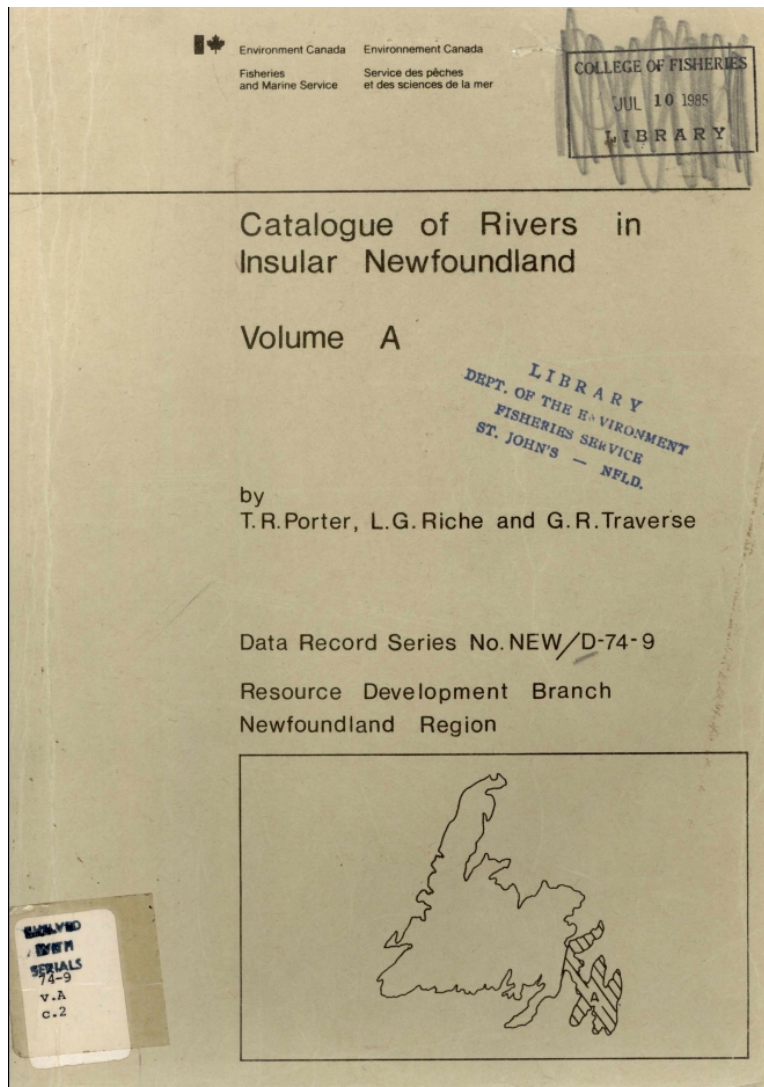


Catalogue of Rivers in Insular Newfoundland, 1974

Introduction

Mobilewords Limited re-published C.H Palmer's *The Salmon Rivers of Newfoundland* in 2005. It was thought then to be the only catalogue of the Island's salmon rivers. Palmer detailed 86 rivers and listed another 135 (total 221). With tributaries, the modern DFO scheduled waters list names 224 island salmon streams, with another 30 in Labrador. An Atlantic Salmon Federation map, ca. 2000, lists 240.

Catalogue of Rivers in Insular Newfoundland, by Porter et.al., a series of four reports prepared by Environment Canada, Fisheries and Marine Service, filed in 1974, was published internally and not generally known to the public. In 2025 it was discovered online, downloaded, and it forms the bulk of this document. It lists 346 rivers, streams, brooks, and creeks emptying to salt water, including many tributary streams, in four volumes. Volume A cover:



The report's introduction reads:

In the early 1960's the Program Working Party on Atlantic Anadromous Fishes requested the compilation of a catalogue of base line data on all river systems in insular Newfoundland. These data would be used to identify river systems with the potential to expand or develop Atlantic salmon (Salmo salar) populations. A program to compile the data from all possible sources was initiated as well as a helicopter river reconnaissance survey program. The terms of reference for the survey were: (1) to provide a general description of each river basin (2) to locate and identify obstructions in river systems, drainage area greater than 25 miles², that are barriers to salmon migration (3) to obtain an estimate of potential parr rearing habitat in accessible and inaccessible areas of the river and to estimate potential adult salmon production. Riche (1972) describes the methods used in stream surveys and estimation of salmon production.

The compilation of physical and chemical data on Newfoundland rivers prior to 1967 was presented by Murray and Harmon (1969). The authors emphasized parameters that affected salmon production; however, the report failed to provide an easy reference for identification of rivers with the potential for development to enhance salmon populations.

The report's four parts were re-ordered, starting with C and progressing clockwise around the Island through Parts, D, A and B. Starting on the southwest corner was where Palmer started his guide, as it was there he first landed and began fishing the waters of the Island's southwest coasts.

The report's structure was stripped of scientific data, leaving the river's name, its location and topo map reference, the character of its drainage basin (and other streams in the drainage basin), often geomorphology and geology factors, and barriers to fish migration. Some rivers include species of fish found in the system and notes of interest of factors affecting the stream's ability to produce fish.

The number of falls is uncountable. The number of northwest, northeast, southeast and southwest names is staggering. The report has a number of annotated maps, traced from topo maps.

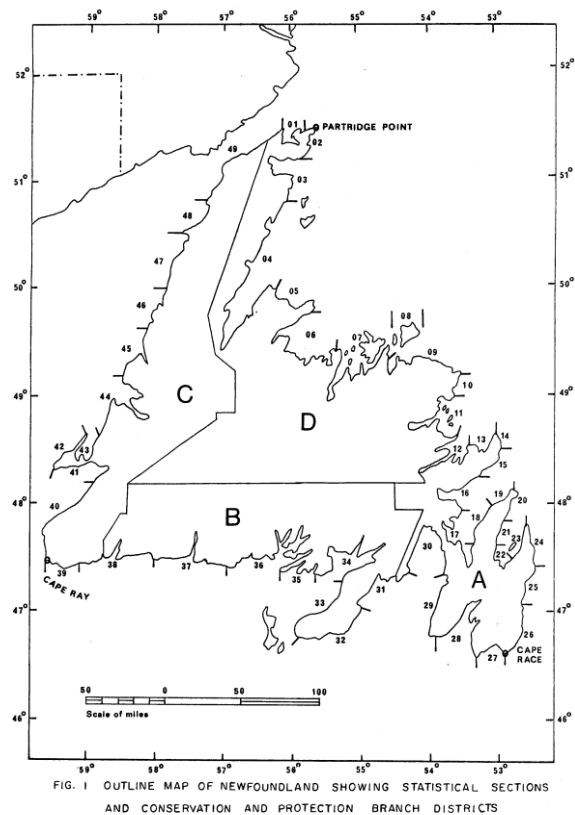
Palmer's notes and hand drawn maps are inserted for each of the rivers he fished and photos from Palmer are tipped in to break up the huge block of the report text, nearly 600 pages.

Each Part starts with an index of the rivers in order of their progression along the coast, followed by an alphabetical listing of the rivers. Both indices give a page number for the river. The page numbers are found at the top of each river's page, they are from the original document and are not sequential. With a little practice any river can be found easily using a Part index and scrolling for the relevant page number.

The file is searchable, so you can enter a river name and get to it, regardless of which part contains it.

Each part starts with its original cover scan. The parts are linked below. You can use your .pdf reader to search for river names, however, there are a lot of rivers with the same name, so be careful. Or you can send your reader, using GoToPage, to a specific page number of the .pdf file.

The parts are shown on a outline map of the island:



Link to parts from the table below:

Part C starts at page 6 Geographic index page 8 Alphabetical index page 11	Part A starts at page 319 Geographic index page 321 Alphabetical index page 326
Part D starts at page 154 Geographic index page 156 Alphabetical index page 160	Part B starts at page 466 Geographic index page 468 Alphabetical index page 472

Definitions

Newfoundlanders have an odd relationship to riverine and lacustrine nomenclature.

Rivers and brooks are used interchangeably, in fact between Palmer and Marine Services many rivers change their name from one to the other. Creeks are few, Portland Creek being the most noticeable. Lakes and ponds are similarly confusing, regardless of the official name, they are often called by the other name. Quidi Vidi Lake is commonly referred to as *the pond*. Here are some official definitions of these terms.

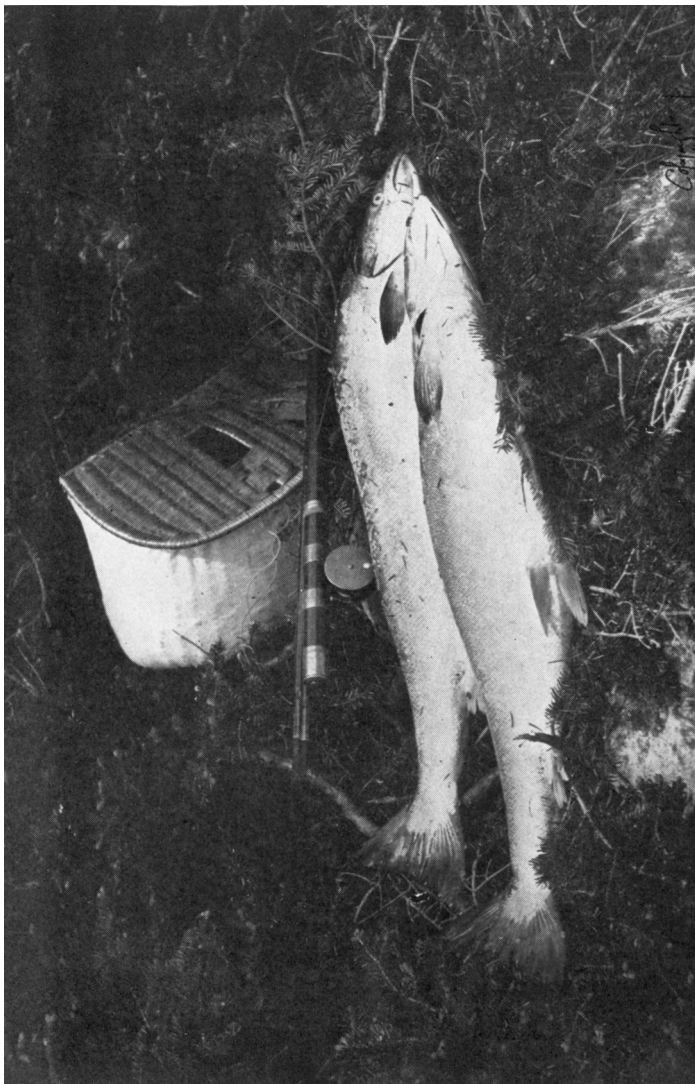
A river is a natural stream of fresh water that flows on land or inside caves towards another body of water at a lower elevation, such as an ocean, lake, or another river. A river may run dry before reaching the end of its course if it runs out of water, or only flow during certain seasons. Rivers are regulated by the water cycle, the processes by which water moves around the Earth. Wikipedia

creek: A small stream, often a shallow or intermittent tributary to a river. A channel or stream running through a salt marsh. A small inlet in a shoreline, extending farther inland than a cove. The American Heritage Dictionary of the English Language

Stream, river, and creek are all used interchangeably, with stream having the broadest definition and being used the most. A stream is a naturally flowing body of water running through the earth's surface in a channel between opposite borders called the banks and a bottom surface called the bed. casualgeographical.com

A pond is a body of water smaller than a lake. Ponds support a wide range of wildlife: ducks, turtles, swans, small fish, and frogs can live in a pond. Usually, in most ponds sunlight can reach to bottom. In some cases, ponds do not last all year round. Wikipedia

A lake is often a naturally occurring, relatively large and fixed body of water on or near the Earth's surface. It is localized in a basin or interconnected basins surrounded by dry land. Lakes lie completely on land and are separate from the ocean, although they may be connected with the ocean by rivers. Lakes, as with other bodies of water, are part of the water cycle, the processes by which water moves around the Earth. Wikipedia



THE KING OF SPORTING FISH—NEWFOUNDLAND SALMON



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Catalogue of Rivers in Insular Newfoundland

Volume C

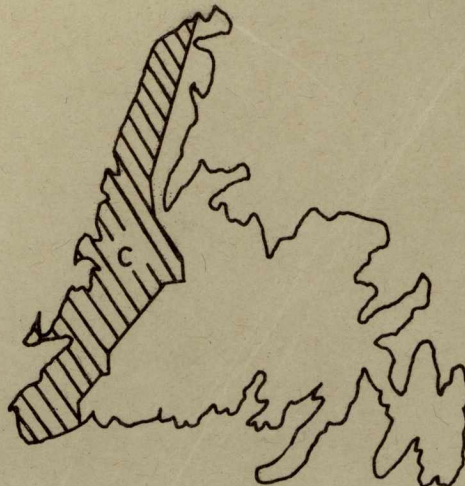
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DATA REPORT SERIES NO. NEW/D-74-9
VOLUME C

CATALOGUE OF RIVERS IN
INSULAR NEWFOUNDLAND

by

T.R. Porter, L.G. Riche and G.R. Traverse

RESOURCE DEVELOPMENT BRANCH
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NORTHWEST BROOK

Location: $47^{\circ} 40' 35''$ N $58^{\circ} 36' 15''$ W. Bay Le Moine.
Map Reference: Rose Blanche. 11 0/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 20.0 miles², (51.80 kilometers²). Mean width, 2.2 miles, (3.53 kilometers).

Perimeter, 26.4 miles, (42.47 kilometers). Axial length, 9.1 miles, (14.64 kilometers).

Maximum basin relief, 1,750 feet, (533.40 meters).

Geology:

About equal amounts of acidic intrusive rocks and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration.

ROSE BLANCHE BROOK

Location: 47° 36' 55" N 58° 42' 05" W. Rose Blanche Bay
Map Reference: Rose Blanche. 11 0/10 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 32.3 miles², (83.65 kilometers²). Mean width, 2.6 miles, (4.18 kilometers).

Perimeter, 37.2 miles, (59.85 kilometers). Axial length, 12.5 miles, (20.11 kilometers).

Maximum basin relief, 1,750 feet, (533.40 meters).

Geology:

About half gneiss with the remainder consisting of acidic intrusive rocks and a small amount of Devonian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main river:

Falls at mile point 0.5; (0.8 kilometers).

Fishway constructed in 1961: Very few fish pass through fishway.

GRANDYS BROOK

Location: $47^{\circ} 37' 17''$ N $58^{\circ} 50' 35''$ W.

Map Reference: Rose Blanche, 11 0/10 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 105.5 miles², (273.24 kilometers²). Mean width, 4.1 miles, (6.59 kilometers).

Perimeter, 61.9 miles, (99.59 kilometers). Axial length, 22.1 miles, (35.55 kilometers).

Maximum basin relief, 1,800 feet, (548.64 meters).

Geology:

Almost entirely gneissis with some Devonian sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

A number of excellent salmon pools in the first 12 miles (19.30 kilometers) of river above Burnt Island Pond. The river is mainly rocky and rugged with rapid water.

Spawning Areas:

Several good areas in first 12 miles (19.30 kilometers) of main river.

Barriers to Fish Migration:

Main River:

Series of small falls and shutes at mile point 7 (11.26 kilometers), greatest drop of 5' (1.52 meters); partial obstruction.

Falls at mile point 12 (19.30 kilometers) 10' (3.05 meters) vertical; probably complete obstruction.

Falls 20'-25' (6.10-7.62 meters) vertical at mile point 17 (27.35 kilometers); complete obstruction.

BURNT ISLAND BROOK
(God Bay Brook)

Location: $47^{\circ} 36' 39''$ N $58^{\circ} 52' 12''$ W. God Bay, East of
Port aux Basques.

Map Reference: Rose Blanche. 11 0/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.2 miles², (10.87 kilometers²). Mean width, 0.8 miles,
(1.28 kilometers).

Perimeter, 14.2 miles, (22.84 kilometers). Axial length, 4.7 miles,
(7.56 kilometers).

Maximum basin relief, 900 feet, (274.32 meters).

Geology:

About equal amounts of Devonian sedimentary and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LITTLE BAY BROOK

Location: 47°35'50" N. 59°04'05" W. Little Bay, Cabot Strait.
Map Reference: Port aux Basques. 11 O/11 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 17.0 miles² (44.03 km²). Mean width, 1.2 miles
(1.93 km).

Perimeter: 11.4 miles (18.34 km). Axial length, 4.6 miles
(7.40 km).

Maximum basin relief, 700 feet (213.36 m).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 2 (3.2 km). Height: 6 feet (1.82 m). Partial obstruction.

In 1961, a channel was blasted around falls, this run-a-round has
decreased the degree of obstruction.

GRAND BAY RIVER

Location: 47°36'08" N. 59°09'21" W. Bottom of Grand Bay,
Cabot Strait.

Map Reference: Port aux Basques. 11 O/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin Area: 51.9 miles² (134.42 km²). Mean width, 3.4 miles
(5.47 km).

Perimeter, 38.7 miles (62.25 km). Axial length, 12.3 miles
(19.79 km).

Maximum basin relief, 2,050 feet (624.84).

Geology:

Almost entirely gneissis with some acidic intrusive rocks
and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 0 sloping for 200 feet (60.96 m). Partial obstruction.

Falls at mile 1 (1.61 km), passable.

Falls: Complete obstruction. Location and height not available.

GRAND BAY RIVER

Location—

Port aux Basques, western terminal of the Newfoundland Railway and Newfoundland port for the S.S. "Caribou," connecting steamer with Canada (North Sydney) across the Gulf of St. Lawrence.

Season—

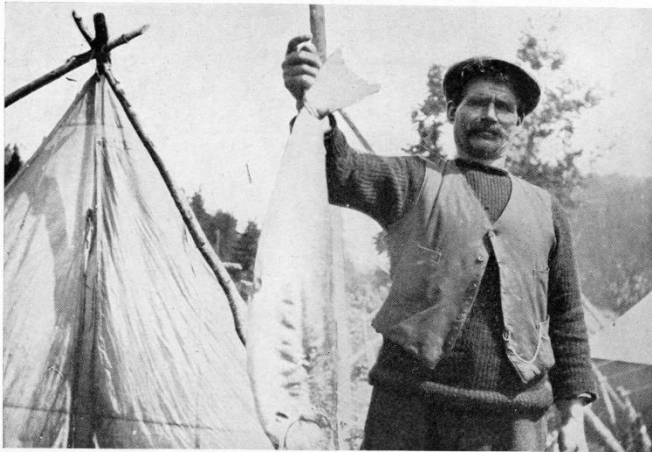
June and July are the best months.

General Remarks—

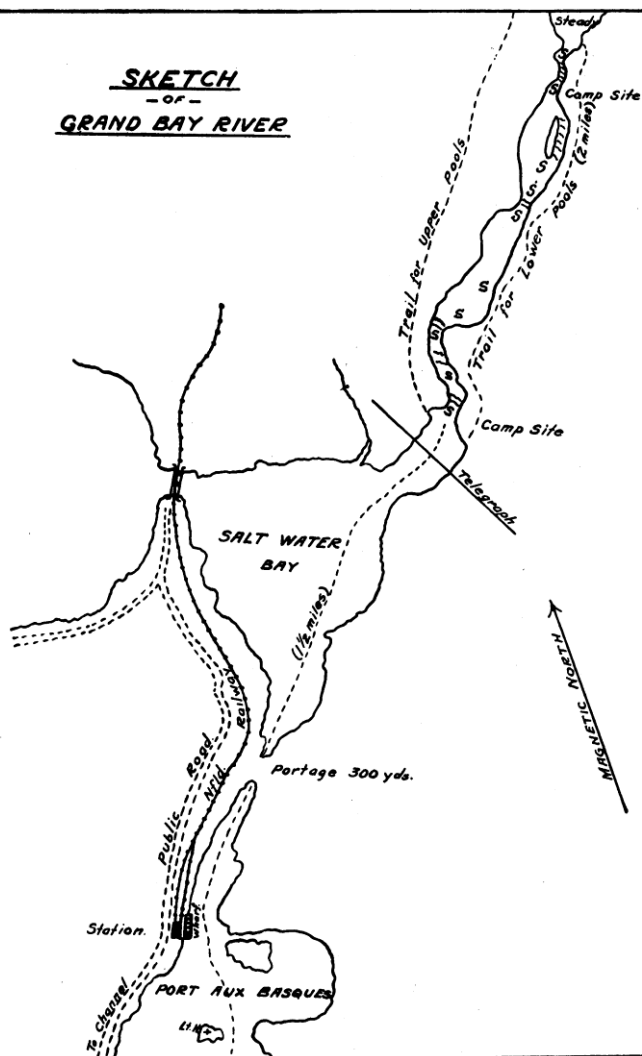
The river flows into a deep inland bay of the sea, which is crossed by the railway. Sea trout are also caught here.

Pools:

10 unnamed pools.



SKETCH
-or-
GRAND BAY RIVER



BARACHOIX BROOK

Location: 47°37'50" N. 59°15'25" W.

Map Reference: Port aux Basques. 11 O/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin Area: 19.1 miles² (49.47 km²). Mean width, 2.0 miles (3.21 km²).

Perimeter, 22.0 miles (35.39 km). Axial length, 8.5 miles (13.67 km).

Maximum basin relief, 1,800 feet (548.64 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of gneiss and a small amount of basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls located at mile 5. Believed to be complete obstruction.

BEAR COVE BROOK

Location: 47°39'35" N. 59°18'35" W. Bear Cove, Cabot Strait.

Map Reference: Port aux Basques. 1 0/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.4 miles² (29.52 kilometers²). Mean width, 2.1 miles, (3.38 kilometers).

Perimeter, 15.4 miles (24.78 kilometers). Axial length, 5.0 miles, (8.05 kilometers).

Maximum basin relief, 1,900 feet. (579.12 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: None reported.

Entrance to brook shallow, salmon enter only when brook high.

LITTLE CODROY RIVER

Location: 47° 45' 51" N. 59° 18' 58" W.

Map Reference: Codroy. 11 O/14 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 86.4 miles² (223.77 kilometers). Mean width, 4.6 miles, (7.40 kilometers).

Perimeter, 55.1 miles (88.66 kilometers). Axial length, 18.0 miles, (28.96 kilometers).

Maximum basin relief, 2,050 feet (624.84 meters).

Geology:

About half basic intrusive rocks with the remainder consisting of about equal amounts of acidic intrusive rocks, gneissis and Pennsylvanian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Dimensions:

Length of entire system including standing water is approx.

160.26 miles (257.85 kilometers).

Length of tributaries143.61 miles (231.06 kilometers)

Length of estuary3.50 miles (5.63 kilometers)

Length of main stream10.49 miles (16.87 kilometers)

Length of lake at upper end of main stream 2.66 miles (4.27 kilometers).

Barriers to Fish Migration:

Main river, Nil; Southern Brook,

Falls, approx. 30 ft. (9.14 meters), about 1.9 miles (3.05 kilometers from main stream; Frank White's Brook, falls, approx. 10 ft.

(3.04 meters) high, 1.0 miles (1.60 kilometers) from the main stream.

Suitable spawning areas on the lower parts of the tributaries in most of the running water on the main river.

LITTLE CODROY RIVER

Location—

On West Coast, 20 miles from Port aux Basques.

Season—

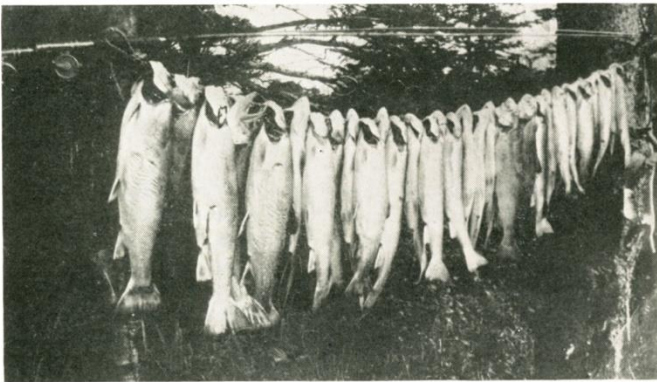
Fishing is good on this river throughout the season from June to September.

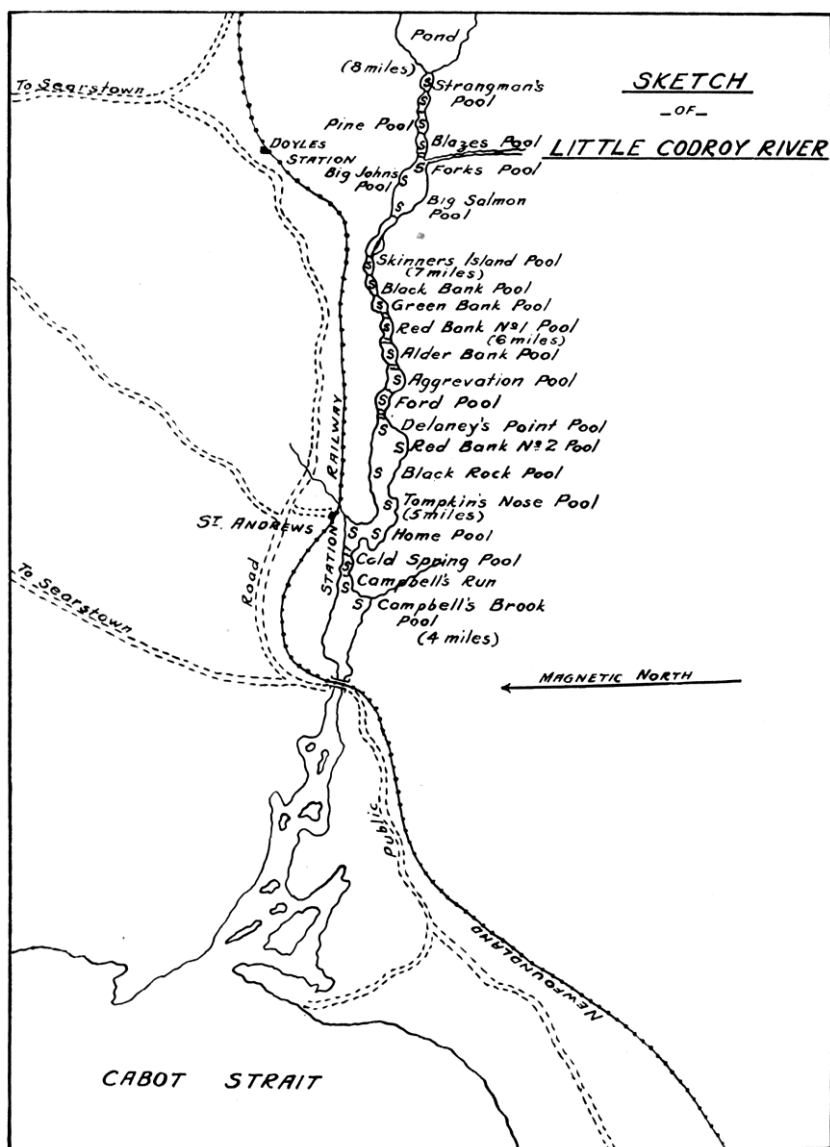
General Remarks—

This is one of the larger rivers and is well known for its sporting activities. Many local and foreign sportsmen return to Tompkins Hotel year after year to enjoy the fishing. Salmon ranging in weight from 10 to 40 lbs. have been caught. The reputation of Mr. Tompkins—"that no one is allowed to leave without having secured one or many salmon, and there is no place in the world where the chances for salmon are so good"—is well lived up to.

Pools:

Campbell's Pool, Cold Spring Pool, Home Pool, Tompkins Nose Pool, Black Rock Pool, Red Bank No. 2 Pool, Delaney's Point Pool, Ford Pool, Aggrevation Pool, Alder Bank Pool, Red Bank No. 1 Pool, Green Bank Pool, Black Bank Pool, Skinners Island Pool, Big Salmon Pool, Big John's Pool, Forks Pool, Blazes Pool, Pine Pool, Strongman's Pool





GRAND CODROY RIVER

Location: 47°50'37" N. 59°11'50" W. Searston Bay, Cabot Strait.

Map Reference: Codroy. 11 0/14 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 369.0 miles² (955.7 kilometers²). Mean width, 11.2 miles (18.02 kilometers).

Perimeter, 94.0 miles (151.24 kilometers). Axial length, 32.7 miles (52.61 kilometers).

Maximum basin relief, 1,850 feet (568.96 meters).

Geology:

Predominantly Mississippian sedimentary with some gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas:

One area approximately 10 miles (16.09 kilometers) from the mouth of the main river. Other areas along the South and North Branch sections.

Barriers to Fish Migration:

Main River:

No obstruction.

North Branch, falls, 20' high (6.09 meters), complete obstruction, 31 miles, (49.87 kilometers), from where it forms main river. South Branch, falls, (Doeball Falls), located 30 miles (48.27 kilometers), from junction of main river. Reported by F/O Marshall to be 60' high, (18.28 meters), complete obstruction.

GREAT CODROY RIVER

Location—

On West Coast, 25 miles from Port aux Basques.

Season—

Fishing begins on this river on the first of June and continues throughout the season.

General Remarks—

This is one of the larger rivers and has numerous large and splendid fishing pools. Many anglers return to Doyle's year after year for the splendid fishing obtained. During 1924, in less than a month, a sports-man caught 116 salmon and 14 grilse, a total weight of 1228 lbs. Salmon up to 40 lbs. in weight have been caught. Fishing from the Tidal Pool up to Overfall Pool can best be done from Doyle's Hotel and Camps, and from the Forks Pool down to Overfall Pool from Tompkins Bungalow at South Branch and Mr. Tompkins' Camps on the river.

Tributaries:

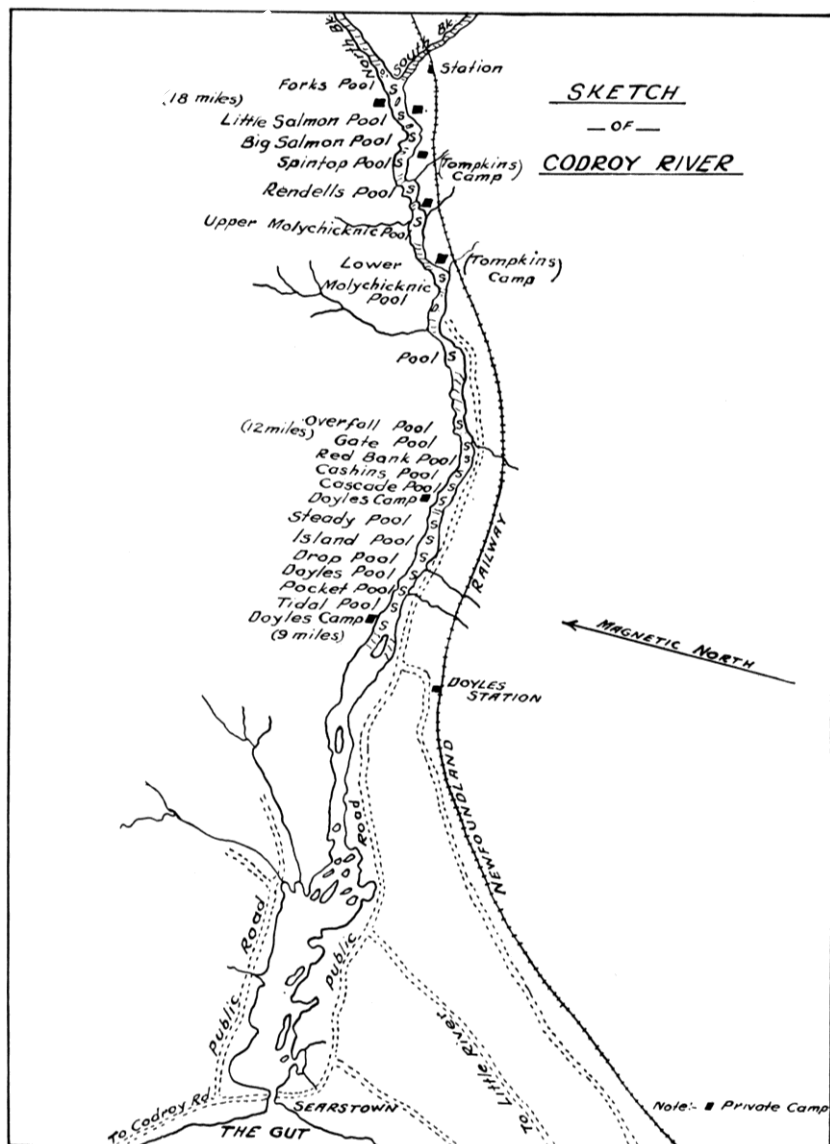
<i>Brooms Brook</i>	110/14
Grand Daddys Brook	110/14
Limestone Brook	110/14
<i>Mollichignick Brook</i>	110/14
Muddy Hole Brook	110/14
<i>North Branch</i>	12B/2
Overfall Brook	110/14
<i>South Branch</i>	110/14
Stephens Brook	110/14

Notes:

Now called Grand Codroy; the community at its mouth is Great Codroy

Pools:

Tidal Pool, Pocket Pool, Doyle's Pool, Drop Pool, Island Pool, Steady Pool, Cascade Pool, Cashin's Pool, Red Bank Pool, Gate Pool, Overfall Pool, unnamed pool, Lower Molychicknic Pool, Rendell's Pool, Spintop Pool, Big Salmon Pool, Little Salmon Pool, Forks



SOUTH BRANCH CODROY RIVER

Location—

On West Coast, 35 miles from Port aux Basques.

Accessibility—

The Newfoundland Railway the South Branch, at South Branch Station, about one-half mile above its junction with the North Branch.

Season—

From 15th June till close of season.

General Remarks—

Like the main Codroy River the Branch contains many fine pools with a splendid run of fish. Camping sites are numerous. Many sportsmen, from St. John's and other places, fish this river year after year. The run of salmon is large, ranging in weight from 10 to 35 lbs.

Tributaries:

Johns Brook	110/14
Muises Brook	110/14

Notes:

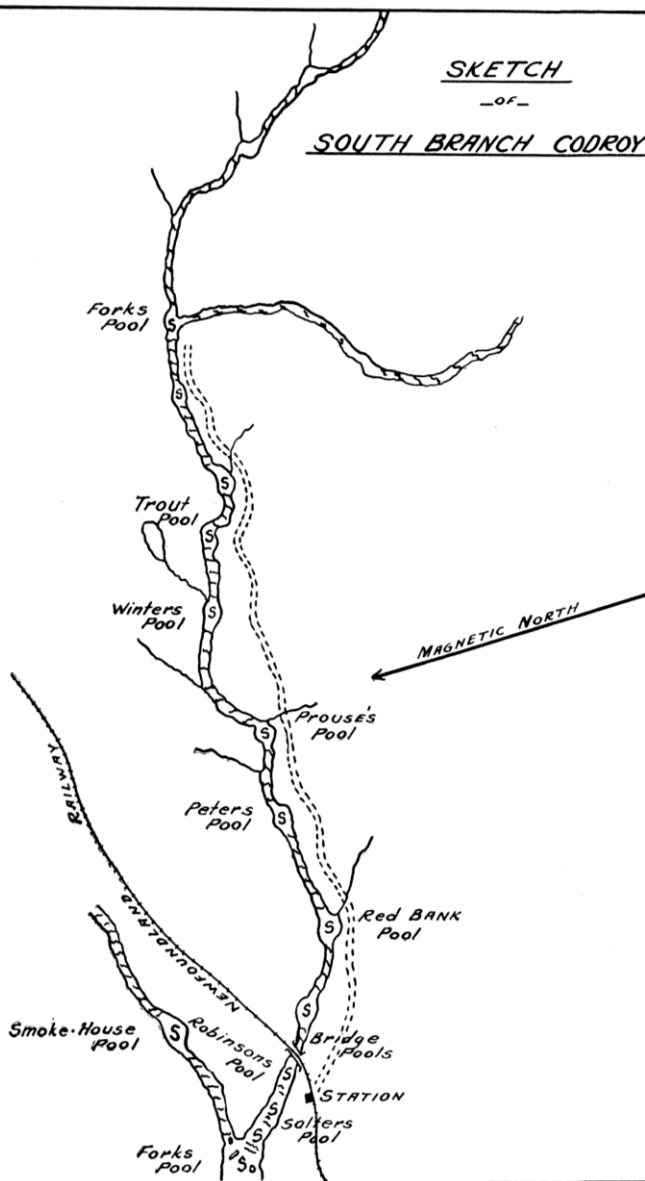
Rises in vicinity of Doughball Pond	110/15
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Pools:

Forks Pool, Salters Pool, Bridge Pool Red Bank Pool, Peters Pool, Prouse's Pool, Winter's Pool, Trout Pool, Forks Pool



SKETCH
-OF-
SOUTH BRANCH CODROY RIVER



NORTH BRANCH CODROY RIVER

Location—

On West Coast, 35 miles from Port aux Basques.

Accessibility—

From South Branch, about one-half mile above its junction with North Branch.

General Remarks—

This Branch, like the South Branch and Main River, contains numerous salmon pools.

Tributaries:

Crooked Brook	12B/2
Limestone Brook	110/14
Scythestone Brook	110/14

Notes:

Rises in the vicinity of Kangaroo Pond	110/15
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Forks Pool, (Bridge Pools, Red Bank Pool on South Branch near forks), Smoke House Pool, Brook Pool, 5 Mile Pool, 7 Mile Pool, 6 Birches Pool, Forks Pool, Siding Pool



STATION

Codroy Pond

SKETCH

— OF —

NORTH BRANCH CODROY RIVER

Siding Pool

Forks Pool

6 Birches Pool

7 mile Pool

5 mile Pool

Brook Pool

Smoke-House Pool

Forks Pool

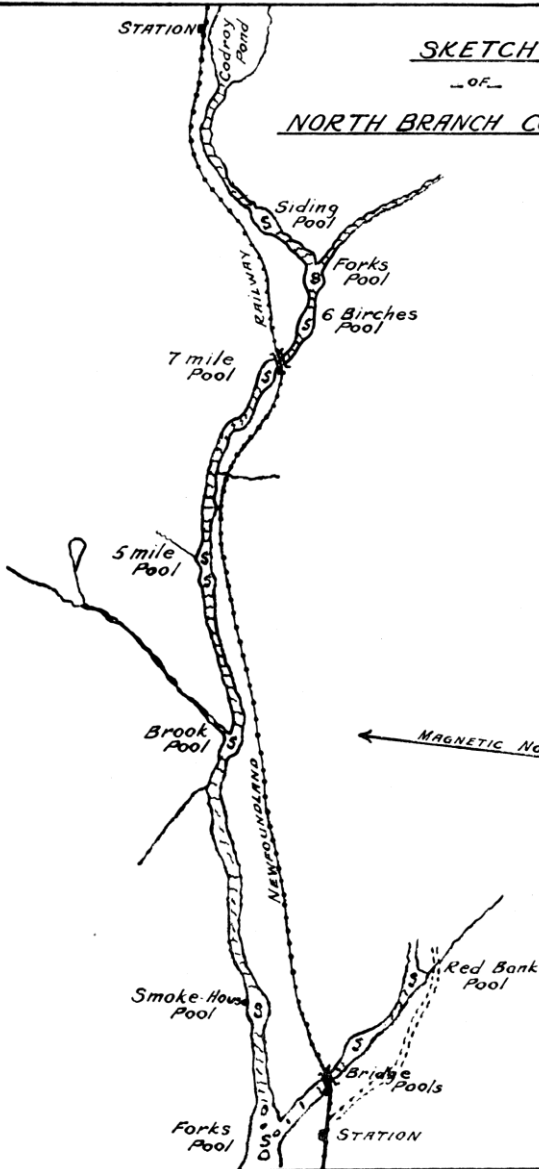
MAGNETIC NORTH

Red Bank Pool

Bridge Pools

STATION

NEWFOUNDLAND



HIGHLANDS RIVER

Location: 48°11'38" N. 58°53'40" W. St. George's Bay.
Map Reference: St. Fintans. 12 B/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 70.7 miles² (183.11 km²). Mean width: 3.1 miles (4.9879 km).
Perimeter: 51.0 miles (82.05 km). Axial length: 18.0 miles (28.96 km).
Maximum basin relief: 1,800 feet (548.64 m).

Geology:

Predominantly Mississippian sedimentary with some gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem (including standing water): 21.7 miles (34.9 km).
Number of major tributaries: 4
Total length of tributaries (including standing water): 28.4 miles (45.7 km).
Area of lakes (> 1 miles² (2.6 km²): Nil.
Channel width varies from 10 yards (9.1 m) to 24 yards (21.9 m).
The river is very shallow throughout and subject to extreme fluctuations in discharge.

Bottom Composition:

Approximately 100% of Highlands River is potential parr rearing habitat and approximately one percent only is suitable for spawning. The main spawning areas appear to be in the vicinity of the Trans-Canada Highway and upstream from the first pond at mile 3.4 (5.5 km).

HIGHLANDS RIVER

Location—

On West Coast, approximately 55 miles from Port aux Basques.

Accessibility—

From Crabbs Station a road connects with the river.

General Remarks—

This river is readily reached by road from Crabbs Station. This river is also noted for its trout fishing. In the latter part of the season it is famous for its run of large fish.

The following by a sportsman who has often fished this river—"River Brook near by, is a great one late for big fish. August and September is better still. Why these large fish go there is a mystery of fish, but I have seen the pools full and not a small one in the lot."

Notes:

Crabbs Station is not community of now Crabbes Brook

Tributaries:

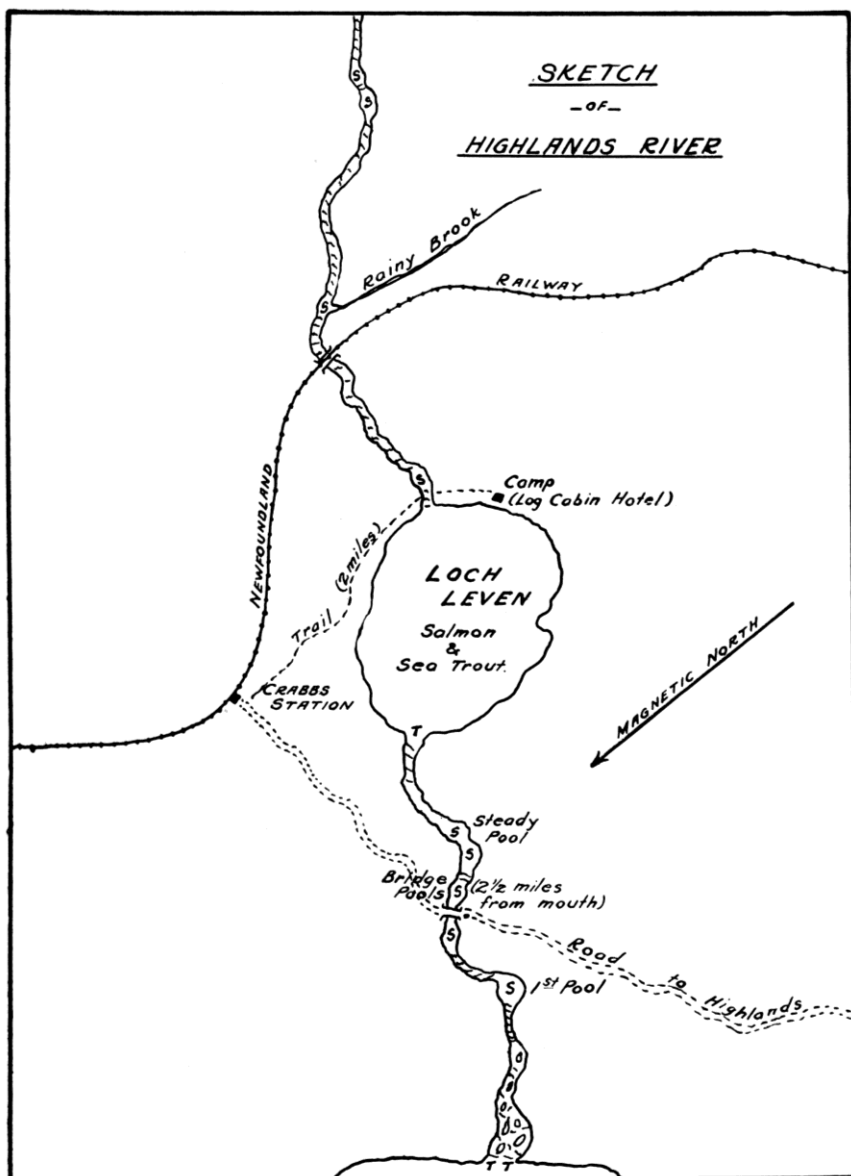
Bald Mountain Brook	12B/2
Rainy Brook East	12B/2
Rainy Brook	12B/2

Pools:

1st Pool, Bridge Pools, Steady Pool, Loch Leven



SKETCH
-OF-
HIGHLANDS RIVER



CRABBS RIVER (Crabbs Brook)

Location: 48°12'50" N. 58°51'40" W. Bay St. George.
Map Reference: St. Fintans. 12 B/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 212.6 miles² (550.6 km²). Mean width: 7.6 miles (12.22 km).

Perimeter: 108.3 miles (174.25 km). Axial length: 29.4 miles (47.30 km).

Maximum basin relief: 2,050 feet (624.84 m).

Geology:

About half gneissis with the remainder consisting of Mississippian sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem (including standing water): 32.2 miles (51.8 km).

Number of major tributaries: 8

Total length of tributaries (including standing water): 150.5 miles (242.2 km).

Area of lakes (1 mile² (2.6 km²): Nil.

Channel width varies from fifty yards in the lower section to fourteen yards in the upper reaches.

Crabbs River is subject to extreme fluctuations in discharge with 40 to 50 percent of rivershed being dry at low water levels.

Bottom Composition:

Crabbs River contains large areas of suitable parr rearing area between mile 0 and mile 24.9 (40.1 km). Large concentrations of spawning habitat are located between mile 0 and mile 6 (9.7 km)

CRABBS RIVER

Location—

On West Coast, approximately 60 miles from Port aux Basques.

Accessibility—

Crabbs [station, now Crabbs Brook, community,] is alongside the river and gives ready access to it.

General Remarks—

This river is studded with many islands, many of which are under cultivation principally for hay. Pools are of ready access and the river being wide the angler can fish without thought as to what is behind him to catch up his flies. Beautiful camping sites, on the many islands and banks of the river, are numerous. The sand and gravel beaches of the river make excellent walking except at very high water. Good trout fishing can be had at the mouth of the river and also on Little Crabbs Brook.

Tributaries:

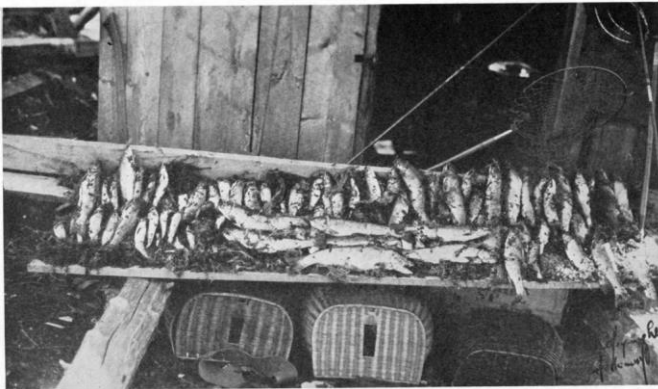
Little Crabbs Brook 12B/2

Notes:

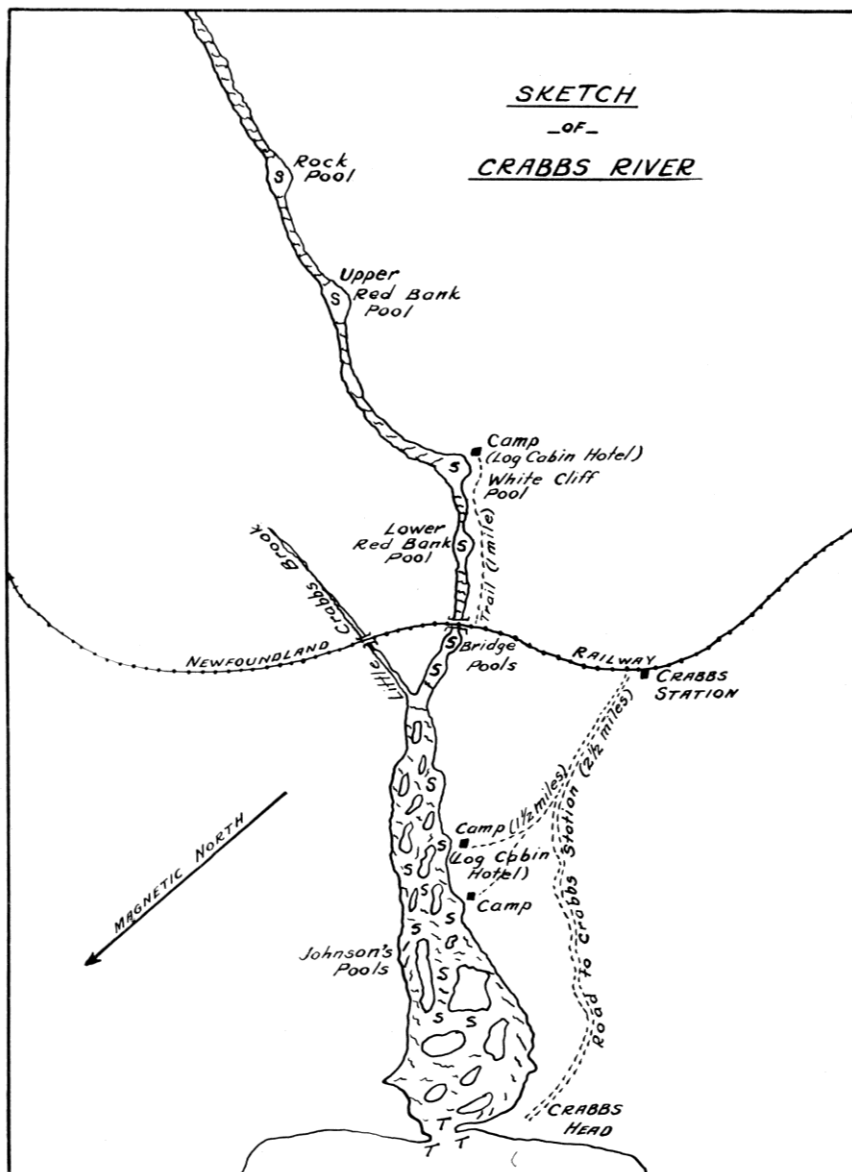
Rises west of Dashwoods Pond 12B/01

Pools:

Johnson's Pools, Bridge Pools, Lower Red Bank Pool, White Cliff Pool, Upper Red Bank Pool, Rock Pool



SKETCH
-OF-
CRABBS RIVER



BARACHOIS BROOK

Location: 48°15'17" N. 58°49'07" W. St. George's Bay.
Map Reference: St. Fintans. 12 B/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 93.0 miles² (240.87 km²). Mean width: 3.8 miles (6.11 km).

Perimeter: 70.3 miles (113.1 km). Axial length: 25.4 miles (40.9 km).

Maximum basin relief: 2,000 feet (609.6 m).

Geology:

Half Mississippian sedimentary with remainder consisting of gneiss and a small amount of acidic intrusive rock.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem (including standing water): 29.3 miles (47.1 km).

Number of major tributaries: 9

Total length of major tributaries (including standing water): 50.3 miles (80.9 km).

Area of lakes (> 1 mile² (2.6 m²): Nil.

Due to small quantity of standing water this river system is subject to extreme fluctuations in discharge.

Width range: 34 yards (31.1 m) - 8 yards (7.3 m) on main stem.

Bottom Composition:

Barachois Brook contain 7,878 rearing units on its main stem. Sixteen percent of these units are suitable for spawning Atlantic salmon. The main concentration of spawning habitat are located in the middle reaches between mile 9.2 (14.8 km) and mile 21.5 (34.6 km).

MIDDLE BARACHOIS BROOK

Location—

On West Coast, approximately 65 miles from Port aux Basques.

Accessibility—

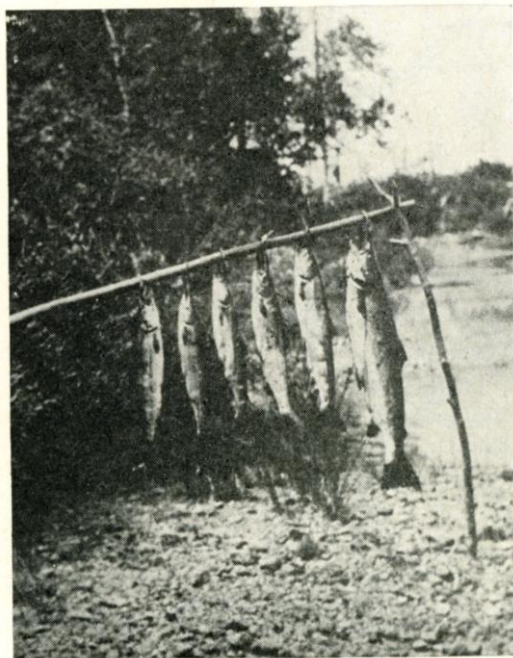
From Cartyville, three-quarters mile from the river's mouth.

General Remarks—

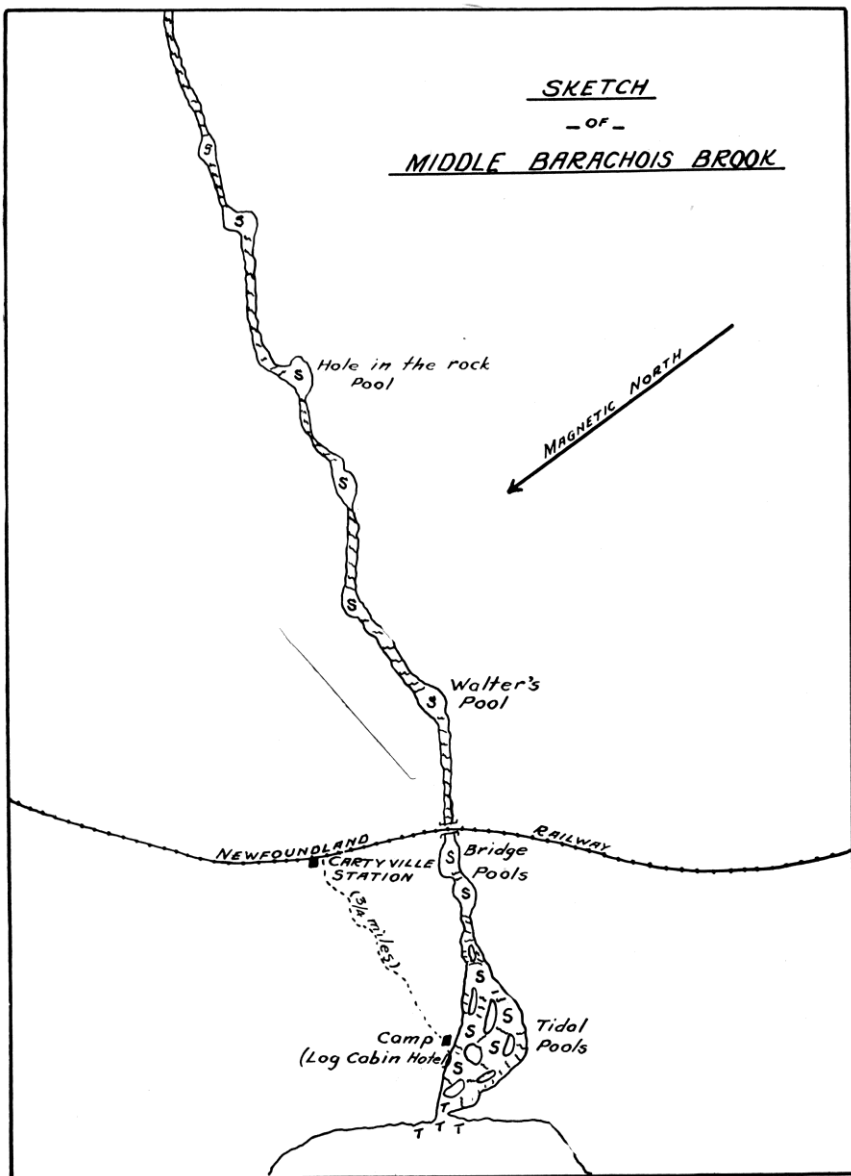
This river is similar to others, draining what is known as the Highlands, and is studded with many islands, many of which make large and admirable salmon s. Sea-trout fishing is good at the river's mouth during the whole season. The run of salmon is plentiful but large fish are scarce.

Pools:

Tidal Pools, Bridge Pools, Walter's Pool, Hole in the Rock Pool, 4 unnamed pools



SKETCH
- OF -
MIDDLE BARACHOIS BROOK



ROBINSONS RIVER

Location: 48°14'55" N. 58°49'07" W. St. George's Bay.

Map Reference: St. Fintans. 12 B/2 West Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 169.5 miles² (439.0 km²). Mean width: 48.0 miles, (77.232 km).

Perimeter: 90.0 miles (144.81 km). Axial length: 31.7 miles, (51.00 km).

Maximum basin relief: 2,050 feet (624.84 m).

Geology:

About half Mississippian sedimentary with the remainder consisting of about equal amounts of gneiss and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem(including standing water): 38.9 miles (62.6 km).

Number of major tributaries: 14

Total length of tributaries: 122.8 miles (197.7 km).

Area of lakes (>1 mile² (2.6 km): Nil.

Channel width: Ranges from 60 yards (54.9 m) at the mouth to 10 yards (9.1 m) at mile 16 (25.8 km). Extreme fluctuations in discharge are evident in this system.

Bottom Composition:

Robinson's River system contains large areas of riverbed suitable for rearing salmon parr. The river system has 16, 138 units (100 yards² (83.6 m²) of parr rearing units accessible to anadromous fish, seventeen percent of which is suitable spawning habitat. There is at present 9,808 rearing units inaccessible to migrating fish.

ROBINSON'S RIVER

Location—

On West Coast, about 70 miles from Port aux Basques.

Accessibility—

About 2 miles from the town of Robinson's at the mouth of the river.

General Remarks—

A splendid fishing river with many pools on the main river and its branches to give the angler an uninterrupted opportunity to whip away to his heart's delight. Sea trout can also be caught.

Tributaries:

Mica Brook	12B/1
Northern Feeder	12B/2

Notes:

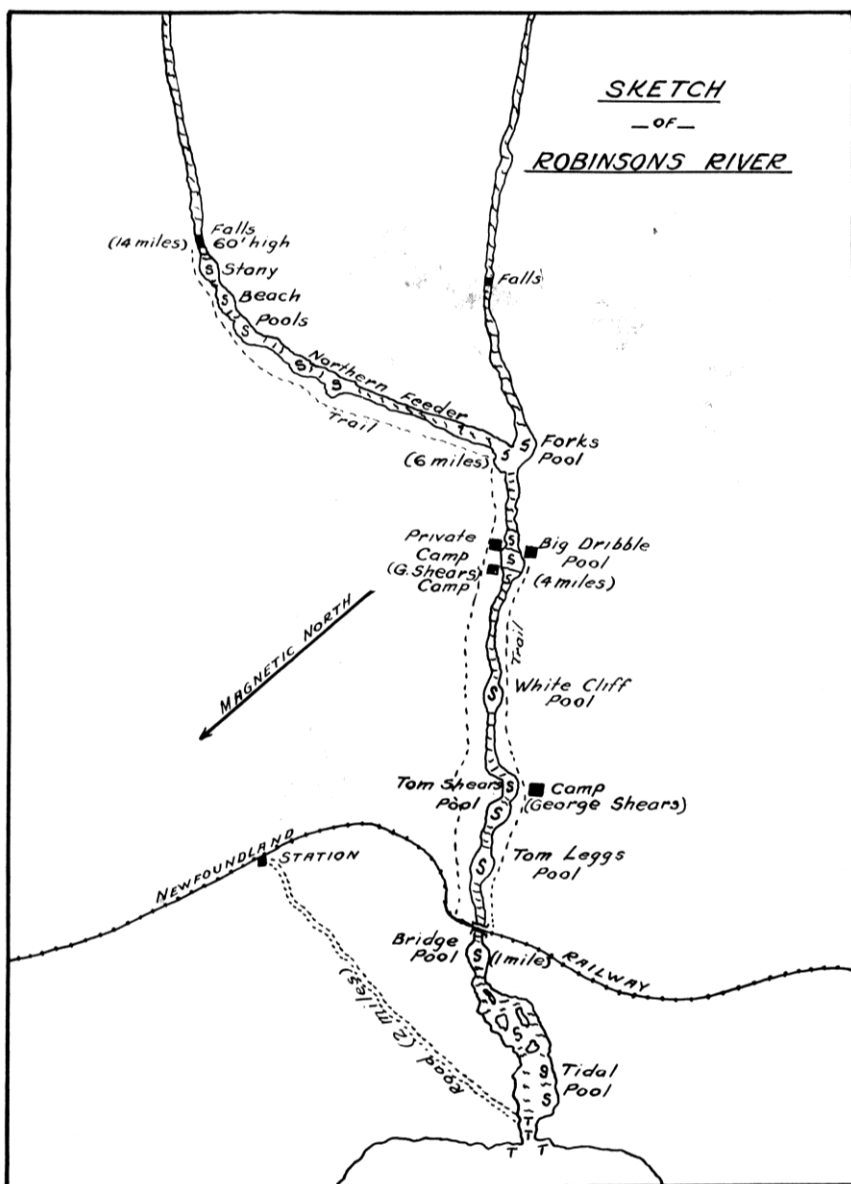
Rises in vicinity of Caribou Pond	12B/1
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Pools:

Tidal Pool, Bridge Pool, Tom Leggs Pool, Tom Shears Pool, White Cliff Pool, Big Dribble Pool, Forks Pool, Stony Beach Pools, 3 unnamed pools



SKETCH
— of —
ROBINSONS RIVER



FISHEL'S BROOK

Location: 48°18'55" N. 58°42'30" W. St. George's Bay.
 Map Reference: Flat Bay. 12 B/7 East Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 139.0 miles² (360.01 km²). Mean width: 3.6 miles, (5.79 km).

Perimeter: 83.2 miles (133.86 km). Axial length: 30.3 miles, (48.65 km).

Maximum basin relief: 1,950 feet (594.36 m).

Geology:

About half Mississippian sedimentary with the remainder consisting of gneiss, basic intrusive rocks and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem: 30 miles (48.3 km).

Depth (above mile 19 (11.8 km): 0.5 to 2 feet (0.2-0.6 m).

Bottom Composition:

Bottom types are well distributed throughout system except for a noticeable lack of bedrock.

Summary of bottom composition of Fishels Brook above complete obstruction at mile 13 (20.9 km).

Unit (100 yd ² (83.6 m ²))	Accessible	Inaccessible	Total
Total	Not surveyed	7,381	-
Rearing		7,149	-
Spawning		232	-

FISHELLS RIVER

Location—

On West Coast, 73 miles from Port aux Basques.

Accessibility—

From Fishell's [community].

General Remarks—

This river contains numerous good pools from the mouth over a distance of 12 miles. Salmon ranging from five to ten lbs. can readily be caught. Boats or canoes for fishing are not required. The bed of the river makes admirable walking, and fishing the various pools can be accomplished without undue hardship. Sea trout can be caught at the mouth of the river.

A sportsman who has been coming to the Island for a number of years says of this river: "A grand little river where I have taken, years ago, as many as 300 salmon in a season in the early days. I believe I was one of the first, if not the first person, to fish here with flies, and it cannot be described, for the bottom was literally covered with salmon and sea trout of enormous size."

Tributaries:

Clam Brook	12B/7
Fischells Dribble	12B/7
Joe Delaneys Brook	12B/8

Notes:

Now Fischells Brook	
Rises in Fischells Pond	12B/1

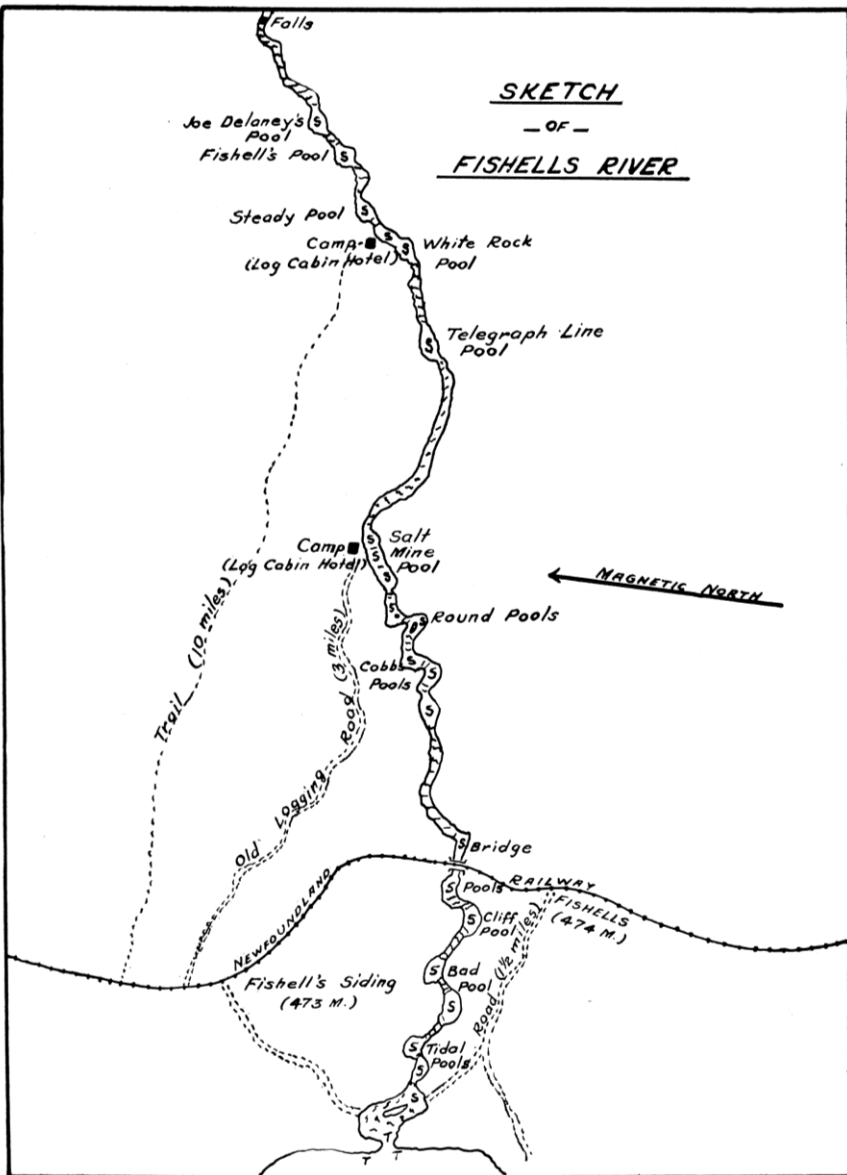
Pools:

Tidal Pools, Bad Pool, Cliff Pool, Bridge Pools, Cobbs Pools, Round Pool, Salt Mine Pool, Telegraph Line Pool, White Rock Pool, Steady Pool, Fishell's Pool, Joe Delaney's Pool, 1 unnamed pool

SKETCH

— OF —

FISHELLS RIVER



BARRY BROOK

Location: 48°19'50" N. 58°41'28" W.
Map Reference: Flat Bay. 12 B/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.0 miles², (31.08 km²). Mean width, 1.2 miles (1.93 km).

Perimeter, 22.9 miles, (36.84 km). Axial length, 9.4 miles, (15.12 km).

Maximum basin relief, 1,000 feet (303.3 m).

Geology:

Mississippian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

MIDDLE BROOK

Location: 48°20'15" N. 58°41'15" W.
Map Reference: Flat Bay. 12 B/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.5 miles² (29.78 km²). Mean width, 1.0 miles,
(1,609 km).
Perimeter, 22.5 miles (36.20 km). Axial length, 10.3 miles,
(16.57 km).
Maximum basin relief, 1,000 feet (303.3 m).

Geology:

Mississippian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas:

Main river just below and above Trans-Canada Highway bridge.

Barriers to Fish Migration:

Falls complete obstruction, 3-4 miles (0.9-1.21 km) above
Trans-Canada Highway.

JOURNOIS BROOK

Location: 48°21'20" N. 58°41'18" W.
Map Reference: Flat Bay. 12 B/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 24.9 miles² (64.49 km²). Mean width, 1.2 miles (1.93 km).

Perimeter, 28.1 miles (45.21 km). Axial length, 12.1 miles (19.46 km).

Maximum basin relief, 1,250 feet, (381.00 m).

Geology:

Almost entirely Mississippian sedimentary with some basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem (including standing water): 11.0 miles (17.7 km).

Number of major tributaries: Nil.

Barriers to Fish Migration: Nil.

FLAT BAY BROOK

Location: 48°24'00" N. 58°33'32" W. Flat Bay, St. George's Bay.
 Map Reference: Flat Bay. 12 B/7 East Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 245.4 miles² (635.2 km²). Mean width: 6.9 miles, (11.10 km).
 Perimeter, 104.7 miles (168.45 km). Axial length: 32.5 miles, (52.29 km).
 Maximum basin relief: 1,950 feet (594.36 m).

Geology:

About half basic intrusive rocks with the remainder consisting of Mississippian sedimentary, gneissis and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem: 33.9 miles (54.5 km).
 Number of major tributaries: 9
 Total length of tributaries: 149.5 miles (240.5 km).
 Area of lakes (>1 mile²):

Dennis Pond	L1	1.1 miles ²	(704.4 km)
Long Pond	L2	1.0 miles ²	(640.0 km)
Cross Pond	L3	1.1 miles ²	(704.0 km)
	L4	1.0 miles ²	(640.0 km)

Bottom Composition:

Flat Bay Brook has 17,260 rearing units and 4,337 spawning units.
 Accessible tributaries have 1,893 potential rearing units.
 Inaccessible areas of Flat Bay Brook has approximately 1,848 rearing units. Tributaries inaccessible to anadromous fish contain 689 rearing units but no significant spawning areas.

FLAT BAY BROOK

Location—

In Bay St. George, on the West Coast.

Accessibility—

The upper reaches of this river are approximately 4½ miles south of St. George's [community]. A road connects St. George's with the river.

General Remarks—

There are also a number of good pools on the lower reaches of the river, but they are not so readily accessible. A road traverses the east bank of the river alongside of which there are admirable camping sites. The road connects with the main road to St. George's. A sportsman's remark: "A really good river with fish of size and plentiful at times."

Tributaries:

China Brook	12B/7	Sheep Brook	12B/8
Dribble Brook	12B/7	Spear Brook	12B/8
Coal Brook	12B/8	Three Brooks	12B/8
Cross Pond Brook	12B/8	Wolf Brook	12B/8
Lookout Brook	12B/8		

Notes:

Now spelled Fischells

Rises west of King George IV Lake 12A/4

Pools:

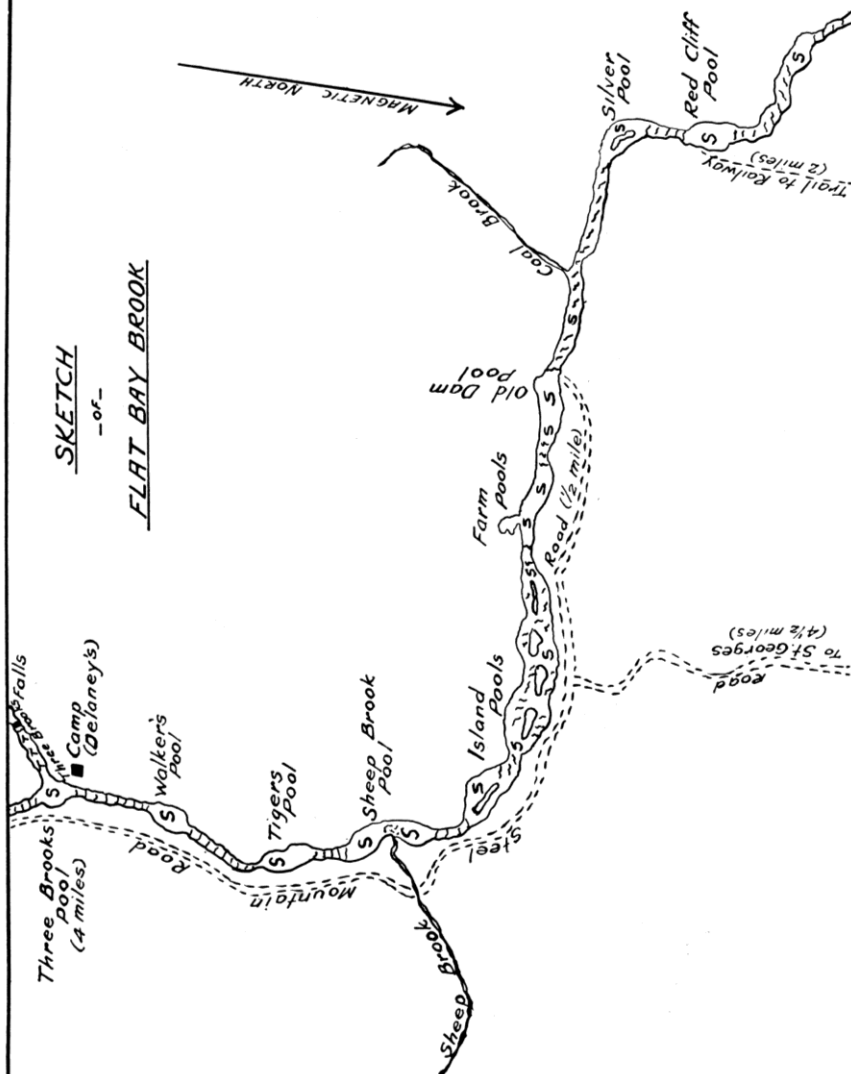
Red Cliff Pool, Silver Pool, Old Dam Pool, Farm Pools, Island Pools, Sheep Brook Pool, Tigers Pool, Walker's Pool, Three Brooks Pool



SKETCH

-of-

FLAT BAY BROOK



LITTLE BARACHOIS RIVER

Location: 48°26'40" N. 58°26'30" W. Flat Bay, St. George's Bay
Map Reference: Main Gut. 12 B/8 West Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 136.8 miles² (354.31 km²). Mean width: 3.6 miles, (5.79 km).
Perimeter: 95.4 miles (153.49 km). Axial length: 34.1 miles, (54.86 km).
Maximum basin relief: 1,900 feet (579.12 m).

Geology:

About half basic intrusive rocks with the remainder consisting of gneissis, acidic intrusive rocks and Mississippian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem: 49.9 miles (79.0 km).
Number of major tributaries: 5
Total length of tributaries: 70.6 miles (113.6 km).
Area of lakes: (>1 mile² (2.6 km²): Nil.
Main river from mouth to headwaters has an average width; 100 feet (30.48 m) and an average depth of 1 foot (0.3 m).

Bottom Composition:

The total accessible parr rearing habitat of Little Barachois Brook is 8,498 units (100 yd² (83.6 m²). There are 1,627 inaccessible units in the system.

LITTLE BARACHOIS BROOK

Location—

On the West Coast about 90 miles from Port aux Basques. This river flows into Bay St. George.

Accessibility—

St. George's is approximately 4 miles from the river, and a motor road from St. George's crosses it. Motor boats and motor cars can readily be hired for the run to the river.

General Remarks—

There are many good salmon pools on this river. Good camping sites are readily located.

Tributaries:

Birchy Brook	12B/8
Tight Brook	12B/8
White Hill Brook	12B/8

Notes:

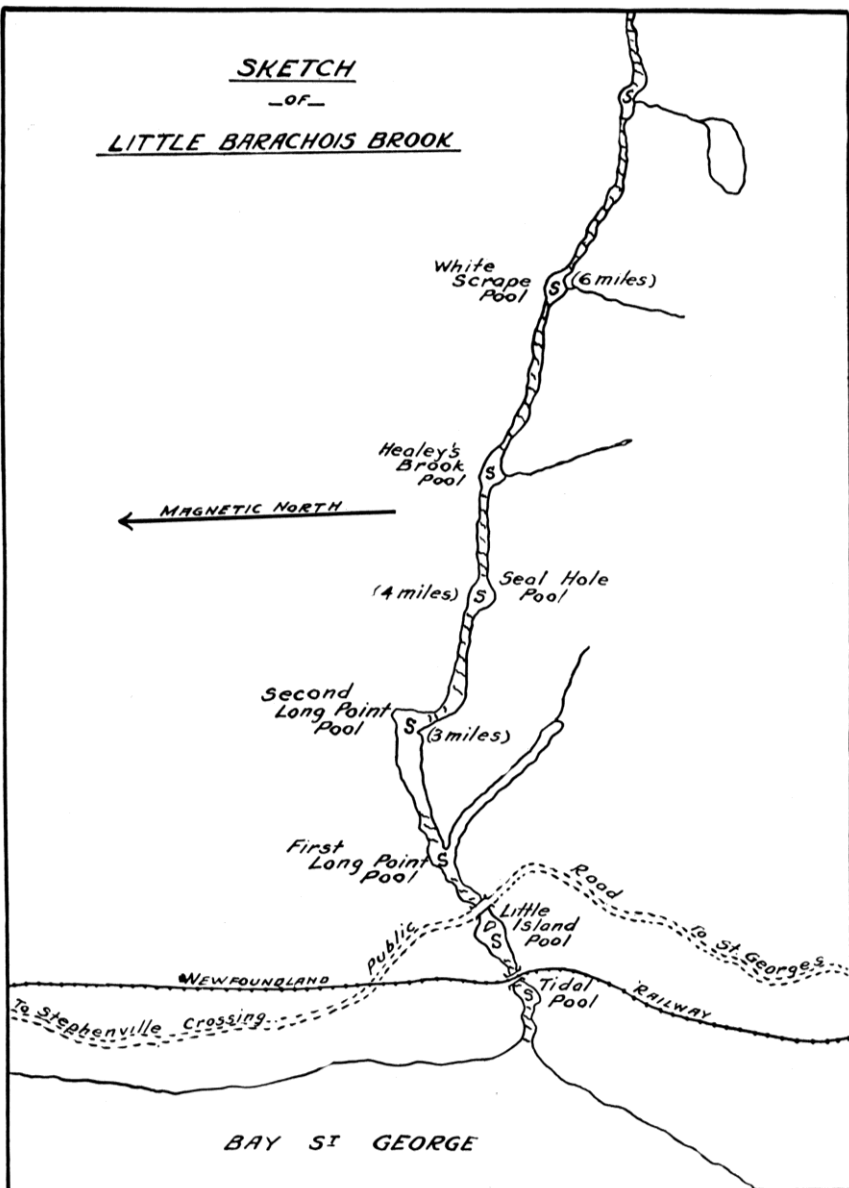
Rises in high mountains	12A/5
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Pools:

Tidal Pool, Little Island Pool, First Long Point Pool, Second Long Point Pool, Seal Hole Pool, Healey's Brook Pool, White Scrape Pool



SKETCH
-OF-
LITTLE BARACHOIS BROOK



SOUTH WEST BROOK AND BOTTOM BROOK

Location: 48°30'45" N. 58°16'28" W. Main Gut (St. George's River).

Map Reference: Harry's River. 12 B/9 West Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 314.2 miles² (813.78 km²). Mean width: 5.9 miles, (9.49 km).

Perimeter 110.0 miles (176.99 km). Axial length: 33.0 miles, (53.09 km).

Maximum basin relief: 2,057 (627.03 m).

Geology:

About half basic intrusive rocks with the remainder consisting of Pennsylvanian sedimentary, acidic intrusive rocks and Mississippian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

South West Brook:

Length of main stem (including standing water): 43.9 (70.6 km).

Number of major tributaries: 10

Total length of tributaries (including standing water): 145.0 miles (233.3 km).

Area of lakes (> 1 mile² (2.61 km²)): L-1 2.4 miles² (1,536 acres)
 L-2 1.4 miles² (896 acres)
 L-3 2.2 miles² (1,408 acres)
 L-4 1.0 miles² (640 acres)
 L-5 3.8 miles² (2,432 acres)

Bottom Brook:

Length of main stem (including standing water): 23 miles (37.7 km).

Number of tributaries: 9

Total length of tributaries (including standing water): 97.5 miles (156.9 km).

Area of lakes (> 1 mile²): Nil.

Width range 20-50 feet (6.1-15.2 m). Depth range; 2-3 feet (0.6-0.9 m).

T1-5, East Branch: Average width; 50 feet (15.2 m). Average depth 1 foot (0.31 m).

Bottom Composition:

South West and Bottom Brooks system contain exceptionally large areas of riverbed suitable for rearing salmon parr.

Summary of bottom composition of South West Brook and Bottom Brook and tributaries accessible to anadromous fish.

Section	Total units	Rearing units	Spawning units
South West Brook (main stem)	15,203	14,691	3,710
South West Brook (tributaries)	2,806	2,330	283
Bottom Brook (main stem)	4,401	3,436	964
Bottom Brook (tributaries)	2,245	2,202	43
Total	24,655	22,702	5,000

Spawning areas:

Distributed intermittently throughout the system with main concentrations from mile 4.2 (6.8 km) to mile 13.0 (20.9 km) on the main stem of South West Brook.

Barriers to Fish Migration:

South West Brook:

Falls, at mile 20.7 (33.3 km). Height: 8 feet (2.4 m). Slope 45°.

Partial obstruction at low discharge.

Falls, located 500 feet (150.5 m) above mile 20.7 (33.3 km). Height: 20 feet (6.0 m). Slope: 50°. Length: 40'-50' (12.0-15.0 m).

Passable with extreme difficulty at all water levels.

Shallow riverbed of tightly packed boulders, at mile 25.8 (41.6 km).

Partial obstruction at low discharge.

- (7) Saunders Brook, from mouth to mile point 1 (1.60 kilometers).
Rubble 4.5%; gravel 14%; sand 20.8%; silt 20.2%. Spawning areas - nil.
Average width 12 ft. (3.65 meters). Depth range 6" - 2' (.15 - .6 meters).
- (8) Furriers Brook, from mouth to mile point 1.5 (2.41 kilometers).
Boulder 12.3%; rubble 43.6%; gravel 39.0%; sand 5.0%. Width range 6 - 20 ft.
(1.82 - 6.09 meters). Depth range 6" - 4' (.15 - 1.21 meters). Spawning
areas: 400 sq. yds. (334.8 sq. meters). Poor condition.
- (9) No Name Brook, from mouth to 3,500 ft. (1,066.80 meters), upstream.
Boulder 16.7%; rubble 13.3%; gravel 46.7%; sand 15.0%; silt 8.3%. Width
range 3 - 12' (.9 - 3.65 meters). Depth range 6" - 3' (.15 - .9 meters).
Spawning areas: 310 sq. yds. (259.47 sq. meters). Medium condition.
- (10) North Brook, from mouth to mile point 3.5 (5.63 kilometers). Average
width 100 ft. (30.48 meters). Depth range 10" - 12" (.25 - .30 meters).
Boulder 50%; rubble 47.5%; gravel 1.25%; sand 1.25%. Spawning areas: 500
sq. yds. (418.5 sq. meters).
- (11) Muskrat Brook, from mouth to mile point 2.5 (4.02 kilometers). Average
width 10 ft. (3.04 meters). Average depth 1 ft. (.30 meters). Boulder
26.7%; rubble 13.3%; gravel 26.7%; sand 33.3%. Spawning areas 2,100 sq. yds.
(1757.7 sq. meters). Good areas for trout.
- (12) Spruce Brook, from mouth to mile point 3 (4.82 kilometers). Width
range 15 - 75' (4.57 - 22.86 meters). Depth range 6" - 4" (.15 - .10 meters).
Spawning areas: 9,000 sq. yds. (7533.0 sq. meters). Bedrock 6.7%;
boulder 13.3%; rubble 10.0%; gravel 64.3%; sand 3.0%; silt 2.7%.
- (13) Pinchgut Brook, from mouth to Pinchgut Lake, distance 4 miles (6.43
kilometers). Width range 60 - 125 ft. (18.28 - 33.10 meters). Depth range
6" - 4' (.15 - 1.21 meters). Bedrock 5%; boulder 33%; rubble 50%; gravel 12%.
Spawning areas: 3,650 sq. yds. (3,055 sq. meters). Good condition.
- George's Lake: (Oligotrophic)
Morphometric data: Max. length 7.6 miles (12.22 kilometers). Max width
2.4 miles (3.86 kilometers). Max. Depth: 296 ft. (90.22 meters). Mean
depth: 138.2 ft. (42.12 meters). Estimated average depth: 150 ft.
Area: 8.2 sq. mis. (21.2 sq. kilometers). Mean length: 3.1 miles
(4.98 kilometers). Mean width: 0.9 miles (1.44 kilometers). Volume: 23,171.2
 $\times 10^6$ cu. ft.

Water chemistry: pH (1) 6.5 (1) 75.0 ppm
1961, T.D.S. 1961
(2) 7.55 (2) 77.5 ppm
Temperature: (1) 74°F. (2) 73°F. August 15, 1961

Bottom Composition

Harry's River has a large concentration of "spawning gravel" on the lower reaches; however, it appears, from results of several surveys, that it is not utilized by Atlantic salmon to any great extent. The areas of riverbed on the upper reaches and tributaries appear to provide suitable conditions for egg disposition.

The main stem of Harry's River (including Pinchgut Brook) has an estimated 20,250 potential rearing units (100 yd^2 (83.6 m^2)) and 5,250 spawning units for Atlantic salmon. Fourteen tributaries have an estimated 11,552 potential rearing units and 2,082 spawning units. Downer (1968) estimated approximately 40,000 rearing units accessible to Atlantic salmon. The variation in the two estimates is attributed to the two methods of surveying.

Summary of accessible rearing and spawning habitat of Harry's River.

Units	Accessible	Inaccessible	Total
Total system	32,073	-	32,073
Rearing	31,572	-	31,572
Spawning	7,332	-	7,332

Barriers to Fish Migration:

Main river: No obstructions.

Tributaries:

(1) North Brook, falls at mile 5 (8.04 km), complete obstruction.

(2) Spruce Brook, falls 10 feet high (3.04 m), 10 feet wide (3.04 m), Angle 90° at mile 3 (4.82 km), complete obstruction.

(3) Pinchgut Brook, wooden dam; kept open most of the year and poses very little obstruction to fish.

Pinchgut Lake dam-fishway constructed to replace inadequate sluice - 1956.

Spillway in dam opened, fishway not in use - 1963.

Miscellaneous Information:

Except for Roberts Brook, most of the salmon population utilize the upper regions of this system for spawning purposes.

(2) Long Gull Pond Brook, from mouth to Long Gull Pond, approx. $1\frac{1}{2}$ miles (2.41 kilometers). Boulder 10%; rubble 29%; gravel 41%; sand 8%; silt 12%. Width range 5' - 30' (1.52 - 9.14 meters). Depth range 6" - 5' (.15 - 1.52 meters). Spawning areas: 8,440 sq. yds. (7064.28 sq. meters). Poor to good conditions.

(3) Rushy Pond Brook, from mouth to Rushy Pond, distance approx. 1.3 miles (2.09 kilometers). Width range 3 - 4 ft. (.91 - 1.21 meters). Depth range 1 - 2 ft. (.3 - .6 meters). Boulder 5%; rubble 10%; gravel 10%; silt 75%. Spawning areas - nil.

(4) Black Duck Brook, from mouth to Black Duck Pond, approx. distance 4 miles (6.43 kilometers). Width range 15-20 ft. (4.57 - 6.09 meters). Depth range 1 - 2.5 ft. (.3 - .76 meters). Boulder 55%; rubble 20%; gravel 20%; sand 5%. Spawning areas: 4,125 sq. yds. (3452.62 sq. meters). Medium condition.

(5) Trout Brook, from mouth to Bottle Neck Pond, approx. distance 17 miles (27.34 kilometers). Width range 10-100 ft. (3.04 - 34.28 meters). Boulder 27.3%; rubble 33.8%; gravel 21.0%; sand 5.7%; silt 12.2%. Spawning areas: 62,300 sq. yds. (52,145.1 sq. meters).

(6) Roberts Brook, from mouth to mile point 3 (4.82 kilometers). Bedrock 13.0%; boulder 28.0%; rubble 43.0%; gravel 12.5%; sand 2.5%; silt 0.3%. Width range 60 - 70 ft. (18.28 - 21.33 meters). Depth range 1 - 2 ft. (.3 - .6 meters). Spawning areas - nil.

HARRY'S RIVER

Location—

On the West Coast, empties into The Gut at the bottom of Bay St. George.

Accessibility—

The Newfoundland Railway traversed the north bank of this river for its entire length of about 20 miles.

General Remarks—

All fishermen are interested in records ... Captain Walter P. Lambert, from May 26th to September 1st landed 198 salmon and grilse, the largest of which weighed 28 lbs. S. Overton landed 90 salmon and grilse from May 22nd to July 24th. Messrs. W.A.S. Sparling and L. Young, from May 23rd to August 27th landed 139 salmon and grilse. Maximum weight 29 lbs. E.F. Reinhart landed 18 salmon from July 16th to 25th. Of this number, 6 exceeded 20 lbs. The above all fished ... on Harry's, Crabbs, Highlands, Fishells, Robinson's, Barachois, and North Branch Rivers.

Tributaries:

Ahwachenjeech Brook	12B/9	Jack Burke Brook	12B/9
Black Duck Brook	12B/9	Muskrat Brook	12B/9
Bras Mort Brook	12B/9	Roberts Brook	12B/9
Caribou Brook	12B/9	Rushy Brook	12B/9
Dons Brook	12B/9	Sanders Brook	12B/9
Furies Brook	12B/9	Trout Brook	12B/9
Hickeys Brook	12B/9	Twentieth Brook	12B/9

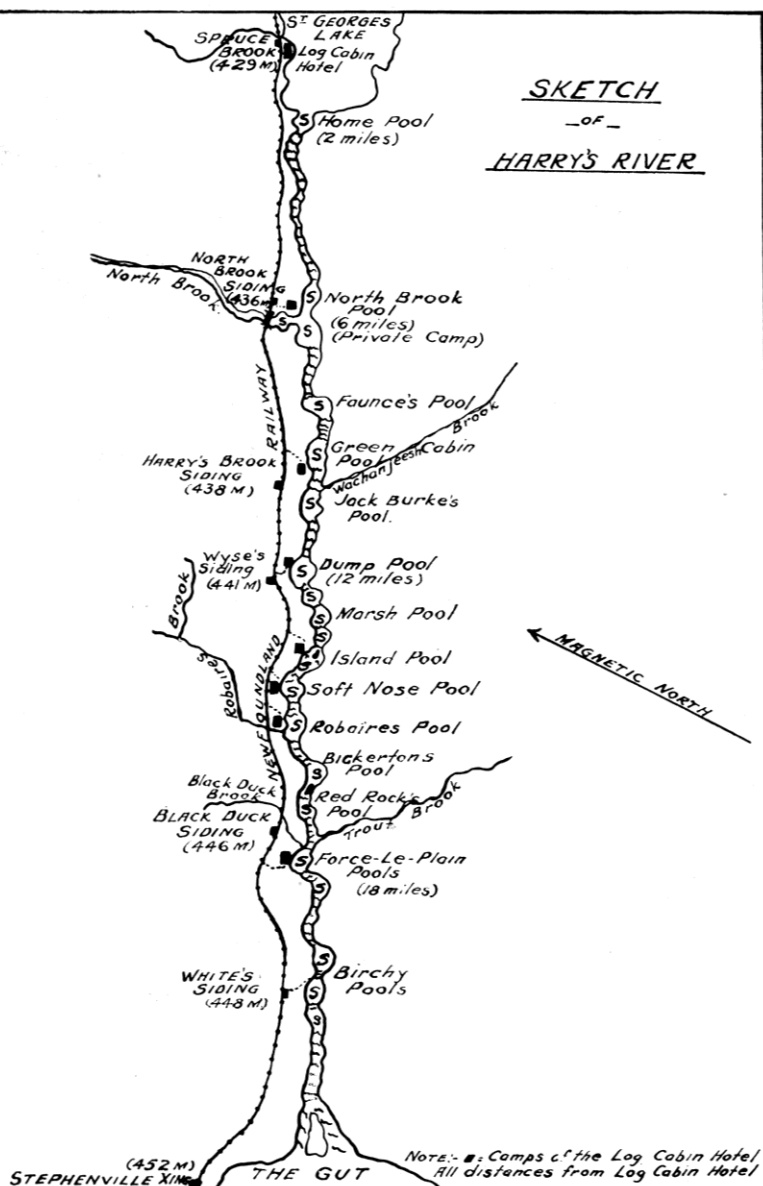
Notes:

Rises in Georges Lake 12B/9 and 16

Pools:

Birchy Pools, Force-Le-Plain Pools, Red Rocks Pool, Bickertons Pool, Robaires Pool, Soft Nose Pool, Island Pool, Marsh Pool, Dump Pool, Jack Burke's Pool, Green Pool, Faunce's Pool, North Brook Pool, Home Pool

SKETCH
- of -
HARRY'S RIVER



SEAL COVE BROOK

Location: 48°30'55" N. 58°27'45" W.
Map Reference: Harry's River. 12 B/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Mummichogs

No angling data available on this stream.

BLANCHE BROOK

Location: 48°32'25" N. 58°34'45" W. St. George's Bay.

Map Reference: Stephenville. 12 B/10 East half.

CHARACTERISTICS OF DRAINAGE BASIN**Geomorphological Factors:**

Basin area, 47.9 miles², (124.06 km²). Mean width, 4.4 miles, (7.07 km).

Perimeter, 35.4 miles, (56.95 km). Axial length, 11.2 miles, (18.02 km).

Maximum basin relief, 1,801 feet, (548.94 m).

Geology:

About half Ordovician sedimentary with the remainder consisting of acidic intrusive rocks and Pennsylvanian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN**Barriers to Fish Migration:**

ROMAINES BROOK

Location: 48°33'05" N. 58°40'25" W. St. George' Bay.

Map Reference: Stephenville. 12 B/10 East Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin Area: 38.0 miles² (98.42 km²). Mean width: 2.9 miles, (4.82 km).

Perimeter: 38.0 miles (61.14 km). Axial length: 16.1 miles, (25.92 km).

Maximum basin relief: 1,801 feet (548.94 m).

Geology:

Almost entirely Ordovician sedimentary with small amounts of Cambrian sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem (including standing water): 18.6 miles (29.9 km).

Number of major tributaries: 2

Total length of major tributaries (including standing water); 17.1 miles (27.5 km).

Area of lakes (> mile² (2.6 km²): nil.

Bottom Composition:

The main stem contains 2,752 rearing units and the two significant tributaries 238 rearing units.

Summary of bottom composition of Romaines Brook and tributaries.

Unit (100 yd ² (83.6 m ²))	Accessible	Inaccessible	Total
Total system	2,990	-	2,990
Rearing	2,752	-	2,752
Spawning	918	-	918

FOX ISLAND RIVER

Location: 48°41'30" N. 58°40'14" W. North of East Bay,
Port au Port Bay.

Map Reference: Stephenville. 12 B/10 East Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 75.0 miles² (194.25 km²). Mean width: 3.6 miles,
(5.79 km).

Perimeter: 47.0 miles (75.62 km). Axial Length: 18.9 miles,
(30.41 km).

Maximum basin relief: 2,672 (814.42 m).

Geology:

About half Ordovician sedimentary with the remainder consisting
of ultrabasic intrusive rocks and a small amount of basic
intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of main stem (including standing water): 22.7 miles
(36.5 km).

Number of major tributaries: 5

Total length of tributaries (including standing water): 75.9 miles
(122.1 km).

Area of lakes (> 1 mile² (2.6 km²)): Nil.

Bottom Composition:

The main stem of Fox Island River has 6,650 units (100 yd² (83.6 m²))
of parr rearing habitat and 1,875 units suitable for spawning
adults. Major tributaries contain 1,195 parr rearing units and 51
spawning units.

FOX ISLAND RIVER

Location—

In Port au Port Bay on West Coast [also known as Benoit's Brook].

Accessibility—

This river is readily reached from Stephenville Crossing or St. George's. A motor road runs from St. Georges through Stephenville to The Gravels, Port au Port, a total distance of 30 miles. At The Gravels a motor boat can be hired for the run to the river, a distance of approximately 9 miles.

General Remarks—

Good camping sites are numerous. Salmon ranging from 10 to 30 lbs. have been caught. Good sea-trout fishing can be had at the mouth of the river in June and early July.

Tributaries:

Phillips Brook	12B/10
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Notes:

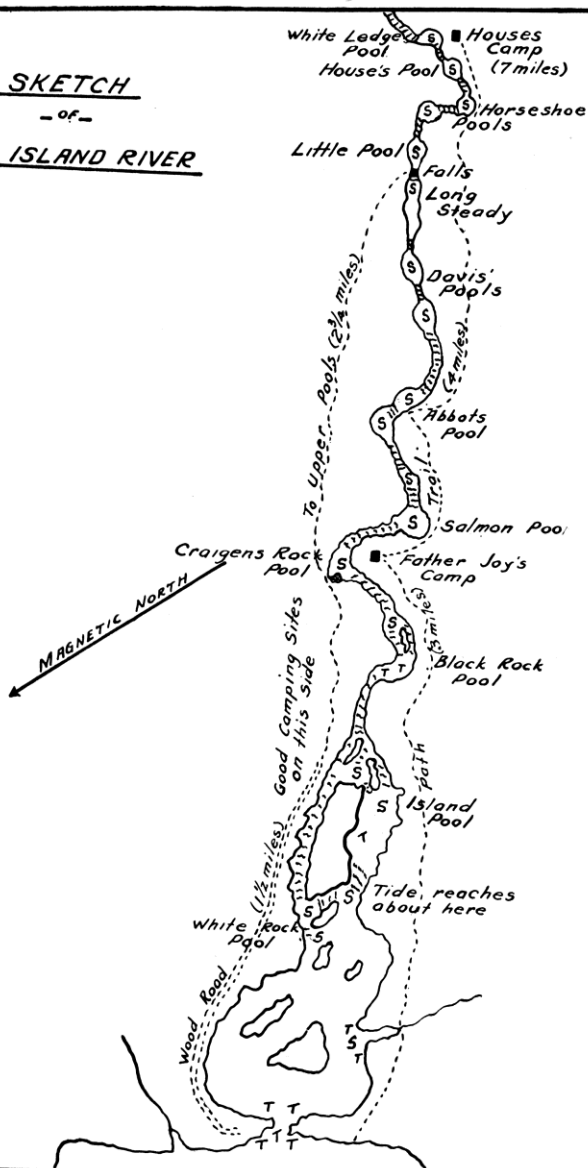
Rises in the mountains	12B/16
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Pools:

White Rock Pool, Island Pool, Black Rock Pool, Craigens Rock Pool, Salmon Pool, Abbots Pool, Davis' Pools, Long Steady, Little Pool, Horseshoe Pools, House's Pool, White Ledge Pool



SKETCH
- of -
FOX ISLAND RIVER



LEWIS BROOK

Location: 48°49'15" N. 58°35'12" W.
Map Reference: Shag Island. 12 B/15 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.7 miles², (32.89 km²). Mean width, 2.2 miles,
(3.53 km).

Perimeter, 15.2 miles (24.47 km). Axial length, 5.6 miles,
(9.01 km).

Maximum basin relief, 2,450 feet, (746.76 m).

Geology:

Amlost entirely Ordovician sedimentary with a small amount of
Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

DEADMAN'S BROOK

Location: 48°51'35" N. 58°33'27" W.
Map Reference: Shag Island. 12 B/15 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.5 miles², (22.01 km²). Mean width, 1.2 miles,
(1.93 km).

Perimeter, 13.3 miles, (21.39 km). Axial length, 5.3 miles,
(8.52 km).

Maximum basin relief, 2,672 feet, (814.42 m).

Geology:

About half Ordovician sedimentary with the remainder consisting
of basic intrusive rocks and ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SERPENTINE RIVER

Location: 48°56'30" N. 58°30'25" W. South of Bay of Islands.
Map Reference: Shag Island. 12 B/15 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 167.2 miles², (433.05 km²). Mean width, 7.9 miles,
(12.71 km).

Perimeter, 73.6 miles, (118.42 km). Axial length, 19.3 miles,
(31.05 km).

Maximum basin relief, 2,501 feet, (762.30 m).

Geology:

About half Ordovician sedimentary with the remainder consisting
of untrabasic intrusive rocks, basic intrusive rocks and a small
amount of Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 2, (3.21 km), partial obstruction.

Falls at mile 5.5., (8.84 km), partial obstruction.

SERPENTINE RIVER

Location—

On the West Coast 12 miles [south] from the entrance to Bay of Islands.

Accessibility—

Readily reached by motor boat from Curling in Bay of Islands, a total distance of approximately 30 miles.

General Remarks—

This is a well-known river to which many anglers, from abroad, return year after year. It offers excellent fishing and the run of salmon is large, fish of 40 lbs. in weight having been caught. From the falls, a distance of approximately 5 miles, to the mouth of the river, are located many excellent pools and are most readily accessible. Other pools are located above the falls to the outlet at Serpentine Lake. A trail leads from the lower pools to the falls. Excellent sea-trout fishing can be had in June and July at the mouth of the river. Camping sites along the river are numerous.

Tributaries:

Blue Hill Brook	12B/16	Red Barren Brook	12B/16
East Blue Hill Brook	12B/16	Simms Brook	12B/16
Middle Blue Hill Brook	12B/16	Whealers Brook	12B/16

Notes:

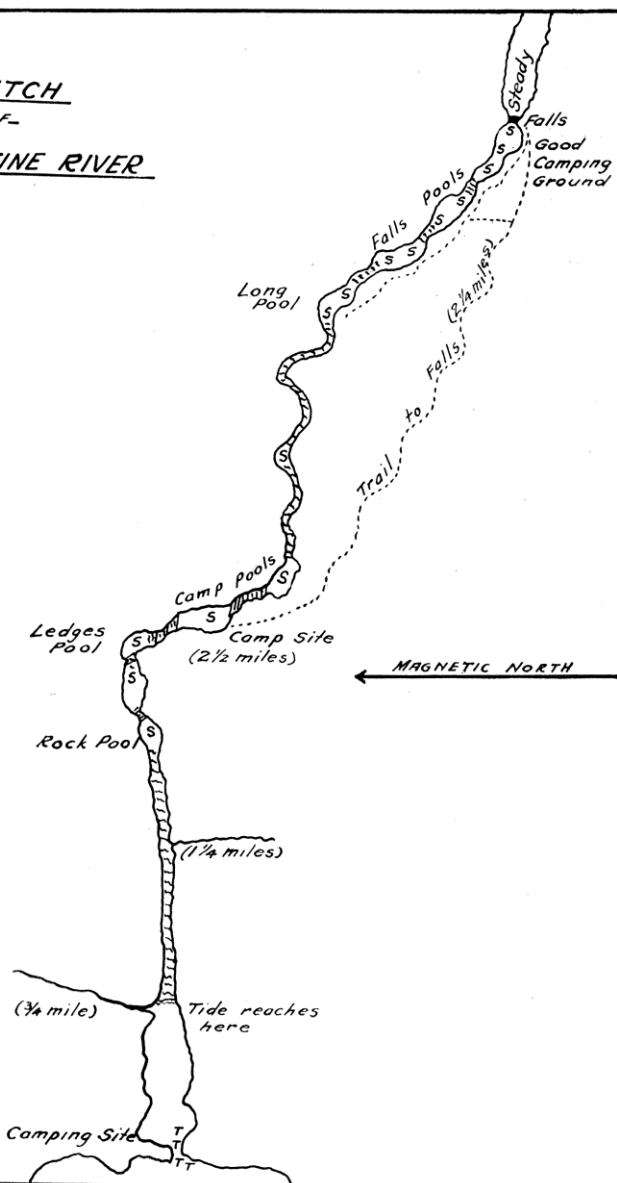
Rises in Serpentine Lake	12B/16
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Pools:

Rock Pool, Ledges Pool, Camp Pools, Long Pool, Falls Pools



SKETCH
-of-
SERPENTINE RIVER



WILD COVE BROOK

Location: 58°31'25" N. 58°27'45" W. South of Bay of Islands.
Map Reference: Bay of Islands. 12 G/1 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 31.1 miles² (80.54 km²). Mean width, 4.9 miles,
(7.88 km).
Perimeter, 24.1 miles, (38.77 km). Axial length, 6.3 miles,
(10.13 km).
Maximum basin relief, 2,501 feet, (762.50 m).

Geology:

Almost entirely Ordovician volcanic with some acidic intrusive
rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas:

Salmon and sea trout spawn in the lower section of the main river.

Barriers to Fish Migration:

Falls at mile 0.5, (0.80 km), on the main river; complete
obstruction.

FISH POPULATIONS

Species Present: Atlantic salmon and brook trout.

No angling data available on this stream.

BLOW ME DOWN BROOK

Location: 49°03'50" N. 58°13'35" W. Bay of Islands.
Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 21.0 miles², (54.39 km²). Mean width, 2.4 miles, (3.86 km).

Perimeter, 26.4 miles, (42.47 km). Axial length, 9.0 miles, (14.48 km).

Maximum basin relief, 2,134 feet, (650.44 m).

Geology:

About half ultrabasic intrusive rocks with the remainder consisting of Ordovician sedimentary and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls, partial obstruction, located at mile 1 (1.61 km) from mouth.

CLARKES BROOK

Location: 49°00'40" N. 58°07'58" W. Bay of Islands.
Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 13.2 miles², (34.18 km²). Mean width, 2.6 miles,
(4.18 km).

Perimeter, 22.4 miles, (36.04 km). Axial length, 6.7 miles,
(10.78 km).

Maximum basin relief, 2,000 feet, (609.60 m).

Geology:

Almost entirely Ordovician sedimentary with the remainder
consisting of ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

COOK'S BROOK

Location: 48°58'17" N. 58°04'02" W. Humber Arm, Bay of Islands.
Map Reference: Serpentine. 12 B/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 39.0 miles², (101.01 km²). Mean width, 3.9 miles, (6.27 km).

Perimeter, 36.1 miles, (58.08 km). Axial length, 10.2 miles, (16.4 km).

Maximum basin relief, 1,350 feet, (411.48 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 0.1, (.16 km), partial obstruction.

Falls at mile 0.3, (.48 km), 5' (1.52 m) high; partial obstruction.

In 1971, pool at mile 0.1 (.16 km) filled in with boulders so that fish would not hold up.

COOK'S BROOK

Location—

In Humber Arm, Bay of Islands, West Coast.

General Remarks—

This brook can be fished from any of the hotels in Bay of Islands. A nice run of salmon frequent it and many local sportsmen from Bay of Islands fish here.

Tributaries:

Burnt Hill Brook	12A/13 –12 B/16
Little Feeder Brook	12A/13 –12 B/16
Black Gulch Brook	12A/13 –12 B/16
Snooks Brook	12B/16

Notes:

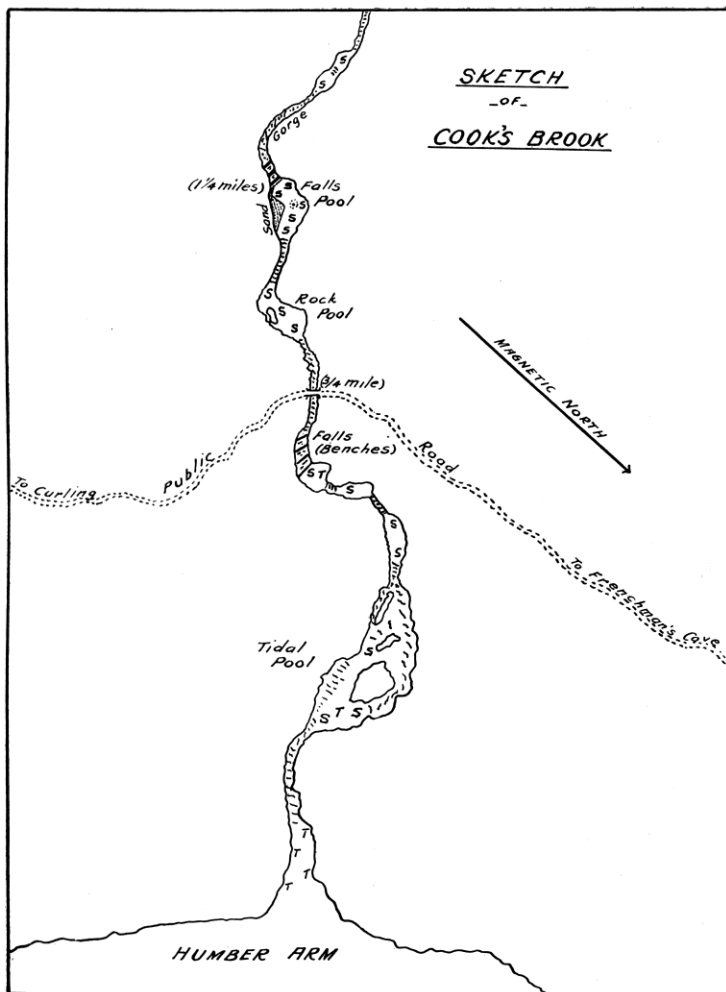
Rises in Big Cooks Pond	12B/16
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Pools:

Tidal Pool, Falls, Rock Pool, Falls Pool, 5 unnamed pools



SKETCH
-of-
COOK'S BROOK



W-44-0243

HUMBER RIVER

Location: $48^{\circ} 57' 30''$ N $57^{\circ} 53' 50''$ W. Humber Arm, Bay of Islands.

Map Reference: Corner Brook. 12 A/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 2,965.0 miles², (7679.35 kilometers²). Mean width 30.6 miles, (49.23 kilometers).

Perimeter, 734.3 miles, (1181.48 kilometers). Axial length, 75.8 miles, (121.96 kilometers).

Maximum basin relief, 2,163 feet, (659.34 meters).

Geology: About equal amounts of acidic intrusive rocks, Mississippian sedimentary, gneiss and a small amount of Cambrian sedimentary, Ordovician sedimentary and Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics: Total length of all streams in system, 1,523 miles, (2450.50 kilometers).

Main river is 95 miles long (152.85 kilometers), including standing water.

Spawning Areas: The $3\frac{1}{2}$ mile, (5.63 kilometer), section of river, between the inlet of Birchy Basin Dam and Main Falls may well be the chief spawning area of the main river salmon run.

Barriers to Fish Migration: Section: Main River:

Falls (Big Falls) 48 miles, (77.23 kilometers) from mouth, 12 ft., (5.65 meters) high, 300 ft. wide (91.44 meters), 90° angle; partial

obstruction. In 1951, a rock cut made to serve as fishway.

Effectiveness is considered poor, except at a narrow range of water levels, when turbulence is not too strong. In 1972, rock was blasted that had fallen in fish passage.

Dam (Birchy Basin Dam) 8 ft. (2.45 meters) high, length bank to bank 200 ft., (60.96 meters) at mile point 65, (104.58 kilometers) partial obstruction. Note: Gates in dam are kept open during salmon run. Dam not presently being used by salmon.

Falls (Main Falls) 70 miles, (112.63 kilometers) from mouth consist of falls and rapids.

Falls is 21 ft. high, (6.40 meters), 50 ft. long (15.24 meters), rapids 10 ft. high, (3.04 meters), 200 ft. (60.96 meters) long; complete obstruction.

Falls and rapids, 77 miles, (123.89 kilometers) from mouth, 39' high (11.38 meters) high, 640' long, (195.07 meters), partial obstruction.

Section: Tributary - Junction Brook dammed, (Grand Lake system flowing into Deer Lake). Power house at mouth; complete obstruction.

Section: Deer Lake:

Mean width 1.4 miles, (2.25 kilometers). Mean length 11 miles, (17.69 kilometers). Area, 22 sq. mi., (56.98 square kilometers).

Maximum depth, 310', (94.48 meters). Mean depth, 145', (44.19 meters).

Volume $95,001 \times 10^6$ cu. ft.

Bottom: Brown mud, with considerable bark material mixed therein.

Shoreline is regular and composed of boulder, rubble, sand and gravel.

Species of fish present: ouananiche, brook trout, Arctic char, smelt (possibly landlocked) and tomcod.

Water chemistry: pH 6.7 (1961) Total dissolved solids, 34.6 ppm (1961).

Temperature, 75°F. (Sept. 15, 1961).

Inflow to lake from two sources; 1) Upper Humber River 3,070 cfs.

2) Grand Lake inflow through Deer

Lake power house, 5,070 cfs.

Adies River, wooden sluice constructed by Bowaters, poses no problem to salmon. Sluice modified in 1961. Sluice fenced in 1964.

LOWER HUMBER RIVER

Location—

On West Coast, empties into Humber Arm, Bay of Islands,.

General Remarks—

This is one of the largest rivers on the Island. Motor boats can go up this river to Deer Lake. A large and heavy run of salmon go up this river, many fish between 30 to 40 lbs. being caught. There are splendid salmon pools and camping sites.

Tributaries:

Duncan Brook	12A/13
East Steady Brook	12A/13
Matthews Brook	12A/13
Parsons Brook	12A/13
Steady Brook	12A/13

Notes:

The Humber River flows out of Deer Lake to Humber Arm, Bay of Islands. It is commonly, and incorrectly, called Lower Humber to distinguish it from Upper Humber, its extension north of, and emptying into, Deer Lake.

Pools:

Shell Bird Island, Limestone Quarry, Seal Island, Steady Brook, Big Rapids, Little Rapids



UPPER HUMBER RIVER

Location—

On West Coast. Flows into Deer Lake.

General Remarks—

This river offers a splendid canoe as well as fishing trip. There are numerous pools along its course, the two most important being John's and Big Falls. The trip up the river from Deer Lake at Big Falls is 25 miles in length and can be readily accomplished by canoe (poling the rapids) with one or two portages. Large salmon up to 40 lbs. in weight have been caught on the river.

Tributaries:

Crooked Feeder	12H/3	Wigwam Brook	12H/6
Junction Brook	12H/3	Big Falls Brook	12H/6
Nichols Brook	12H/3	Little Falls Brook	12H/6
Glide Brook	12H/3	East Adies River	12H/11
Rocky Brook	12H/3	Gales Brook	12H/11
Trout Brook	12H/3	Northeast Adies River	12H/11
Drill Hole Brook	12H/6	Taylors Brook	12H/11
Harrimans Brook	12H/6		
Joes Brook	12H/6		

Notes:

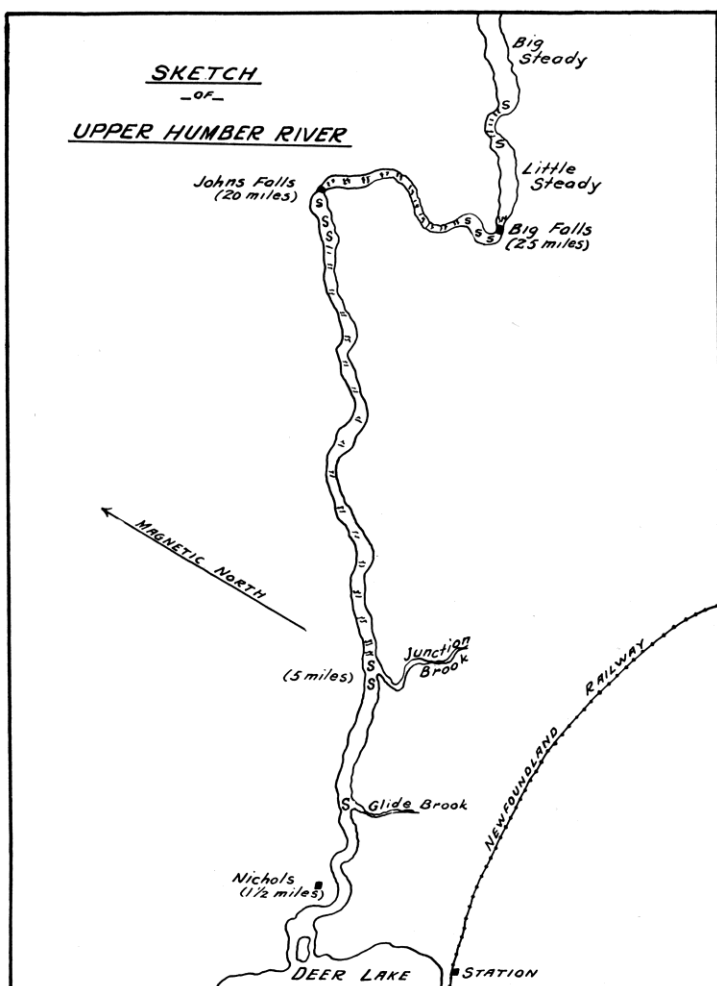
Rises in Middle Barrens, east of Gros Morne 12H/3

Pools:

Glide Brook, Johns Falls, Big Falls, Little Steady, Big Steady



SKETCH
-OF-
UPPER HUMBER RIVER



HUGHES BROOK

Location: 48°59'15" N. 57°54'30" W. Bottom of Humber Arm,
Bay of Islands.

Map Reference: Corner Brook. 12 A/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 51.1 miles², (132.34 km²). Mean width, 4.0 miles,
(6.43 km).

Perimeter, 36.6 miles, (58.88 km). Axial length, 12.0 miles,
(19.30 km).

Maximum basin relief, 1,500 feet, (457.20 m).

Geology:

Predominantly Ordovician sedimentary with some Cambrian
sedimentary and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 3 (4.82 km), on the main river; partial
obstruction.

GILLAMS BROOK

Location: 49°01'03" N. 58°04'10" W. Humber Arm, Bay of Islands.
Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.2 miles², (44.54 km²). Mean width, 2.5 miles,
(4.02 km).

Perimeter, 20.0 miles, (32.18 km). Axial length, 6.4 miles,
(10.29 km).

Maximum basin relief, 1,350 feet, (411.48 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

RATTLER BROOK

Location: 49°03'45" N. 58°06'55" W. Humber Arm, Bay of Islands.
Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 5.6 miles², (14.50 km²). Mean width 1.6 miles,
(2.57 km).
Perimeter, 11.0 miles, (17.69 km). Axial length, 3.8 miles,
(6.11 km).
Maximum basin relief, 1,050 feet, (320.04 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls located near mouth is complete at all discharges.

COX'S BROOK

Location: 49°07'15" N. 58°04'40" W. Middle Arm, Bay of Islands.

Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 21.2 miles², (54.90 km²). Mean width, 2.3 miles, (3.70 km).

Perimeter, 28.0 miles, (45.05 km). Axial length, 9.6 miles, (15.44 km).

Maximum basin relief, 1,350 feet, (411.48 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls - complete obstruction.

FISH POPULATIONS

Species Present:

No angling data available on this stream.

BARACHOIS BROOK

Location: 49°07'21" N. 58°00'59" W. Middle Arm, Bay of Islands.
Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.3 miles², (11.13 km²). Mean width, 1.4 miles, (2.25 km).

Perimeter, 10.3 miles, (16.57 km). Axial length, 3.4 miles, (5.47 km).

Maximum basin relief, 1,250 feet, (381.00 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present:

No angling data available on this stream.

OLD MAN'S BROOK

Location: 49°07'13" N. 57°55'01" W. Goose Arm, Bay of Islands.

Map Reference: Pasadena. 12 H/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 61.1 miles², (158.2 km²). Mean width, 5.1 miles, (8.20 km).

Perimeter, 44.3 miles (71.27 km). Axial length, 12.0 miles, (19.30 km).

Maximum basin relief, 1,500 feet, (457.20 m).

Geology:

About half gneiss with the remainder consisting of about equal amounts of Ordovician sedimentary and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GOOSE ARM BROOK

Location: 49°11'00" N. 57°51'30" W. Bottom of Goose Arm, Bay of Islands.

Map Reference: Pasadena. 12 H/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 81.9 miles², (212.12 km²). Mean width, 5.4 miles, (8.68 km).

Perimeter, 49.8 miles, (80.12 km). Axial length, 12.0 miles, (19.30 km).

Maximum basin relief, 1,653 feet, (503.83 m).

Geology:

Almost entirely Ordovician sedimentary with small amounts of Cambrian sedimentary and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Dam at outlet of Cloudy Pond on the main river; partial obstruction.

Falls on left branch 3/4 mile (1.20 km) from mouth. Partial obstruction, total drop of 12 feet, (3.65 m) in two drops 8 feet and 4 feet, (2.43 and 1.21 m).

PENGUIN ARM BROOK

Location: 49°11'32" N. 57°55'35" W. Penguin Arm, Bay of Islands.

Map Reference: Pasadena. 12 H/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 6.7 miles², (17.35 km²). Mean width, 1.4 miles, (2.25 km).

Perimeter, 11.8 miles, (18.98 km). Axial length, 4.3 miles, (6.91 km).

Maximum basin relief, 1,150 feet, (350.52 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTH ARM BROOK

Location: 49°14'22" N. 57°56'25" W. North Arm, Bay of Islands.

Map Reference: Pasadena. 12 H/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 19.1 miles², (49.47 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 22.5 miles, (36.20 km). Axial length, 7.8 miles, (12.55 km).

Maximum basin relief, 2,250 feet, (685.80 m).

Geology:

Almost entirely Ordovician sedimentary with a small amount of ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

STROWBERGS BROOK

Location: 49°12'50" N. 58°05'03" W. North Arm, Bay
of Islands.

Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.2 miles², (10.88 km²). Mean width, 0.8 miles,
(1.28 km).

Perimeter, 11.0 miles, (17.69 km). Axial length, 4.9 miles,
(7.88 km).

Maximum basin relief, 2,315 feet, (705.61 m).

Geology:

Ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LIVERPOOL BROOK

Location: 49°13'30" N. 58°07'25" W. North Arm, Bay of Islands.

Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 24.8 miles², (64.23 km²). Mean width, 2.8 miles, (4.50 km).

Perimeter, 27.6 miles, (44.40 km). Axial length, 9.0 miles, (14.48 km).

Maximum basin relief, 2,315 feet, (705.61 m).

Geology:

About half basic intrusive rocks with the remainder consisting of ultrabasic and Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LOWER CRABB BROOK

Location: 49°14'00" N. 58°11'38" W. North Arm, Bay of Islands.

Map Reference: Bay of Islands. 12 G/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 32.0 miles², (82.88 km²). Mean width, 3.3 miles, (5.30 km).

Perimeter, 34.9 miles, (56.15 km). Axial length, 11.4 miles, (18.34 km).

Maximum basin relief, 2,251 feet, (686.10 m).

Geology:

About equal amounts of basic intrusive rocks and Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GREGORY RIVER

Location: 49°22'25" N. 58°13'45" W.
Map Reference: Trout River. 12 G/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 52.4 miles², (135.71 km²). Mean width, 3.8 miles, (6.11 km).
Perimeter, 41.5 miles, (66.77 km). Axial length, 10.8 miles, (17.37 km).
Maximum basin relief, 2,100 feet, (640.08 m).

Geology:

Predominantly gneiss with some Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

TROUT RIVER

Location: 49°28'50" N. 58°08'00" W. Trout River Bay.
Map Reference: Trout River. 12 G/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 98.2 miles², (254.33 km²). Mean width, 4.4 miles, (7.07 km).
Perimeter, 66.7 miles, (107.32 km). Axial length, 20.7 miles, (33.30 km).
Maximum basin relief, 2,333 feet, (711.09 m).

Geology:

Predominantly Ordovician sedimentary with the remainder consisting of ultrabasic intrusive rocks and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

TROUT RIVER

Location—

On West Coast between Bay of Islands and Bonne Bay.

General Remarks—

Trout River is only 1½ miles long from the outlet of First Trout Pond to the sea. A road parallels the river along its North Bank. Good camping sites are available adjacent to road and river. Fish ranging in weight from the grilse of 4 or 5 lbs. to salmon of 40 lbs. frequent this river. On rising evening tides in the month of July splendid sea-trout fishing can be had at the river's mouth.

Tributaries:

Fox Point Brook	12G/8
Grassy Point Brook	12G/8
Long Point Brook	12G/8
Rocky Point Brook	12G/8
Burnt Brook	12H/5
Middle Trout River	12H/5
North Trout River	12H/5
Overfall Brook	12H/5

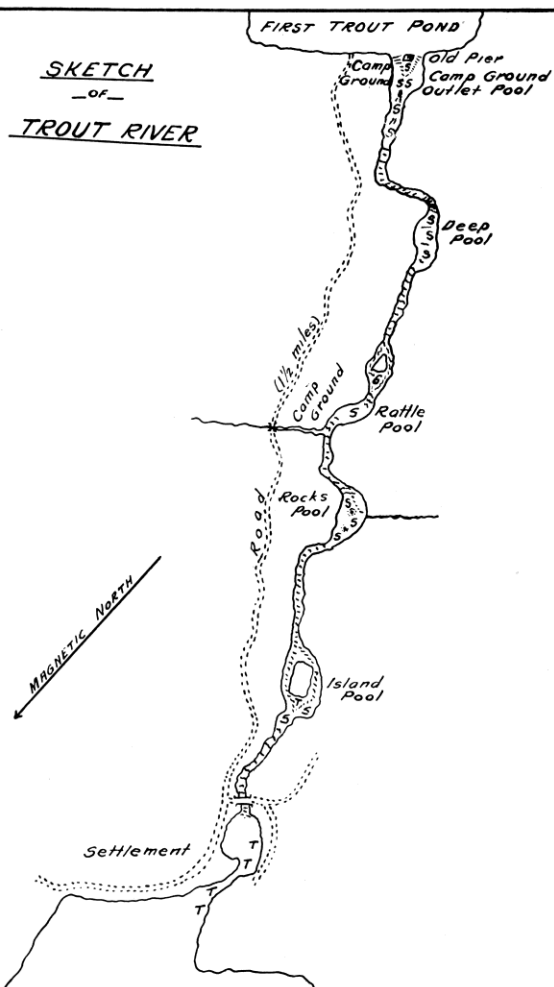
Notes:

Rises north of Mount St. Gregory 12H/5

Pools:

Island Pool, Rocks Pool, Rattle Pool, Deep Pool, Outlet Pool





MIDDLE BROOK

Location: 49°26'08" N. 57°53'15" W. South Arm, Bonne Bay.
Map Reference: Lomond. 12 H/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Arctic char.

No angling data available on this stream.

Gene Frequency: Not completed.

LOMOND RIVER

Location: $49^{\circ} 25' 50''$ N. $57^{\circ} 44' 00''$ W. East Arm, Bonne Bay.

Map Reference: Lomond. 12 11/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 181.3 miles² (469.56 kilometers²). Mean width, 6.6 miles (106.19 kilometers).

Perimeter, 84.4 miles (135.79 kilometers). Axial length, 14.0 miles, (22.52 kilometers).

Maximum basin relief, 2,200 feet (670.56 meters).

Geology: About half Ordovician sedimentary with the remainder consisting of about equal amounts of Cambrian sedimentary and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Tributaries:

West Brook joins the main river on the left bank, approx. 2 miles (3.21 kilometers) upstream from the head of Bonne Bay Little Pond. Average width, 20 ft. (6.09 meters). Average depth, 1 ft. (0.3 meter). Velocity, moderate. Bottom type, mostly coarse gravel with some rubble and small boulders.

Longs Brook, on the left bank of the river, approx. 3 miles (4.82 kilometers) upstream from the head of Bonne Bay Little Pond. Width, 10 to 20 ft (3.04 to 6.08 meters). Depth, 15 in. (.38 meters). Velocity, moderate. Bottom type, coarse gravel, small and large boulders and some bedrock.

Wagtail Brook, on the left bank of the river, approx. 5 miles (8.04 kilometers) the head of Bonne Bay Little Pond. Width, 2 to 6 ft. (.60 to 1.82 meters). Depth, shallow. Velocities, sluggish. Bottom type, mud, fine gravel and bedrock.

Whitewash Brook, situated on the southwest side of Bonne Bay Big Pond about 3 miles (4.82 kilometers) from Bonne Bay Big Pond dam. Width, approx. 10 ft. (3.04 meters). Depth, shallow. Velocities, range from sluggish to rapid. Bottom type, fine and coarse gravel and rubble all covered with a layer of fine white clay.

Sand Bar Brook, situated on the south side of Bonne Bay Big Pond, approx. 6 miles (9.65 kilometers) from the dam. Width, 10 to 15 ft. (3.04 - 4.57 meters). Depth, 6 inches to 3 ft. (.15 meters to .91 meters). Velocities, swift. Bottom type, coarse gravel, rubble and small boulders.

Grindstone Brook, situated on the southeast side of Bonne Bay Big Pond approx. 5 miles (8.04 kilometers) from the dam. Width, 10 to 15 ft. (3.04 - 4.57 meters). Depth, 6 to 12 in. (.15 to .30 meters). Velocity, moderate to swift. Bottom type, mud, coarse gravel, rubble and small boulders.

White Hill Brook, situated on the east side of Bonne Bay Big Pond, about 4 miles (6.43 kilometers) by road from the dam. The highroad crosses the brook just above Big Pond. Width, 20 to 30 ft. (6.09-9.14 meters). Depth, 6 in. to 6 ft. (.15 to 1.82 meters). Velocities, sluggish to swift. Bottom type, fine and coarse gravel and small boulders.

Falls at mile 3.2 (5.14 km), outlet of Bonne Bay little pond, run around built 1948, did not function well. Fishway (pool and weir type) construction 1960, improvements made in 1961 and 1962.

Concrete floor placed in bottom pool of fishway, 1965; concrete baffle installed 1966; entrance removed and floors of concrete poured in all pools in 1969; new entrance installed in 1970; general repairs and clean out in 1971.

The fishway appeared to be operating well in 1963, but the count was low. It is assumed that the major portion of the run spawns below the falls or use the East River tributary. Glory Hole Falls, run around built by F.R.B.C. in 1948, did not work well. A partly successful attempt to divert water from Glory Hole in 1971, more work required.

DEER ARM BROOK

Location: 49°34'00" N. 57°50'20" W. Deer Arm, Bonne Bay.
Map Reference: Gros Morne. 12 H/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 48.5 miles², (125.61 km²). Mean width, 4.0 miles,
(6.43 km).

Perimeter, 36.7 miles, (59.05 km). Axial length, 10.4 miles,
(16.73 km).

Maximum basin relief, 2,300 feet, (701.04 m).

Geology:

About half Ordovician sedimentary with the remainder consisting
of Cambrian sedimentary and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

EAST RIVER

Location—

On West Coast. Bottom of East Arm, Bonne Bay.

General Remarks—

A road traverses the river from Lomond. Best salmon pools are located 3½ miles up the river from Lomond. The mouth of the river is practically a low lying flat at low tide. Salmon from 10 to 25 lbs. in weight frequent the river.

Tributaries:

East Lomond River	12H/5
Three Tom Brook	12H/5
White Hill Brook	12H/5
Sandbar Brook	12H/5

Notes:

Now Lomond River.

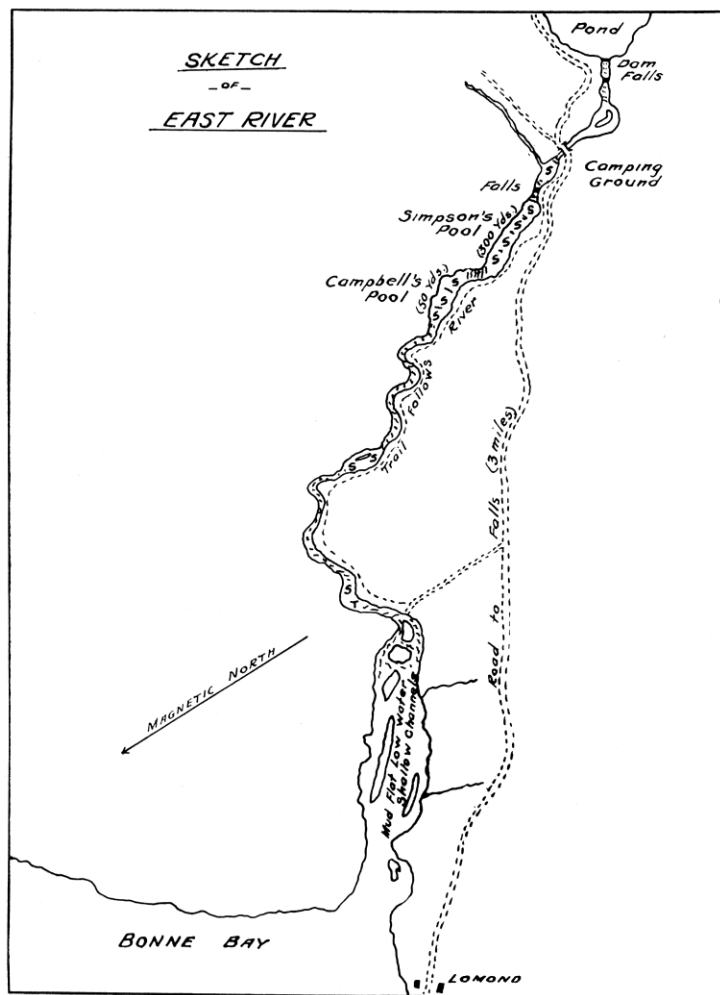
Flows through Little and Big Bonne Bay Ponds.

Pools:

Campbell's Pool, Simpson's Pool



SKETCH
- OF -
EAST RIVER



BAKERS BROOK

Location: 49°39'25" N. 57°57'45" W.
Map Reference: Gros Morne, 12 H/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN**Geomorphological Factors:**

Basin area, 54.3 miles², (140.64 km²). Mean width, 3.3 miles, (5.30 km).

Perimeter, 42.1 miles, (67.73 km). Axial length, 14.9 miles, (23.99 km).

Maximum basin relief, 2,615 feet, (797.05 m).

Geology:

About half gneiss with the remainder consisting of Ordovician sedimentary and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN**Barriers to Fish Migration:**

WESTERN BROOK

Location: 49°49'35" N. 57°51'30" W. South of St. Paul's Bay.
Map Reference: St. Paul's Inlet. 12 H/3 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 74.1 miles², (191.91 km²). Mean width, 4.2 miles, (6.75 km).

Perimeter, 56.7 miles, (91.23 km). Axial length, 14.5 miles, (23.34 km).

Maximum basin relief, 2,615 feet, (797.05 m).

Geology:

Predominantly gneiss with some Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls 6 feet to 8 feet high, (1.82-2.43 m.); partial obstruction.

WEST BROOK

Location—

On West Coast, approximately 15 miles north of Bonne Bay.

General Remarks—

The river is approximately 3 miles long and winds its way through flat lying country from its source in West Pond to the sea. It carries a nice run of salmon, of average weight of 7 lbs., and is noted for its sea-trout fishing, many large catches (sea trout) having been taken from its numerous pools, fish as large as 7 and 8 lbs. being caught.

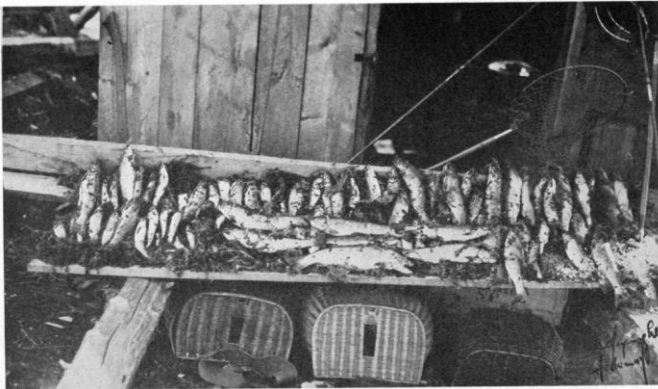
Notes:

Now Western Brook.

Rises in Western Brook Pond, Western Brook Gorge.

Pools:

9 unnamed pools



SKETCH
—OF—
WEST BROOK

← MAGNETIC NORTH

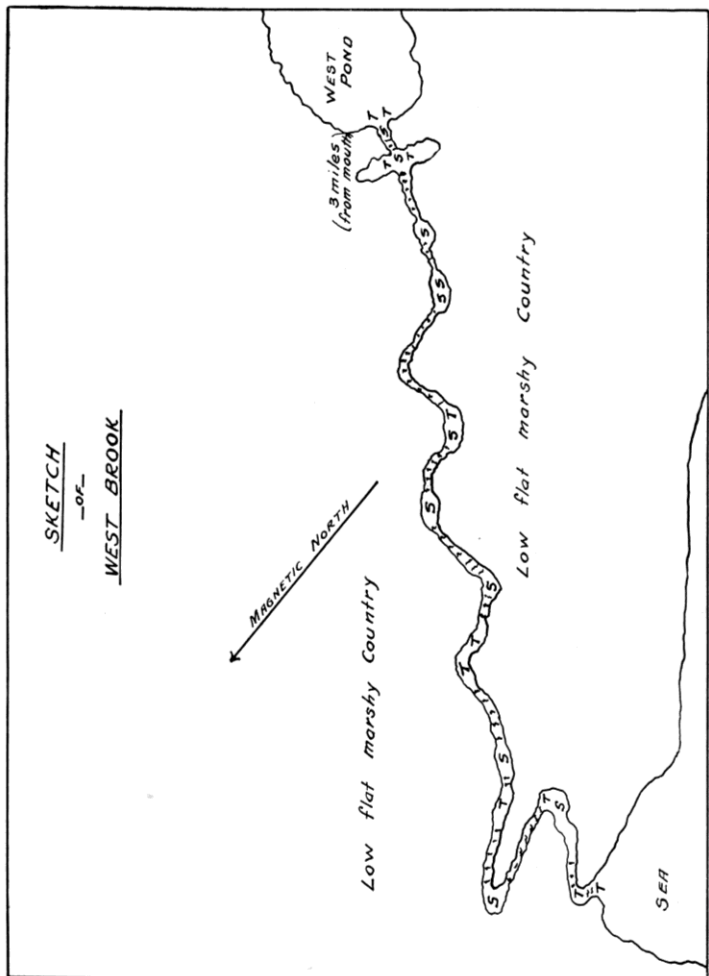
3 miles
(from mouth)

WEST
POND

Low flat marshy Country

Low flat marshy Country

SEA



ST. PAUL'S RIVER

Location: 49°49'18" N. 57°39'50" W. St. Paul's Inlet.
Map Reference: St. Paul's Inlet. 12 H/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 30.1 miles², (77.96 km²). Mean width, 3.1 miles,
(4.98 km).
Perimeter, 30.3 miles, (48.75 km). Axial length, 8.3 miles,
(13.35 km).
Maximum basin relief, 2,400 feet, (731.52 m).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

STANFORD RIVER

Location: 49°57'00" N. 57°45'35" W. Shallow Bay.
Map Reference: St. Paul's Inlet. 12 H/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.7 miles², (22.53 km²). Mean width, 2.1 miles,
(3.37 km).
Perimeter, 11.9 miles, (19.14 km). Axial length, 4.0 miles,
(6.43 km).
Maximum basin relief, 450 feet, (137.16 m).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

PARSONS POND RIVER

Location: 50°01'58" N. 57°43'40" W.
Map Reference: Portland Creek. 12 1/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 150.0 miles², (388.50 km²). Mean width, 7.4 miles, (11.90 km).

Perimeter, 65.0 miles, (104.58 km). Axial length, 17.2 miles, (27.67 km).

Maximum basin relief, 2,283 feet, (695.85 m).

Geology:

About equal amounts of Ordovician sedimentary and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

PORTLAND CREEK

Location: $50^{\circ} 10' 50''$ N. $57^{\circ} 36' 28''$ W. Near Daniel's Harbour.

Map Reference: Portland Creek. 12 1/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 380.4 miles² (985.24 kilometers²). Mean width, 13.2 miles (21.23 kilometers).

Perimeter, 109.3 miles (175.86 kilometers). Axial length, 26.2 miles (42.15 kilometers).

Maximum basin relief, 2,421 feet (737.92 meters).

Geology: About equal amounts of Ordovician sedimentary and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics: Length of all streams in system, not including standing water, is 120 miles, (193.08 kilometers).

Main river, from mouth to Portland Creek Pond (1 mile section), (1.6 kilometers). Depth range, 2 to 6 ft. (.60 to 1.82 meters).

Width range, 300 to 400 ft. (91.44-121.92 meters). Velocity, medium. Bottom types, fine sand - 6%, rubble - 46%, boulder - 46%, gravel - 2%.

Portland Creek Pond: Largest water surface area on the system. Estimated depth, 10 - 50 ft. (3.04 - 15.24 meters). Bottom type, sand with small sections of mud and rock.

Inner Pond: Six mile (9.65 kilometers) long body of water adjoins Portland Creek Pond. Situated between two mountain ridges which rise almost vertically from the shoreline to a height of 1,000 (304.8 meters) to 2,000 (609.60 meters).

Soundings in the northwest end showed a depth of over 100 ft. (30.48 meters).

Main Port Brook: Originates on the slopes of the Long Range Mountains, it flows through a valley bordered by 2,000 ft. (609.80 meters) high mountain ranges and empties into the southeast corner of Inner Pond. Width range 300 ft. (91.44 meters) near mouth to narrow farther upstream. Depth range 1 to 3 ft. (.15 to .91 meters). Velocity, medium, to fast in the lower section to swift further upstream. Bottom type, boulder and rubble in lower section with bedrock and boulder upstream.

Brian's Feeder, flows into the south end of Portland Creek Pond: Length of streams, 50 miles (80.45 kilometers). Basin area, 130 miles² (336.7 kilometers²). Near the mouth is slow moving over rubble and gravel bottom. It then passes for 300 yards (274.32 meters) between high banks bordered by large boulders. Depth range 3 to 6 ft. (.91 to 1.82 meters) affording excellent fishing pools.

Between mile points 0.2 and 0.5 (.32 and .80 kilometers) velocity turbulent over falls and rapids. Bottom type, mostly bedrock. Some small pools and steadies in this section.

Between mile points 0.5 and 1.0 (.80 and 1.60 kilometers) fast stream over bedrock and boulders.

Above mile point 1.0 (1.60 kilometers) velocity slow. River widens into steadies and pools.

South West Feeder, flow into the southwest corner of Portland Creek Pond, this tributary is considered the most important stream on the system.

From mouth to mile point 0.75 (1.20 kilometers), depth range, 2 - 5 ft (.6-1.52 meters). Bottom type, gravel and sand covered by a thin layer of rubble. Width range, estimated 75 to 100 ft. (22.86 to 30.48 meters). Several good fishing ponds in this section.

Between mile points 1 and 2 (1.609 - 3.21 kilometers) velocities, swift. Several rapid areas and steep pools were noted in this section.

Between mile points 2 and 3 (3.21 and 4.82 kilometers) velocities, swift. Falls and rapids cause increased velocity and turbulence. Many resting pools in this section.

Between mile points 3 and $4\frac{1}{2}$ (4.82 and 7.24 kilometers) velocity, medium over rubble and gravel bottom.

Between mile point $4\frac{1}{2}$ and mile point 5 (7.24 and 8.04 kilometers). River flows through narrow gulch having vertical rock walls and river bottom of bedrock and boulders.

Above mile point 5 (8.04 kilometers). Medium velocity over gravel bottom.

Sam Brown's Brook: This is a small trout stream, four miles (6.43 kilometers) long, having relatively little headwater storage.

Its single headwater pond drains marshland and flows slowly over mud and gravel bottom. Flow is reduced considerably during dry periods.

Spawning Areas:

Accessible Areas:

Main river, from mouth to Portland Creek Pond, one-quarter mile (0.4 kilometers) section suitable for spawning.

Brian's Feeder, at the mouth, has 150 ft. (45.72 meters) of river bottom suitable for spawning.

South West Feeder: The only significant available areas are reported to be located on this tributary where a possible 2 - 3 miles (3.21 - 4.82 kilometers) of stream is probably utilized.

Inaccessible Areas:

These include extensive stream on Brian's Feeder and Main Brook tributaries which is believed presently impossible to migrant fish.

Barriers to Fish Migration:

Main Port Brook, between mile points 2.8 and 5.0 (4.50 and 8.04 kilometers). Drop in elevation, 1,050 ft. (320.04 meters) numerous falls and rapids; complete obstruction.

Brian's Feeder, between mile points 0.2 and 0.5 (.32 and .80 kilometers) rapids and falls; complete obstruction: At upper end there is a falls with a height of 10 - 11 ft. (3.04 to 3.35 kilometers) at a 80° angle. Coupled with the height, an overhanging lip or jagged rock at the top presents an insurmountable barrier to migrating salmon.

South West Feeder, between mile points 2.4 and 3.0 (3.86 and 4.82 kilometers), section contains a rapids and three falls. All considered to be partial obstructions except the upper section "Puddle and Basin". During low water the local warden reports that salmon are held up at the foot of the falls to await suitable water levels. Fish are cut and bruised while attempting to surmount this obstruction. Rapids at mile point 4.8, (7.72 kilometers), fast turbulent water rushing through a long gorge; partial obstruction.

PORTLAND CREEK

Location—

On West Coast, approximately 100 miles from Curling in Bay of Islands, the nearest railway station.

Accessibility—

Daniel's Harbour, 4 miles north from the river's mouth, is a port of call for the coastal steamers.

General Remarks—

The main river from First Pond to the sea is only one mile long. This is a wide heavy stream, the fish lying behind the numerous large boulders in the river and below the numerous eddies so formed. Boats or canoes are required for fishing here. The South West Feeder, which empties into First Pond, 2 miles east from the outlet, contains many fine pools. These are readily accessible by means of a trail up the side of the river. These two rivers carry a large run of fish ranging from 10 to over 40 lbs. in weight. The "Narrows," between the First and Second Ponds, is a splendid place for sea trout.

Tributaries:

Greavett Brook	121/4
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Notes:

Now Portland Creek Pond and Inner Pond.	
Rises north of Indian Lookout	121/3

Pools:

Island Pool, Big Rattle, Rapid Pool, Falls Pool

BOWING BROOK

Location: 50°15'52" N. 57°34'20" W.
Map Reference: Bellburns. 12 1/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 21.4 miles², (55.42 km²). Mean width, 2.3 miles,
(3.70 km).

Perimeter, 19.3 miles (31.05 km). Axial length, 7.4 miles,
(11.90 km).

Maximum basin relief, 500 feet (152.40 m).

Geology:

Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BOUND BROOK

Location: 50°20'10" N. 57°32'12" W. Bellburns.
Map Reference: Bellburns. 12 1/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 25.6 miles², (66.30 km²). Mean width, 3.1 miles,
(4.98 km).

Perimeter, 22.9 miles, (36.84 km). Axial length, 6.8 miles,
(10.94 km).

Maximum basin relief, 500 feet, (152.40 m).

Geology:

Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

RIVER OF PONDS

Location: 50°32'30" N. 57°23'20" W. South of Hawke's Bay.

Map Reference: Port Saunders. 12 1/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 332.5 miles² (861.17 kilometers). Mean width, 10.8 miles, (17.37 kilometers).

Perimeter, 110.1 miles (177.15 kilometers). Axial length, 27.6 miles, (44.40 kilometers).

Maximum basin relief, 2,100 feet (640.08 meters).

Geology:

About half Ordovician with the remainder consisting of acidic intrusive rocks and a small amount of gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics: Length of all streams in system, not including standing water, 130 miles, (209.17 kilometers).

Spring Tilt Brook (Trib.) from mouth to mile point 0.5:

Depth range, 10 to 20 ft., (3.04 to 6.08 meters). Width range, 50 to 75 ft., (15.24 to 22.86 meters). Velocity, slow.

Spawning Areas: On the main river only limited spawning areas available; from mouth to River of Ponds Lake, largest suitable gravel area (est. 100 yds. long) (91.44 meters), located below the junction of Spring Tilt Brook. Big Gulch Brook: This stream is considered to have some of the major accessible spawning gravel of the system. The first two miles, (3.21 kilometers) has an estimated bottom type of 60% gravel.

Main spawning area considered to be Big Feeder Brook.

Barriers to Fish Migration: On Big Gulch Brook, a series of six falls

between mile points 2.8 and 3.1, (4.50 -4.98 kilometers). Falls No.

1 to 5 going upstream are partial obstructions. Falls No. 6 at

First Pool on stream is a complete obstruction.

Rushy Brook, underground stream at 0.2 miles, (0.32 kilometers), from

mouth. Stream at this point runs underground; complete obstruction

at low water. Spring Tilt Brook, becomes underground stream between

0.5 and 1.0, (0.80-1.60 kilometers), complete obstruction. Falls 3.2

miles, (5.14 kilometers), from mouth; complete obstruction. Big Feeder

Brook runs underground approximately 2 miles (3.2 kilometers) from mouth.

RIVER OF PONDS

Location—

On the West Coast, approximately 120 miles from Curling Station on Newfoundland Railway in Bay of Islands. Empties into Mal Bay.

General Remarks—

As the name implies, this river contains many ponds throughout its course, the inlets and outlets of these various ponds making splendid pools where the salmon and sea trout naturally rest on their way up the river to their spawning beds above. Camping sites are numerous.

From the sea to the first pond, about 2 miles, offers the best fishing, there being no less than 20 pools on this stretch of the river. Underground Brook Pool, at the head of the first steady above first pond, is a noted pool. Two private camps are located on this river.

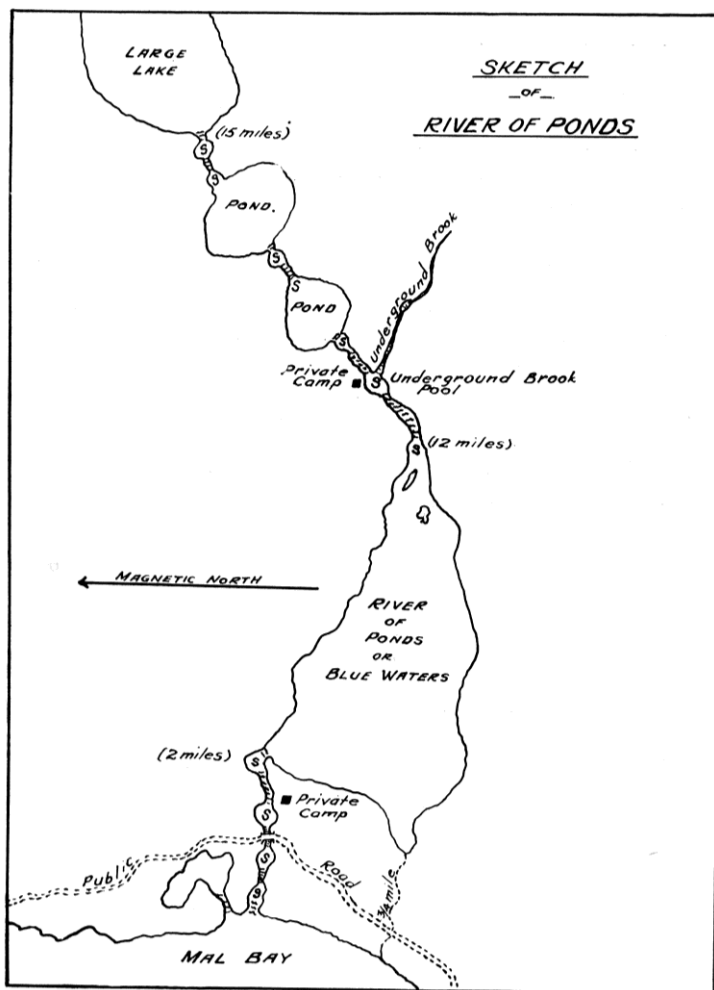
Notes:

Rises in a series of interior ponds. 12/10

Pool:

Underground Brook Pool, 9 unnamed pools [Palmer noted 20]





LITTLE BROOK PONDS

Location: 50°33'04" N. 57°23'37" W. North of the River of Ponds.

Map Reference: Port Saunders. 12 1/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 29.2 miles², (75.62 km²). Mean width, 3.1 miles, (4.98 km).

Perimeter, 25.3 miles, (40.70 km). Axial length, 8.9 miles, (14.32 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology:

Almost entirely Ordovician sedimentary with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Nil. Boulder blasted at mouth - 1970.

TORRENT RIVER

Location: 50° 36' 47" N. 57° 10' 14" W. Hawke's Bay, Cornochoix Bay.

Map Reference: Port Saunders. 12 1/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin Area, 239.0 miles² (619.0 kilometers²). Mean width, 7.6 miles (12.22 kilometers).

Perimeter, 86.4 miles (139.01 kilometers). Axial length, 24.0 miles (38.61 kilometers).

Maximum basin relief, 1,750 feet (533.40 meters).

Geology: About half gneiss with the remainder consisting of Cambrian sedimentary, acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Dimensions: Length of all streams in drainage basin, not including standing water, 100 miles (160.90 kilometers).

Main river: At the mouth, the river is approximately 50 to 100 ft (15.24 - 30.48 meters) wide and fast flowing over large boulders.

Spawning Areas: Bryants Feeder and Main Part Brook (Trib.) have an estimated 2 miles (3.21 kilometers) of river bottom that appears suitable for salmon spawning gravel.

Barriers to Fish Migration: On the main river, falls 1.5 miles (2.41 kilometers) from mouth, 30 ft. (9.14 meters) high; complete obstruction. (See fishway).

Main Part Brook (Trib.) Falls, 100 ft. (30.48 meters) from mouth, 10 to 12 ft. (3.04 - 3.65 meters) high; partial obstruction (Numerous ledges). Remedial work carried out in 1973. Falls channelized allow for easy passage of migrating fish.

Bryants Feeder (Trib.) (1) Dam, mile 0.2 (.32 km) 6 feet high, (1.82 m); complete obstruction when gates closed. (2) Dam, mile 1.2 (1.93 km); complete obstruction when gates closed. (3) Dam, mile 1.7 (2.73 km); partial obstruction. Dam, mile 2.0, (3.21 km), 7 feet, (2.13 m) high, passable when gates are open.

Stream Improvements for Fisheries Purposes:

A vertical slot, concrete fishway, completed October 1965, at falls on main river, 1.5 miles (2.41 km) from mouth. Fishway has opened up 5 miles, (8.04 km) of main river, 10 miles (16.09 km) of surveyed tributaries, and numerous other unsurveyed tributaries.

Miscellaneous Information:

Pulpwood cutting and driving in the area was discontinued in 1958, except for small operations in 1961. Fisheries Wardens believe there has been a gradual buildup of salmon population, since the closing of logging operations. 1972 and 1973, 56 and 203 adult salmon transferred to Torrent River from West River (St. Barbe). Settlement of Hawke's Bay is near mouth, population 1956 - 203; 1961 - 312. 83 Adults transferred from West River (St. Barbe) in 1974.

TORRENT RIVER

Location—

This river is located in the bottom of Hawks Bay on the West Coast.

General Remarks—

This river is noted for its large fish. 12 fine fishing pools are located between the mouth of the river and the falls, a distance of 1½ miles. The salmon are unable to go farther up the river than the falls.

Tributaries:

Lady Worcester Brook

121/10

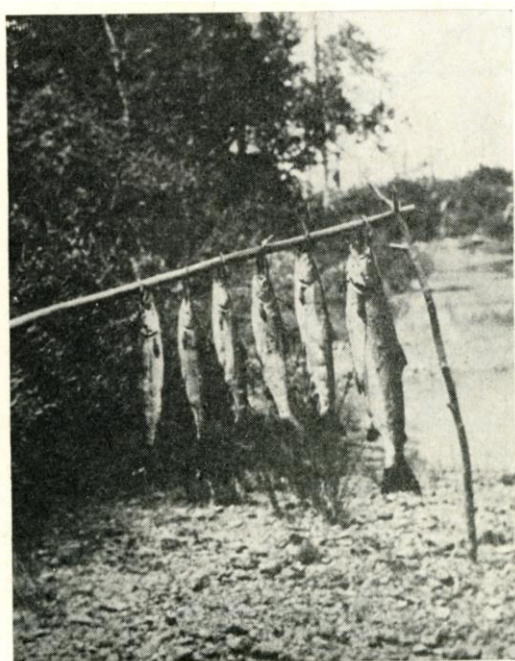
Notes:

Rises high up in Long Range Mountains 121/10

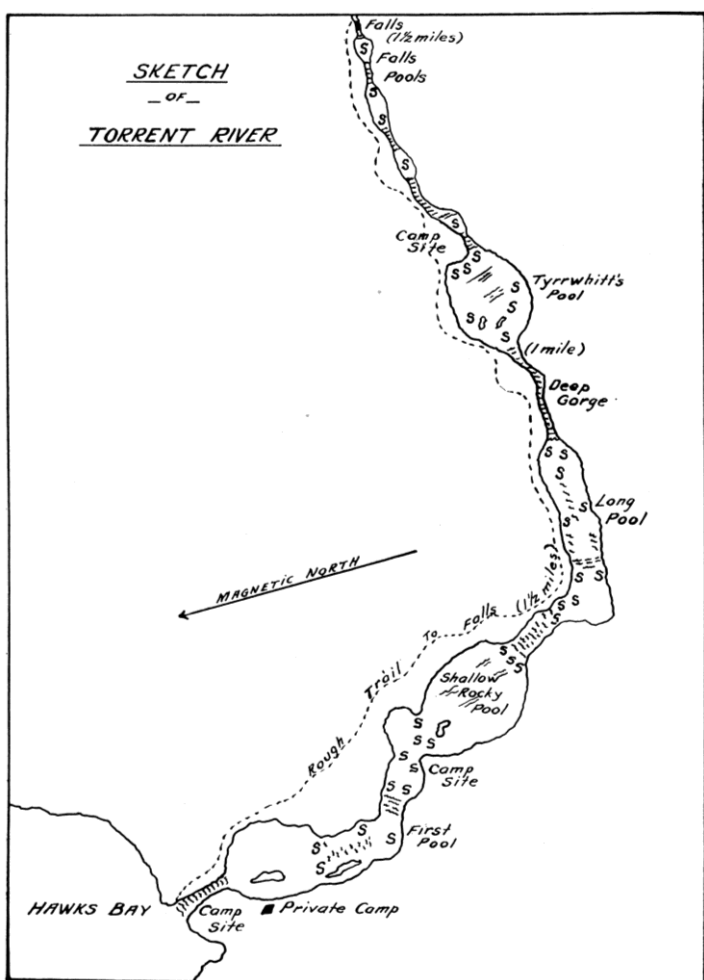
Hawks now spelled Hawkes.

Pools:

First Pool, Shallow Rocky Pool, Long Pool, Tyrwhitt's Pool, Falls Pools



SKETCH
- OF -
TORRENT RIVER



LITTLE EAST RIVER

Location: 50°37'10" N. 57°09'25" W. Hawke's Bay.

Map Reference: Port Saunders. 12 I/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 7.6 miles², (19.68 km²). Mean width, 1.0 miles, (1.609 km).

Perimeter, 18.0 miles, (28.96 km). Axial length, 6.9 miles, (11.10 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

River blocked by series of beaver dams.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (sea run).

No angling data available on this stream.

EAST RIVER

Location: 50° 38' 04" N. 57° 10' 10" W. Hawke's Bay.

Map Reference: Port Saunders. 12 1/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 52.6 miles² (136.23 kilometers²). Mean width, 3.0 miles, (4.82 kilometers).

Perimeter, 50.0 miles (80.45 kilometers). Axial length, 20.2 miles, (32.50 kilometers).

Maximum basin relief, 2,050 feet (665.70 meters).

Geology:

Almost entirely Cambrian sedimentary with a small amount of acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams, 34 miles (54.70 kilometers). Length of tributaries, 13 miles, (20.91 kilometers).

Main River:

Mouth, width range 40 to 50 feet (12.19 - 15.24 meters). From mouth two miles (3.21 kilometers) upstream, average width, 200 ft. (60.96 meters).

Bottom types:

Rock, large rubble mixed with small gravel. Velocity, medium.

Remainder of river:

Bottom types, bedrock, boulder, small quantities of gravel and sand. Velocity, swift.

Tributaries: Velocity, swift.

EAST RIVER

Location—

This river is located in the bottom of Hawks Bay on the West Coast.

General Remarks—

A good salmon river with fine pools between the first falls and the mouth. The upper reaches are over flat lying country until the Big Falls are reached about 20 miles inland.

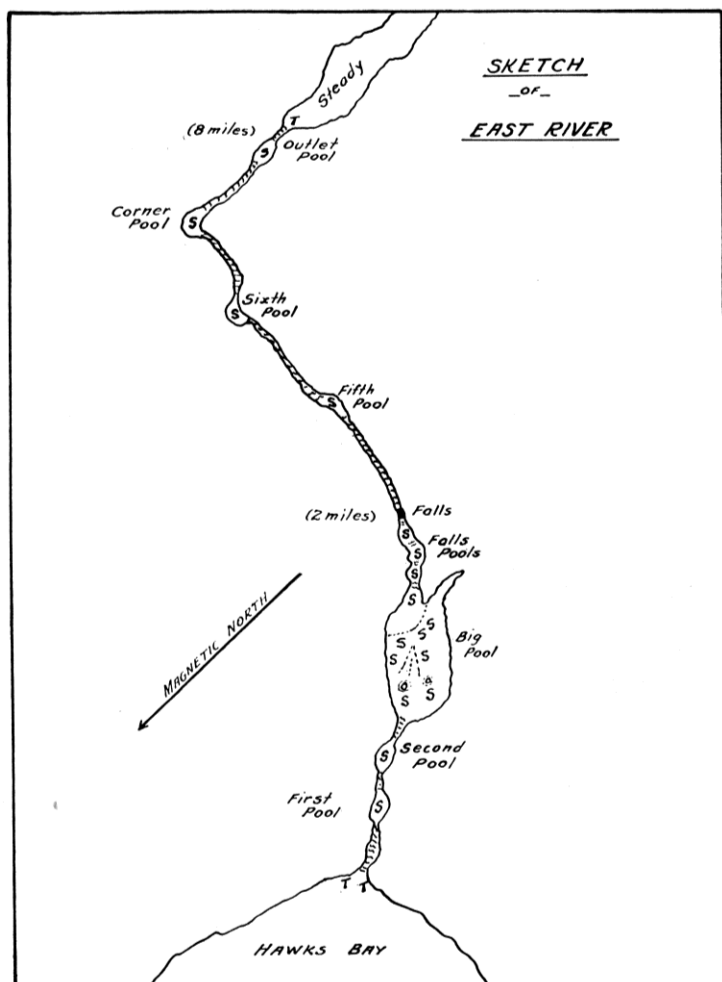
Notes:

Hawks now spelled Hawkes.

Pools:

First Pool, Second Pool, Big Pool, Falls Pool, Fifth Pool, Sixth Pool, Corner Pool, Outlet Pool





DOCTORS BROOK

Location: 59°47'55: N. 57°04'35" W.
Map Reference: St. John Island. 12 I/14 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 30.5 miles², (79.0 km²). Mean width, 3.8 miles, (6.11 km).

Perimeter, 25.5 miles, (41.02 km). Axial length, 8.2 miles, (13.19 km).

Maximum basin relief, 1,800 feet, (548.64 m).

Geology:

Almost entirely Cambrian sedimentary with small amounts of gneissis and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Major obstruction located 2.5 miles (.40 km) from mouth.

CASTOR RIVER

Location: $50^{\circ} 55' 00''$ N. $56^{\circ} 55' 38''$ W. Castor Harbour, St. John Bay.

Map Reference: Castor River. 12 1/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 210.1 miles² (544.16 kilometers²). Mean width 11.2 miles, (18.02 kilometers).

Perimeter, 79.3 miles (127.59 kilometers). Axial length, 17.1 miles, (27.51 kilometers).

Maximum basin relief, 2,050 feet (624.84 meters).

Geology: About equal amounts of Cambrian sedimentary with acidic intrusive rocks and a small amount of Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams in system, not including standing water, 100 miles (160.9 kilometers).

Main river:

From mouth to first pond, several hundred yards: (Note: 100 yds = 91.44 meters): Depth, shallow.

Average width, 100 yds (91.44 meters). Velocity, swift. Bottom types, bedrock, boulder, rubble and gravel.

From outlet of first pond to 3 miles (4.82 kilometers) upstream: Depth range, 0.5 to 2 ft. (.15 - .60 meters). Width range, 200 to 300 ft. (60.96 - 91.44 meters). Bottom types, rubble and gravel.

From mile point 3 (4.82 kilometers) to outlet of Middle Gulch Brook:
Width, river narrow in this section. Velocity, swift. Bottom types,
bedrock ledges.

Middle Gulch Brook (Trib.): Velocity, slow, bottom types, gravel
and rubble, mud.

Beaver Brook (Trib.): Velocity, swift. Bottom types, bedrock and
boulders.

South West Feeder (Trib.): From mouth 2 miles (3.21 kilometers)
upstream. Bottom types, mud, sand, scattered gravel areas, small
boulders.

Rattling Brook (Trib.): Velocity, fast over rapids and falls.

Flat Brook (Trib.): Bottom types, rocky, large falls and rapids.

Spawning Areas:

On the main river, 3 miles (approx.) (4.82 kilometers) between 1st
pond and Leg pond offer good spawning gravel.

Middle Gulch Brook, it is estimated, has about 6 to 8 miles (9.65
to 12.87 kilometers) of suitable gravel.

South West Feeder, Flat Rock Brook and Rattling Brook, spawning
areas are believed to be utilized by brook trout.

Barriers to Fish Migration:

On the main river, falls (2) 50 ft. (15.24 meters) apart at mile
point 4.9 (7.88 kilometers), (NO. 1) 10 ft. (3.04 meters) high,
15 ft. (7.91 meters) wide, 30° angle. (No. 2) Falls 8 ft. high,
(2.44 meters), 15 ft. (7.91 meters) wide, 45° angle; partial
obstruction.

Falls at mile 5.0 on the main stem, is 4 ft (13.1 meters) high.

It was a partial obstruction at low discharge but was channeled in

1973 and now presents no difficulty to migration fish at any water level.

Flat Brook (Trib.): Falls, 100 yds. (91.44 meters) from mouth, 100 ft. high (30.48 meters): complete obstruction.

Rattling Brook (Trib.): Falls, 300 yds. (274.32 meters) from mouth, 30 ft. high (9.14 meters), complete obstruction.

Photographs on file; Nos. 395, 396, 91

Miscellaneous Information:

The 1961 survey was confined to the main river, from mouth upstream to Leg Pond. The information on the various tributaries was obtained from local Fisheries personnel. As far as is presently known, migratory fish have unimpeded access to the extensive spawning areas of this system, except for beaver dams which are cleared annually.

CASTORS RIVER

Location—

On the West Coast empties into Bay St. John.

General Remarks—

This river contains many fine salmon pools and is an excellent river for canoeing, there being many small ponds along its course. The Eastern Feeder is noted for its salmon pools and fishing, and the South East Feeder for its run of large sea trout.

Tributaries:

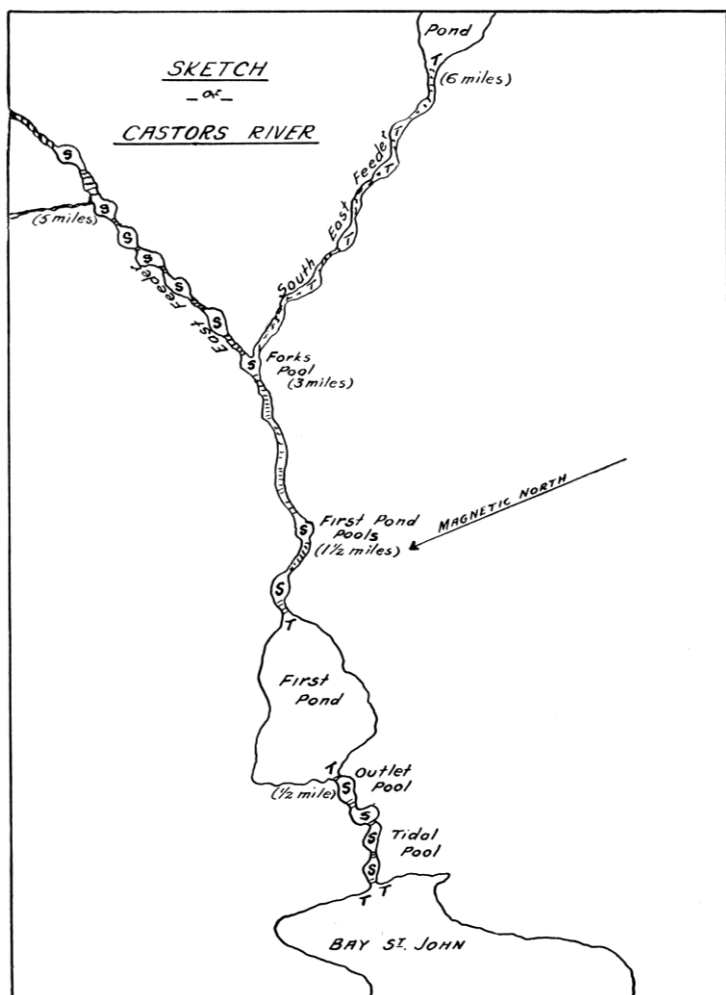
Middle Gulch Brook 12I/15

North Branch, Middle Gulch Brook 12I/15

Pools:

Tidal Pool, Outlet Pool, First Pond Pools, Forks Pool, 6 unnamed pools on East Feeder and 4 unnamed trout pools on South East Feeder





ST. GENEVIEVE RIVER

Location: 51° 08' 15" N. 56° 47' 48" W. St. Genevieve Bay.

Map Reference: Brig Bay.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 122.6 miles² (317.53 kilometers²). Mean width, 6.6 miles, (10.61 kilometers).

Perimeter, 52.5 miles (84.47 kilometers). Axial length, 16.3 miles, (26.22 kilometers).

Maximum basin relief, 915 feet, (278.89 meters).

Geology:

Predominantly Cambrian sedimentary with some Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams in system, not including standing water, 40 miles, (64.36 kilometers).

Section: On main river, from mouth to 8 miles, (12.87 kilometers), upstream.

Depth range, 2 to 4 ft., (.60-1.20 meters). Velocity, 1/2 area fast, other 1/2 steadies.

Bottom types, boulder, large rubble, gravel, bedrock.

Section: Within 1/2 mile, (.80 kilometers), of outlet of 10 mile pond (16.09 kilometers).

Depth range, 2 to 6 ft., (.60-1.82 meters). Velocity, steady area.

Bottom types, rubble and gravel.

Section: Manuels River (Trib.): Velocity, slow. Located approximately 0.75 miles from main river mouth. Also named Angle Pond Brook.

Barriers to Fish Migration:

On the main river, wooden dam in tidal water zone; since 1959, gates kept open; no obstruction.

Falls, $3\frac{1}{2}$ miles, (5.63 kilometers), from mouth, 14 ft. (4.2 meters) high (rises in steps, each 4 to 5 ft.), (1.21-1.52 meters); partial obstruction.

Dams, 2, at mile points 4 and 8 (6.42 and 12.87 kilometers); partial obstructions, since 1959 gates kept open.

Tributary Stream 5:

Dams - Kelly's Brook, Roses Brook and Muskrat Brook.

These obstructions have been removed.

Miscellaneous information:

Two large bodies of water. Ten mile Pond (20. sq. mi.) (51.8 sq. kilometers) and Round Lake (10 sq. mi.) (25.9 sq. kilometers), constitutes the major water reserves of this system. Manuels River is the largest (6 linear miles) (9.65 kilometers), and only sizable tributary on the main river. Salmon have access to the main river and two chief tributaries.

Until 1959, extensive logging operations were carried out in the area, and the river was utilized for log driving. Bark deposits are still present on river bed.

WEST BROOK (WESTERN ARM BROOK)

Location: 51 51°11'25" N. 56°45'58" W. St. Barbe Harbour,
St. Barbe Bay.

Map Reference: Brig Bay. 12 P/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 57.6 miles² (149.18 kilometers²). Mean width, 3.1 miles. (4.98 kilometers).

Perimeter, 44.5 miles (71.6 kilometers). Axial length, 16.6 miles (26.71 kilometers).

Maximum basin relief, 350 feet (106.68 meters).

Geology:

Almost entirely Ordovician sedimentary with a small amount of Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Falls on the main river at mile point 0.5 (0.8 kilometers).

4' - 5' high, (1 - 1-1/2 meters) temporary holdup. Blasted in 1971 but requires more work for easy access at all water levels.

Channeled in 1973. Easily accessible at all discharges.

At mile point 10 (16 kilometers) there is an area of heavy slab rock, broken or cracked in several places. In 1971, a channel was blasted through this rock. This now presents no holdup problem at any water level.

EAST RIVER

Location: 51°12'35" N. 56°44'35" W. St. Barbe Bay.
Map Reference: Brig Bay. 12 P/2 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 16.7 miles², (43.25 km²). Mean width, 2.0 miles,
(3.21 km).
Perimeter, 19.9 miles, (32.01 km). Axial length, 7.7 miles,
(12.38 km).
Maximum basin relief, 300 feet, (91.44 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (sea run).

Angling Data:

See West River, W-49-0519.

SOUTH RIVER

Location—

On the West Coast in St. Barbe Bay.

General Remarks—

Not a large river, but one that has a large run of medium fish. Has two nice fishing pools near its mouth.

Notes:

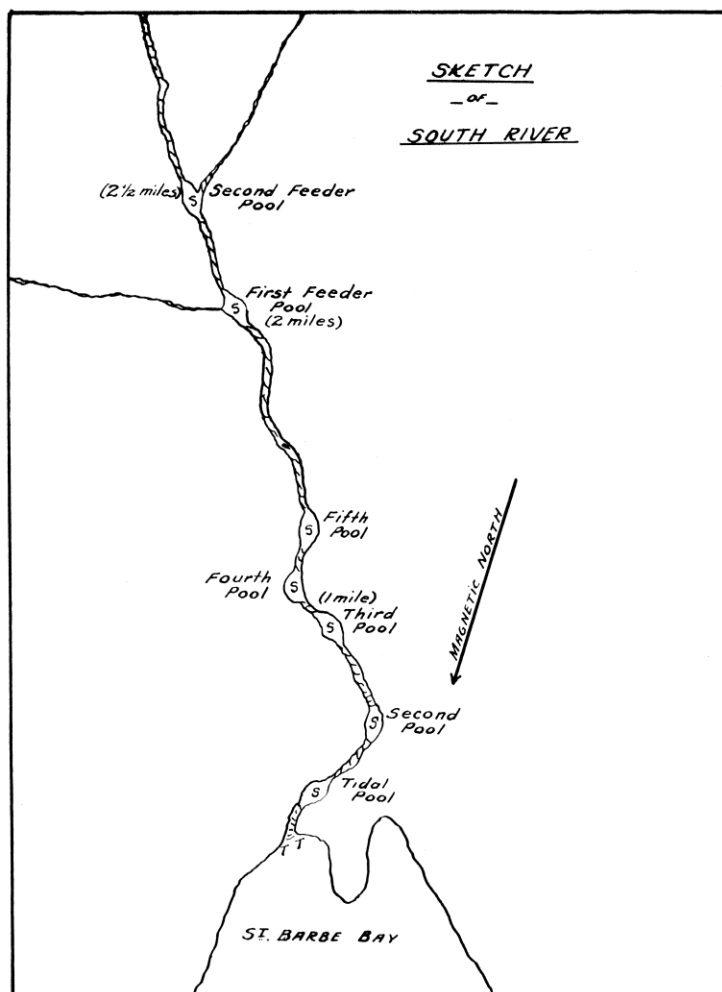
Now West River.

Rises in Western Brook and Owl Ponds 12P/2

Pools:

Tidal Pool, Second Pool, Third Pool, Fourth Pool, Fifth Pool, First Feeder Pool, Second Feeder Pool





GREEN ISLAND BROOK

Location: 51°23'55" N. 56°31'40" W. North of Flowers
Cove, Strait of Belle Isle.
Map Reference: Flower's Cove. 12 P/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 5.4 miles², (13.98 km²). Mean width, 4.1 miles,
(6.56 km).

Perimeter, 45.0 miles, (72.40 km). Axial length, 12.6 miles,
(20.27 km).

Maximum basin relief, 300 feet, (91.44 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

EDDIE'S COVE BROOK

Location: 51°24'50" N. 56°27'00" W. Strait of Belle Isle.
Map Reference: Eddie's Cove. 12 P/8 West half.

CHARACTERISTICS OF DRAINAGE BASIN**Geomorphological Factors:**

Basin area, 34.9 miles², (90.4 km²). Mean width, 3.1 miles, (4.98 km).

Perimeter, 33.1 miles, (53.25 km). Axial length, 11.1 miles, (17.85 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN**Barriers to Fish Migration:**

HALFWAY BROOK

Location: 51°28'20" N. 56°17'40" S.
Map Reference: Eddie's Cove. 12 P/8 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.3 miles², (39.62 km²). Mean width, 1.1 miles, (1.76 km).

Perimeter, 26.4 miles, (42.47 km). Axial length, 11.7 miles, (18.82 km).

Maximum basin relief, 200 feet, (60.96 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BIG BROOK

Location: 51°31'22" N. 56°09'10" W. Strait of Belle Isle.
Map Reference: Big Brook. 12 P/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 81.7 miles², (211.60 km²). Mean width, 3.6 miles, (5.79 km).

Perimeter, 55.1 miles, (88.71 km). Axial length, 23.1 miles, (37.17 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls approximately 6 feet high (1.8 m), is a partial obstruction to fish migration at low discharge. The falls is located approximately 100 yards (109.4 m) above mouth.



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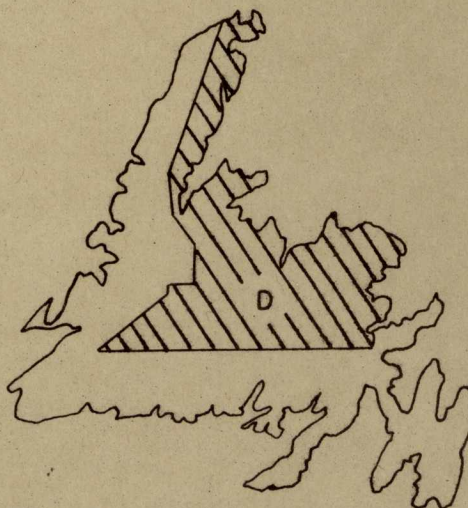
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CATALOGUE OF RIVERS IN
INSULAR NEWFOUNDLAND

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RESOURCE DEVELOPMENT BRANCH
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OCTOBER, 1974

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WATTS BIGHT BROOK (WATSONS BROOK)

Location: 51°34'25" N. 56°00'25" W. Open Bay, Strait of Belle Isle.

Map Reference: Big Brook. 12 P/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 36.6 miles², (94.79 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 39.3 miles, (63.23 km). Axial length 17.5 miles, (28.15 km).

Maximum basin relief, 150 feet, (45.72 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

None to headwaters.

PARKER RIVER

Location: 51° 29' 50" N. 55° 44' 01" W. Pistolet Bay,

Map Reference: St. Anthony, 2 M/5 East half and 2 M/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.8 miles² (46.10 kilometers²). Mean width, 2.4 miles, (3.86 kilometers).

Perimeter, 21.7 miles (34.91 kilometers). Axial length, 7.5 miles, (12.06 kilometers).

Maximum basin relief, 1,050 feet (320.04 meters).

Geology:

About equal amounts of Ordovician volcanic and Ordovician sedimentary with a small amount of ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams in system, not including standing water, 12 miles (19.30 kilometers).

Main River:

From mouth to mile point 2.5 (4.02 kilometers).

Width range, 20 to 70 ft. (6.09 to 23.87 meters). Velocity range, medium to rapid.

Bottom types: Gravel, rubble, small boulders.

Barriers to Fish Migration:

On the main river, no serious obstructions.

BARTLETT'S RIVER

Location: 51°28'26" N. 51°39'50" W. Milan Arm, Pistolet Bay.
Map Reference: St. Anthony. 2 M/5 East half and 2 M/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.4 miles², (39.9 km²). Mean width, 1.8 miles,
(2.89 km).
Perimeter, 24.5 miles, (39.42) km). Axial length, 8.1 miles,
(13.03 km).
Maximum basin relief, 850 feet, (259.08 m).

Geology:

About equal amounts of Ordovician volcanic and ultrabasic
intrusive rocks with a small amount of Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Complete obstruction 5 miles upstream from mouth.

UPPER BROOK (Pistolet Bay)

Location: 51°28'45" N. 55°38'08" W. Milan Arm, Pistolet Bay.
Map Reference: St. Anthony. 2 M/5 East half and 2 M/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.0 miles² (38.85 km²). Mean width, 2.3 miles,
(3.70 km).

Perimeter, 20.9 miles, (33.62 km). Axial length, 6.0 miles,
(9.65 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: None.

EAST BROOK

Location: 51°32'42" N. 55°42'45" W. Carpon Cove, Pistolet Bay.
Map Reference: Raleigh. 2 M/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.6 miles², (61.12 km²). Mean width, 2.9 miles, (4.66 km).

Perimeter, 22.5 miles, (36.20 km). Axial length, 7.8 miles, (12.55 km).

Maximum basin relief, 250 feet, (76.20 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: None.

NORTHWEST BROOK

Location: 51°23'10" N. 55°35'15" W. St. Anthony Bight.

Map Reference: St. Anthony. 2 M/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 1.8 miles², (4.66 km²). Mean width, 0.9 miles, (1.44 km).

Perimeter, 6.5 miles, (10.45 km). Axial length, 2.5 miles, (4.02 km).

Maximum basin relief, 500 feet, (152.40 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH PCPULATIONS

Species Present: Atlantic salmon.

IRELANDS BROOK

Location: 51°20'35" N. 55°45'30" W. Hare Bay.

Map Reference: St. Anthony. 2 M/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 24.2 miles², (62.67 km²). Mean width, 3.0 miles, (4.82 km).

Perimeter, 24.4 miles (39.25 km). Axial length, 8.0 miles, (12.87 km).

Maximum basin relief, 1,050 feet, (320.04 m).

Geology:

Predominantly Ordovician sedimentary with some ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Partial obstruction at mile 0.25 - obstruction on both branches - all obstructions serious but passable at some water levels.

NORTHEAST BROOK (Hare Bay)

Location: 51°22'15" N. 56°01'00" W. Hare Bay.

Map Reference: Eddies' Cove. 12 P/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 17.0 miles² (44.03 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 24.2 miles, (38.93 km). Axial length 6.5 miles, (10.45 km).

Maximum basin relief, 800 feet, (243.86 m).

Geology:

Predominantly Ordovician sedimentary with some acidic intrusive rocks and ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTH EAST RIVER

Location—

On East Coast, river flows into the North East Arm of Canada Bay.

Accessibility—

Englee, is distant approximately 15 miles from the river’s mouth. Motor boats can be hired for the run to the river.

General Remarks—

This river is practically one pool after another, as the country rocks are of sedimentary formation, which make numerous ledges and corresponding pools, in which salmon and trout lie. The river bed is easily walked and the pools readily fished.

Tributaries:

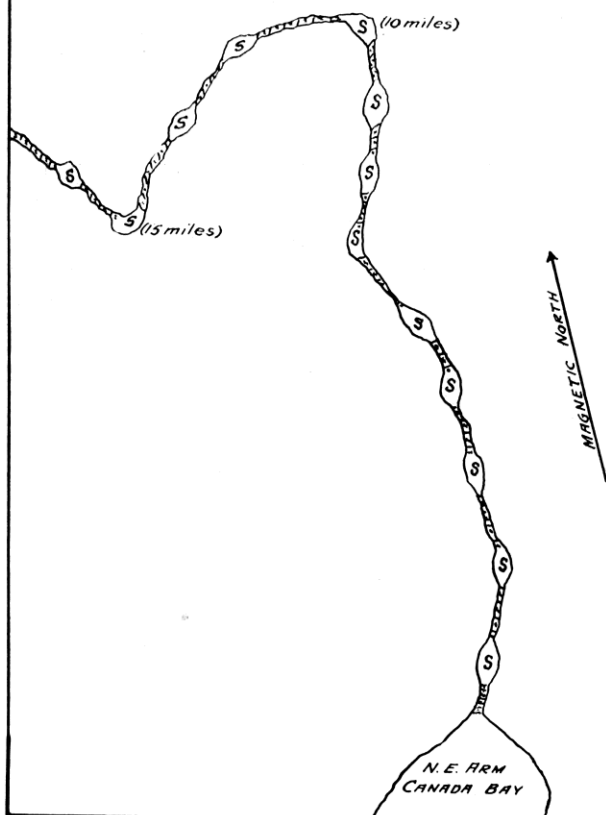
Pennys Brook	121/16
Rushy Brook	121/16

Pools:

13 unnamed pools



SKETCH
-OF-
NORTH EAST RIVER



NORTHWEST BROOK

Location: 51°22'40" N. 56°02'30" W. Northern Arm, Hare Bay.

Map Reference: Eddies' Cove. 12 P/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 3.5 miles², (9.06 km²). Mean width, 1.4 miles, (2.25 km).

Perimeter, 7.5 miles, (12.06 km). Axial length, 2.4 miles, (3.86 km).

Maximum basin relief, 100 feet, (30.48 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTH WEST RIVER

Location—

On East Coast, river flows into the bottom of Canada Bay.

General Remarks—

This river, like others in the Bay, offers good salmon and sea trout fishing.

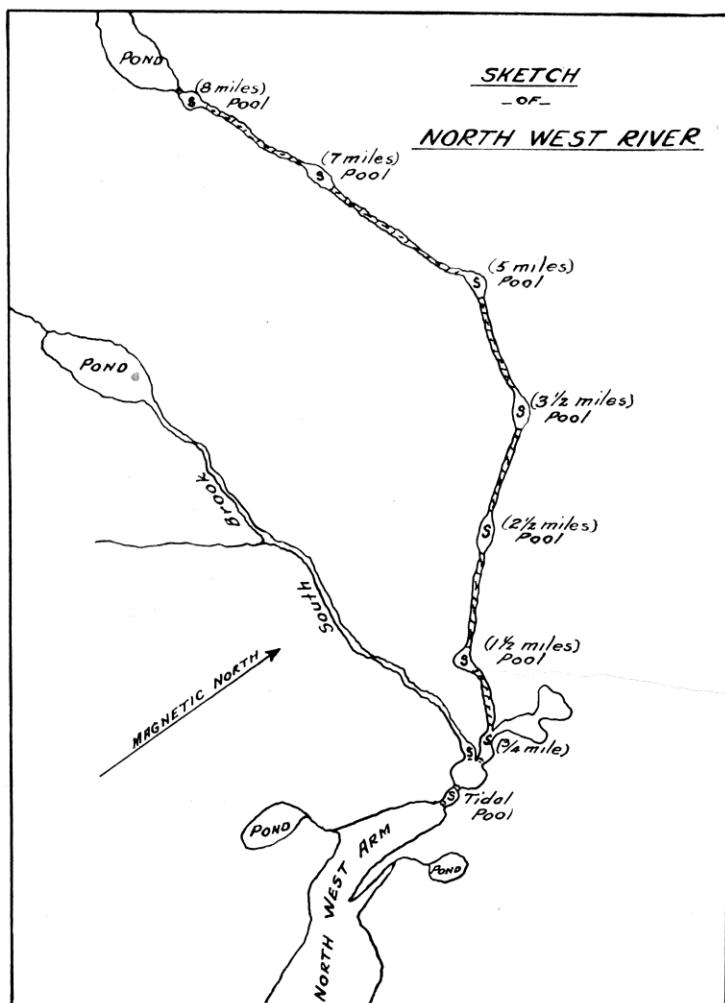
Notes:

Flows into Long Arm of Northwest Arm
of Castor Cove, Canada Bay. 121/16

Pools:

Tidal Pool, 7 unnamed pools





WEST BROOK

Location: 51°13'15" N. 56°04'55" W. Windy Bay, Hare Bay.

Map Reference: Salmon River. 12 P/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 97.9 miles², (253.56 km²). Mean width, 5.6 miles, (9.01 km).

Perimeter, 48.1 miles, (77.39 km). Axial length, 17.3 miles, (27.83 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SALMON RIVER

Location: 51° 10' 10" N. 56° 01' 25" W. Ariege Bay, Hare Bay.

Map Reference: Salmon River, 12 P/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 281.9 miles², (730.12 kilometers²). Mean width, 7.1 miles, (11.42 kilometers).

Perimeter, 89.6 miles, (144.16 kilometers). Axial length, 29.3 miles, (47.14 kilometers).

Maximum basin relief, 900 feet, (274.32 meters).

Geology:

Predominantly Ordovician sedimentary with some acidic intrusive rocks and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of all streams in system not including standing water is 100 miles, (160.90 kilometers).

Main River:

From mouth to mile point 0.75, (1.20 kilometers), (outlet of Southwest Brook);

Width range: 200 - 300 ft., (60.96 - 91.44 meters).

Bottom type: Boulder and rubble.

Southwest Brook (Tributary):

From mouth to 300 yds. (254.40 meters) upstream.

Width range: 20 - 30 ft., (6.08 - 9.14 meters).

Bottom type: Rubble.

Spawning Areas:

Main river:

Length of main stem 42 miles (67.57 kilometers).

2.8 miles, (4.50 kilometers), section between First and Second Salmon ponds.

Barriers to Fish Migration:

Southwest Brook (Tributary):

Wooden dam, 150' (45.72 meters), long (bank to bank)

5-6' (1.52-1.82 meters), high at outlet to little pond, passable, gates kept open during salmon run - Photo #

Wooden dam, 150', (45.72 meters) long (bank to bank) at mile point 5.6, (9.01 kilometers), passable.

Wooden dam, 150', (45.72 meters), long (bank to bank) 5' (1.52 meters) high at mile point 6.0 (9.65 kilometers), passable when gate open.

Wooden dam, 250' (76.20 meters), long (bank to bank) at mile point 10.4, (16.78 kilometers).

Impassable at low water.

Wooden dam at mile point 13.6 (21.88 kilometers) passable.

Wooden dam at mile point 14.0, (22.52 kilometers) impassable at low water. Photo #

Wooden dam at mile point 14.5 (23.33 kilometers), impassable at low water. Photo #

Miscellaneous Information:

As a result of logging operating, there are eight logging dams on Southwest Brook tributary, bark deposit on stream bottom and bulldozing of stream bottom.

ARIÈGE RIVER

Location—

On East Coast at bottom of Hare Bay.

General Remarks—

This river has many fine salmon pools and runs along its course from the sea to its headwaters about 40 miles inland. There are also a number of small ponds or steadies. In anything but a very dry season offers exceptional opportunity for a canoe and fishing trip. From its headwaters a portage of 3 miles brings one to the headwaters of River Castors, and it in turn is a fine river for canoeing and fishing, and empties into Bay St. John on the West Coast of the Island. There are numerous splendid camping sites along its course, and fish ranging from grilse of 4 to 6 lbs. to salmon of 25 lbs. in weight can be caught in abundance.

Notes:

Now Salmon River.

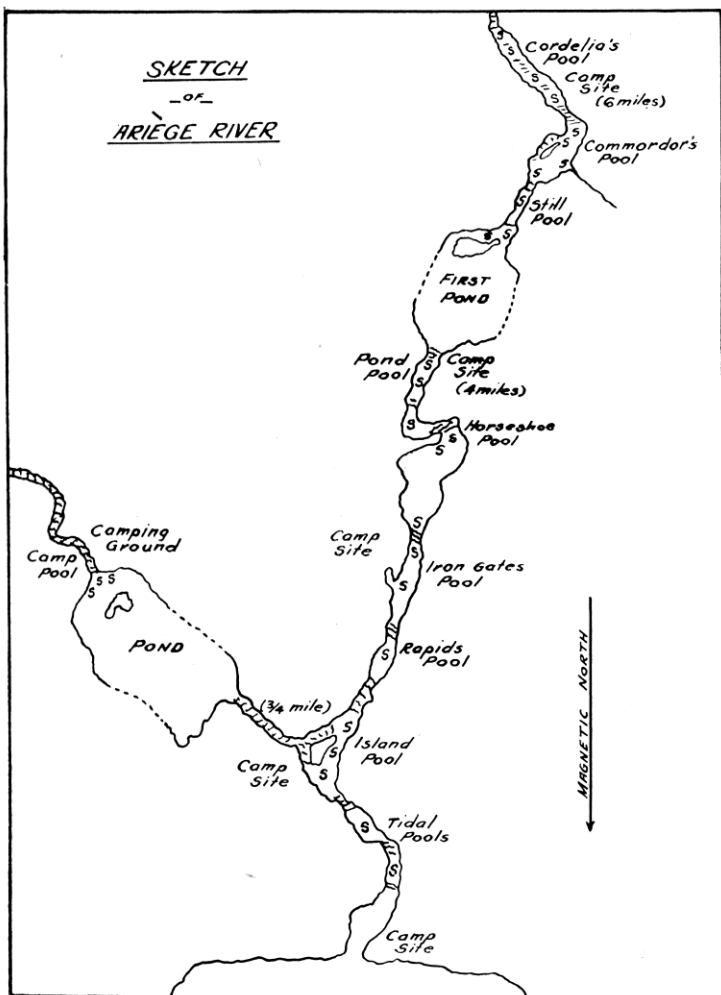
12P/1

Pools:

Tidal Pools, Island Pool, Camp Pool, Rapids Pool, Iron Gates Pool, Horseshoe Pool, Pond Pool, Still Pool, Commordor's Pool, Cordelia's Pool



SKETCH
- of -
ARIEGE RIVER



FRESHWATER CREEK

Location: 51°03'15" N. 55°50'40" W.

Map Reference: St. Julien's. 2 M/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 29.0 miles², (75.11 km²). Mean width, 5.7 miles, (9.17 km).

Perimeter, 30.9 miles, (49.71 km). Axial length, 6.5 miles, (10.45 km).

Maximum basin relief, 500 feet, (152.40 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTH EAST RIVER

Location: 50°54'45" N. 56°07'00" W. Chimney Bay, Canada Bay.

Map Reference: Roddickton. 12 1/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 99.1 miles², (256.66 km²). Mean width, 6.4 miles, (10.29 km).

Perimeter, 48.8 miles, (78.51 km). Axial length, 12.9 miles, (20.75 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Two dams on the main river equipped with fishways. Dams have been removed prior to 1974. They are no longer barriers to salmon migration.

Miscellaneous Information:

Saw logs, pulp and pit props are driven on this brook.

BEAVER BROOK (WESTERN BROOK)

Location: 50°54'15" N. 56°09'02" W. Chimney Bay, Canada Bay.

Map Reference: Roddickton. 12 1/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 93.3 miles², (241.64 km²). Mean width, 3.3 miles, (5.30 km).

Perimeter, 78.5 miles, (126.30 km). Axial length, 27.7 miles, (44.59 km).

Maximum basin relief, 1,400 feet, (426.72 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Main river becomes an underground stream for about 1,000', (304.80 m) at mile 6.0, (9.65 km); obstruction at low water levels; passable at high water levels.

SHOAL BROOK

Location: 50°54'25" N. 56°15'55" W. Northwest Arm, Chimney Bay.

Map Reference: Roddickton. 12 1/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 16.8 miles², (43.5 km²). Mean width, 1.9 miles, (3.05 km).

Perimeter, 23.7 miles, (38.13 km). Axial length, 8.6 miles, (13.83 km).

Maximum basin relief, 1,200 feet, (365.76 m).

Geology:

About equal amounts of gneiss and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTHWEST BROOK (Chimney Bay)

Location: 50°53'50" N. 56°16'20" W. Northwest Arm, Chimney Bay.

Map Reference: Roddickton. 12 1/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 41.9 miles², (108.52 km²). Mean width, 4.0 miles, (6.43 km).

Perimeter, 30.8 miles, (49.55 km). Axial length, 10.7 miles, (17.21 km).

Maximum basin relief, 1,400 feet, (426.72 m).

Geology:

Predominantly gneissis with some Cambrian sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

CLOUD RIVER

Location: 50° 50' 00" N. 56° 13' 15" W. Chimney Bay, Canada Bay.

Map Reference: Roddickton. 121/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 206.0 miles², (533.54 kilometers²). Mean width, 5.6 miles, (9.01 kilometers).

Perimeter, 86.0 miles, (138.37 kilometers). Axial length, 27.7 miles, (44.56 kilometers).

Maximum basin relief, 1,850', (563.88 meters).

Geology:

Predominantly gneiss with some acidic intrusive rocks and small amount of cambrian sedimentary.

Vegetational Cover:

Forest in the lower part of the watershed, with barrens and scattered patches of forest in the upper regions.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams is 100 miles, (160.9 kilometers).

Main river:

Mouth: Mouth of the main river is divided into shallow channels.

Velocity - medium

Bottom type - Gravel and rubble.

Between mile point 1 and 2, (1.60-3.21 kilometers).

Excellent salmon pools.

Velocity - Medium

Bottom type - bedrock and boulder.

Between mile point 2 and 3½, (3.21-5.63 kilometers).

Width range - 20 to 30', (6.09-9.12 meters).

Velocity: Swift and turbulent over rapids and falls.

Spawning Areas:

Main River: One mile (1.60 kilometers), section near mouth. Topographic maps indicate large stretches of wide streams above the falls where good gravel areas possibly exist.

Barriers to Fish Migration:**Main River:**

Series of falls at mile point 2 (3.21 kilometers), total distance from lower to upper falls is roughly 2.5 miles (4.01 kilometers). Lower falls is a partial obstruction at all water levels, total overall height is approximately 18' (5.49 meters) over a length of 40' (12.18 meters). The falls consists of two drops and a chute. The downstream end has a drop of 6' (1.82 meters) overhung. Above this, there is a chute 6' (1.82 meters) at a 45° angle, the upper portion is 5' (1.54 meters) vertical. The upper falls consists of a 20' overhanging falls which is a complete obstruction at all water levels. In addition, there are seven other smaller falls in this 2.5 mile (4.01 kilometers) section; all are estimated to be passable.

Falls at mile point 5 (8.04 kilometers) would cause extreme difficulty to salmon at all water levels. This falls is 12'-14' (3.65-4.62 kilometers) high, 20' (6.08 kilometers) long at 75° angle.

CLOUD RIVER

Location—

On East Coast, river flows into the bottom of Canada Bay.

General Remarks—

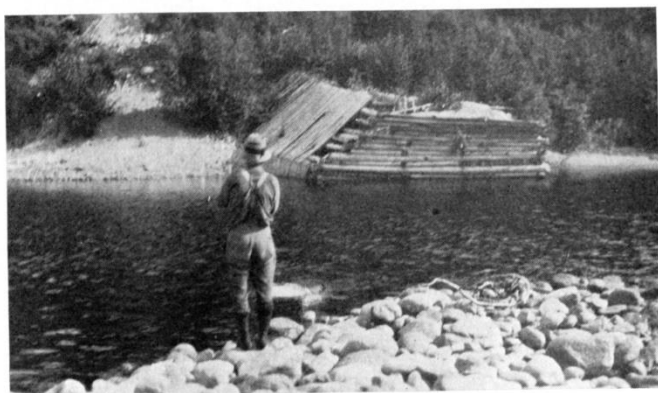
Flies, the pest of the woods, are usually gone from this area by August. Excellent fishing pools are located on this river and good camping sites are easily found. Salmon ranging from grilse of 5 or 6 lbs. to fish of 20 lbs. in weight have been taken from this river. Good sea-trout fishing can be had at the mouth of the river at Salt Water Pond.

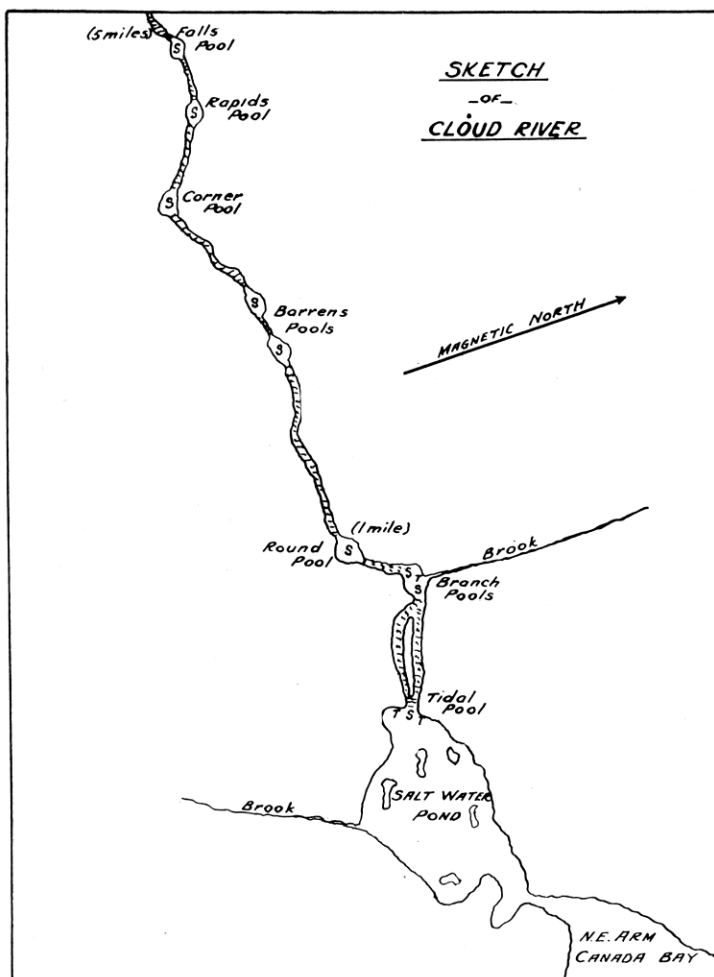
Notes:

Saltwater Pond is confluent with Northwest Arm of Castor Cove Canada Bay.
12/16

Pools:

Tidal Pool, Branch Pools, Round Pool, Barrens Pools, Corner Pool, Rapids Pool, Falls Pool





Location: 50°37'05" N. 56°12'25" W. Eastern Arm, Hooping Harbour.

Map Reference: Englee. 12 1/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 72.9 miles², (188.81 km²). Mean width, 3.4 miles, (5.47 km).

Perimeter, 51.2 miles, (82.38 km). Axial length, 16.8 miles, (27.03 km).

Maximum basin relief, 1,400 feet, (426.72 m).

Geology:

Gneissis.

CHARACTERISTICS OF STRAMS IN DRAINAGE BASIN

Barriers to Fish Migration

SOFFLETS BROOK

Location: 50°25'05" N. 56°30'40" W. Orange Bay.

Map Reference: Harbour Deep. 12 1/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 151.8 miles², (393.16 km²). Mean width, 7.2 miles, (11.58 km).

Perimeter, 88.8 miles, (142.87 km). Axial length, 19.7 miles, (31.69 km).

Maximum basin relief, 1,650 feet, (502.92 m).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

No complete obstructions, several partial obstructions.

CASCADE RIVER

Location: 50°23'20" N. 56°31'20" W. Orange Bay.

Map Reference: Harbour Deep. 12 1/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 81.5 miles², (131.13 km²). Mean width, 4.0 miles, (6.43 km).

Perimeter, 54.4 miles, (87.52 km). Axial length, 17.0 miles, (27.35 km).

Maximum basin relief, 1,750 feet, (533.40 m).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LITTLE HARBOUR DEEP RIVER

Location: 50°14'30" N. 56°34'10" W.

Map Reference: Cat Arm River. 12 1/2 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 188.7 miles², (488.73 km²). Mean width, 8.4 miles, (13.51 km).

Perimeter, 84.0 miles, (135.15 km). Axial length, 23.0 miles, (37.00 km).

Maximum basin relief, 1,950 feet, (594.36 m).

Geology:

Gneiss with small amount of acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Several serious obstructions at mile 7.

These are believed to be impassable to salmon.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (resident and sea run).

No angling data available on this stream.

CAT ARM RIVER

Location: 50° 07' 50" N. 56° 44' 40" W. Great Cat Arm, White Bay.

Map Reference: Cat Arm River. 12 1/2 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 287.5 miles², (744.62 km²). Mean width, 10.0 miles, (16.09 km).

Perimeter, 96.4 miles, (155.10 km). Axial length, 24.5 miles, (39.42 km).

Maximum basin relief, 2,150 feet (655.32 m).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Main River: Falls at mouth, 20' to 25' (6.09-7.62 m) wide, 40' (12.18 m) vertical height; complete obstruction. Falls at mile 3.5 (5.63 km): 15'-20' high (4.56-6.09 m) complete obstruction.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (resident and sea run).

CONEY ARM BROOK

Location: 49°57'35" N. 56°47'30" W. White Bay.

Map Reference: Jackson's Arm. 12 H/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.6 miles², (32.63 km²). Mean width, 2.0 miles, (3.21 km).

Perimeter, 22.9 miles, (36.84 km). Axial length, 5.4 miles, (8.68 km).

Maximum basin relief, 1,600 feet, (487.72 m).

Geology:

Predominantly gneiss with about half as much Cambrian Sedimentary and some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

FISH POPULATIONS

Species Present: Atlantic salmon.

No angling data available on this stream.

CONEY ARM RIVER (Coney Arm, West Arm Brook)

Location: 49°55'10"N. 56°47'40"W. Great Coney Arm, White Bay.

Map Reference: Jackson's Arm. 12 H/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 56.4 miles², (146.07 km²). Mean width, 4.8 miles, (7.72 km).

Perimeter, 52.5 miles, (84.47 km). Axial length, 10.0 miles, (16.09 km).

Maximum basin relief, 1,800 feet, (548.64 m).

Geology:

About half gneissis with about equal amounts of Cambrian sedimentary and acidic intrusive rocks and some Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: From mouth to mile 0.5, (0.80 km);

Channel width: 100 ft. (30.48 m), Water velocity: slow.

Bottom types: Coarse sand and gravel suitable for spawning.

Barriers to Fish Migration: Nil.

MAIN RIVER

Location: 49°46'00" N. 56°54'10" W. Sops Arm, White Bay.

Map Reference: Jackson's Arm. 12 H/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 404.7 miles², (1,048.17 km²). Mean width, 9.7 miles, (15.60 km).

Perimeter, 124.3 miles, (199.99 km). Axial length, 27.8 miles, (44.73 km).

Maximum basin relief, 2,421 feet, (737.92 meters).

Geology:

Gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: From mouth to mile 2, (3.21 km). Average width: 150 ft., (45.72 m). Depth range: 2 to 3 ft., (0.60-0.90 m). Bottom type: Rubble and gravel.

Spawning Areas: Gravel areas dispersed throughout river.

Barriers to Fish Migration: Main River: Falls at mile 13.5 (21.72 km), 5 ft., (1.52 m). Sloping falls. Passable at all water levels.

CORNER BROOK

Location: 49°44'35" N. 56°54'38" W. Sops Arm, White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 18.9 miles², (48.95 km²). Mean width, 2.5 miles, (4.02 km).

Perimeter, 23.7 miles, (38.13 km). Axial length, 8.5 miles, (13.67 km).

Maximum basin relief, 1,430 feet, (435.86 m).

Geology:

About half Ordovician volcanic with the remainder consisting of acidic intrusive rocks with a small amount of silurian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Dam on the main river, passable.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (resident and sea run).

No angling data available on this stream.

NATLINS BROOK

Location: 49°44'45" N. 56°51'55" W. White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 10.3 miles², (26.67 km²). Mean width, 1.6 miles, (2.57 km).

Perimeter, 17.4 miles, (27.99 km). Axial length, 6.3 miles, (10.13 km).

Maximum basin relief, 1,150 feet, (350.52 m).

Geology:

Almost entirely silurian sedimentary and some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SALTWATER BROOK

Location: 49°40'35" N. 56°49'30" W. White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 21.8 miles², (56.46 km²). Mean width, 2.7 miles, (4.34 km).

Perimeter, 25.2 miles, (40.54 km). Axial length, 7.4 miles, (11.90 km).

Maximum basin relief, 1,430 feet, (435.86 m).

Geology:

Almost entirely acidic intrusive rocks with some silurian sedimentary and a little Mississippian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

RATTLING BROOK

Location: 49°36'30" N. 56°49'35" W. White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.8 miles², (30.56 km²). Mean width, 1.5 miles, (2.41 km).

Perimeter 22.1 miles, (35.55 km). Axial length, 6.6 miles, (10.61 km).

Maximum basin relief, 1,163 feet, (354.48 m).

Geology:

About half acidic intrusive with the remainder consisting of Mississippian sedimentary and a little silurian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

HAMPDEN RIVER

Location: 49°32'30" N. 56°52'20" W. White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 48.7 miles², (126.13 km²). Mean width, 4.5 miles, (7.24 km).

Perimeter, 41.8 miles, (67.25 km). Axial length, 11.2 miles, (18.02 km).

Maximum basin relief, 1,163 feet, (354.48 m).

Geology:

About half gneiss with the remainder consisting of Mississippian sedimentary and some intermediate intrusive rocks and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Several obstructions are found near the headwaters.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (resident and sea run).

BIG CHOUSE BROOK

Location: 49°36'42" N. 56°47'30" W. White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 43.3 miles², (112.14 km²). Mean width, 3.0 miles, (4.82 km).

Perimeter, 31.9 miles, (51.32 km). Axial length, 10.6 miles, (17.05 km).

Maximum basin relief, 1,150 feet, (350.52 m).

Geology:

About half gneissis and about half acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LITTLE CHOUSE BROOK

Location: 49°37'48" N. 56°46'35" W. White Bay.

Map Reference: Hampden. 12 H/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.5 miles², (40.14 km²). Mean width, 2.5 miles, (4.02 km).

Perimeter, 17.0 miles, (27.35 km). Axial length, 6.0 miles, (9.65 km).

Maximum basin relief, 1,150 feet, (350.52 m).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of gneiss.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

PURBECKS BROOK

Location: 49°44'40" N. 56°38'55" W. White Bay.

Map Reference: Hampden. 12 H/10 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.3 miles², (60.34 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 27.3 miles, (43.92 km). Axial length, 10.4 miles, (16.73 km).

Maximum basin relief, 1,200 feet, (365.76 m.)

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of gneiss.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

WILD COVE BROOK

Location: 49°49'12" N. 56°35'10" W. White Bay.

Map Reference: Jackson's Arm. 12 H/15 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 51.2 miles², (132.60 km²). Mean width, 2.9 miles, (4.66 km).

Perimeter, 42.7 miles, (68.70 km). Axial length, 15.8 miles, (25.42 km).

Maximum basin relief, 1,250 feet, (381.00 m).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of gneiss.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: None in lower reaches.

MIDDLE ARM BROOK

Location: 49° 1' 15" N. 56° 26' 10" W. Middle Arm, White Bay.
Map Reference: Baie Verte. 12 H/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphologic 1 Factors:

Basin area, 126.7 miles², (328.15 kilometers²). Mean width, 6.1 miles, (9.81 kilometers).

Perimeter, 63.7 miles, (102.49 kilometers). Axial length, 17.4 miles, (27.99 kilometers).

Maximum basin relief, 1,350 feet, (411.18 meters).

Geology:

Predominantly gneiss with the remainder consisting of Ordovician volcanic and small amounts of ultrabasic intrusive rocks and acidic intrusive rocks.

Vegetational Cover:

Forest in the upper part of watershed was destroyed by fire in 1979. Forest remains standing, primarily spruce with some birch, along the river from Freshwater Pond to the sea.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of the main river from Freshwater Pond to the sea is 8 miles, (12.87 kilometers).

Flatwater Pond (oligotrophic lake):

Surface area: 2.8 sq. miles, (4.50 sq. kilometers) Mean depth 42 ft. (12.80 meters). Max. depth 110' (33.52 meters).

Bottom Type:

Small rocks and gravel in areas where water goes to a depth of 20' (6.09 meters). The bottom in deeper areas is covered by a layer of black organic muck. The southwest corner of the lake has fine sand, washed into it by a stream entering at that point.

Water Chemistry:

Surface water temperature: 7°C - June 1963, 17°C - September, 1963.

Lowest dissolved oxygen in 1963 - 8 ppm.

Spawning Areas:

Flatwater Pond: Southwest Inlet stream contains excellent spawning gravel for a distance of 2 miles, (3.21 kilometers), above river mouth.

Barriers to Fish Migration:

Falls 3 miles, (4.82 kilometers), from mouth of river. Partial obstruction. Falls 3.5 miles, (5.62 kilometers), from mouth of river. 20' (6.09 meters) high, 60' (18.27 meters) long at 45° angle, natural fishway blocked by old bridge, long section of rapids below. Complete obstruction except at peak water level. Falls 6.9 miles, (11.10 kilometers), from mouth 6' (1.82 meters) high, 30' (9.14 meters), long at 30° angle. Partial obstruction at low water only. Falls 7.0 miles (11.26 kilometers), from mouth. 10' (3.04 meters) high 13' (3.96 meters) long at 75° angle. Complete obstruction except at peak water levels. Falls 7.3 miles, (11.74 kilometers), from mouth. 10' (3.04 meters) high, 50' (15.24 meters) long at 30° angle. Partial obstruction. Falls 7.5 miles, (12.06 kilometers) from mouth. 8' (2.43 meters) high, 25' (7.62 meters) long at 60° angle. Partial obstruction. Falls 16 miles, (25.74 kilometers), from mouth. 10' (3.04 meters) high, 10' (3.04 meters) long at 80° angle. Complete obstruction.

FLEUR DE LYS RIVER

Location: 50°07'02" N. 59°09'10" W.

Map Reference: Fleur de Lys. 12 I/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.9 miles², (33.41 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 16.6 miles, (26.70 km). Axial length, 5.7 miles, (9.17 km).

Maximum basin relief, 1,000 feet, (304.80 m).

Geology:

Gneisses.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

RATTLING BROOK

Location: 49°55'50" N. 56°12'15" W. Baie Verte.

Map Reference: Baie Verte. 12 H/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 9.3 miles², (24.08 km²). Mean width, 2.3 miles, (3.70 km).

Perimeter, 14.6 miles, (23.49 km). Axial length, 4.5 miles, (7.24 km).

Maximum basin relief, 950 feet, (289.56 m).

Geology:

Predominantly gneiss with the rest consisting of Ordovician sedimentary and a small amount of ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BAIE VERTE BROOK

Location: 49°55'35" N. 56°12'37" W. Baie Verte, White Bay.

Map Reference: Baie Verte. 12 H/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 75.3 miles², (195.02 kilometers²). Mean width, 7.2 miles (11.58 kilometers).

Perimeter, 45.0 miles, (75.40 kilometers). Axial length, 9.8 miles, (15.76 kilometers).

Maximum basin relief, 1,000 feet, (304.80 meters).

Geology:

About half gneiss with the remainder consisting of Ordovician sedimentary and a small amount acidic intrusive rocks and intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

North West Branch at a point 200 ft., (60.96 meters) from junction:

Falls consisting of two drops, 7 ft and 5 ft., (2.13-1.52 meters) high.

In the event that salmon can't get over the falls, there is on the right side of the falls a natural fishway which can be used at high water levels. Logging dams reported on this river at mile points 6 and 8, (9.65-12.87 kilometers) partial obstructions.

1973 South West Brook and Fishway: 16 stop water dams and 8 beaver dams.

North West Brook: 1 stop water dam and 1 diversion dam at headwaters

Southern Arm Pond.

SOUTH BROOK

Location: 49°57'05" N. 56°08'30" W. Baie Verte, White Bay.

Map Reference: Baie Verte. 12 H/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 47.7 miles², (123.54 km²). Mean width, 3.5 miles, (5.63 km).

Perimeter, 38.3 miles, (61.62 km). Axial length, 9.5 miles, (15.28 km).

Maximum basin relief, 1,150 feet, (350.52 m).

Geology:

Predominantly gneiss with the remainder consisting of acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Main river: Falls at mile 0.5 (.80 km), 40 ft. (12.19 m) high; at 80° angle; complete obstruction.
Falls mile 3, (4.82 km), passable.

Miscellaneous Information: This river receives waste material from a base metal mining operation in the area (Rambler Mines).

PACQUET BROOK (WOODSTOCK RIVER)

Location: 49°57'52" N. 55°52'58" W.

Map Reference: Nipper's Harbour. 2 E/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 46.1 miles², (119.39 km²). Mean width, 3.9 miles, (6.27 km).

Perimeter, 35.0 miles, (56.31 km). Axial length, 10.2 miles, (16.41 km).

Maximum basin relief, 950 feet, (289.56 m).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Falls at mouth complete obstruction at low discharge.

EAST BROOK (Burlington River)

Location: 49°45'10" N. 56°01'25" W. Green Bay, Notre Dame Bay.

Map Reference: Baie Verte. 12 H/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 68.6 miles², (177.67 km²). Mean width, 6.0 miles, (9.65 km).

Perimeter, 44.7 miles, (71.92 km). Axial length, 8.5 miles, (13.67 km).

Maximum basin relief, 1,250 feet, (381.00 m).

Geology:

Almost entirely acidic intrusive rocks with the remainder consisting of a small amount of Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics: Main river: from mouth to mile 1.75, (2.81 km).

Depth range: 3-4 ft. (0.91-1.21 m). Bottom type: Small gravel with mud in small pond and steadies.

Barriers to Fish Migration: Main river: Falls at mouth, 8 ft. (2.43 m) high; passable. Falls at mile 1.5, (2.41 km.), 4 ft. (1.21 m) high; passable. Falls at mile 1.8, (2.89 km), 15 ft., (4.57 m) high; made up of 5 steps, each 3-4 ft., (.91-1.21 m) high; passable.

SOUTH BROOK

Location: 49°35'12" N. 55°09'10" W. Southwest Arm, Green Bay.

Map Reference: Kings Point. 12 H/O East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.7 miles², (30.30 km²). Mean width, 1.5 miles, (2.41 km).

Perimeter, 24.1 miles, (38.77 km). Axial length, 6.8 miles, (10.94 km).

Maximum basin relief, 600 feet, (182.88 m).

Geology:

Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (resident and sea run).

No angling data available on this stream.

INDIAN RIVER

Location: 49°29'30" N. 56°05'15" W. Halls Bay, Notre Dame Bay.
 Map Reference: Springdale, 12/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 487.0 miles², (1261.33 km²). Mean width, 8.0 miles, (12.87 km).

Perimeter 176.2 miles (283.5 km.). Axial length, 34.0 miles, (54.70 km.).

Maximum basin relief 1,400 feet, (426.72 m).

Geology:

About half acidic intrusive rocks with about equal amounts of Ordovician volcanic, gneissis, Devonian sedimentary and some ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Length of all streams in drainage basin, not including standing water: 190 miles (305.71 km.).

North Brook: Length 10.5 mi. (16.91 km.), drainage area 9 sq.mi. (23.32 km²)

Little Black Brook: Length 6.4 mi. (10.30 km.), drainage area 3 sq. mi. (7.77 km²).

Black Brook between Indian Pond, Black Lake and Micmac Lake: Length 20.0 mi.. (32.20 km.), drainage area 24 miles² (62.18 km²).

Oxfords Brook: Length 3.6 miles (5.80 km.), drainage area 2 miles² (5.18 km²).

23 Mile Brook: Length 6.9 miles (11.11 km.), drainage area 5 miles² (12.95 km²).

Whitehan's Brook: Length 4.0 miles (6.44 km), drainage area 7 miles² (18.13 km²).

Shoal Pond Brook: Length 4.4 miles (7.08 km.), drainage area 11 miles² (28.50 km²).

Burnt Berry Brook: Length 60.0 miles (96.60 km.), drainage are 78 miles² (202.07 km²).

Areas of standing water in system:

Upper Indian Pond 6.2 miles² (16.06 km²).

Black Lake: 4.7 miles² (12.18 km²).

Micmac Lake 3.9 miles² (10.10 km²).

Gull Pond: 4.7 miles² (12.18 km²).

Gillards Lake: .9 miles² (2.33 km²).

Indian Pond: 1.7 miles² (4.40 km.²).

Shoal Pond: 1.3 miles² (3.37 km.²).

Lower Burnt Berry Pond: 1.1 miles² (2.85 km.²).

Upper Burnt Berry Pond: .9 miles² (2.33 km.²).

Bottom Types:

Section:

Main stream to mile 22 (35.29 km.), 256,000 yds.² (214,048.6 m.²) of .5" to 2.5" (.13 cm. to 6.4 cm.) diameter gravel, 918,000 yds.² (767,558.5 m.²) of 2.5" to 4.0" (1.3 cm to 10.2 cm) diameter gravel

Main stream, Indian Pond to channel, 3 miles, (4.83 km), 70,800 yds.² (59,197.3 m.²) of .5" to 2.5" (.13 cm. to 6.4 cm.) diameter gravel, 22,200 yds.² (18,561.9 m.²) of 2.5" to 4.0" (1.3 cm. to 10.2 cm.) diameter gravel.

Black Brook, from mouth to mile 1.5 (2.4 km.), 8,300 yds.² (6,939.8 m.²) of .5" to 2.5" (1.3 cm. to 6.4 cm.) diameter gravel, 61,000 yds.² (51,003.3 m.²) of 2.5" to 4.0" (1.3 cm. to 10.2 cm.) diameter gravel.

Shoal Pond Brook, from mouth to mile point 1.5 (2.4 km.) 6,000 yds.² (5,016.7 m.²) to .5" to 2.5" (1.3 cm. to 6.4 cm.) diameter gravel, 8,000 yds.² (6,689.0 m.²) of 2.5" to 4.0" (1.3 cm. to 10.2 cm.) diameter gravel.

Burnt Berry Brook, from mouth to mile point 10.0 (16.1 km) 171,400 yds.² (143,311.0 m.²) of gravel.

Rearing Areas:

From the channel to Indian Pond, 2.8 miles (4.51 km) there are 885 rearing units. From Indian Pond to the counting fence, 11.6 miles (18.7 km) there are 7,140 rearing units. From Indian Pond to Black Brook Falls, 1.3 miles (2.1 km) there are 460 rearing units. There are 1,200 rearing units above the channel and 4,540 rearing units above Black Brook Falls, inaccessible to salmon

Barriers to Fish Migration:

Main River:

Falls at mile 3.25 (5.22 km) partial obstruction. Fishway built along side of falls in 1957. Chain link fence erected around fishway in 1957. Trap repaired in 1971. Smolt counting platforms installed 1969; repair work done in 1971.

Spillway at mile 22 (35.39 km), immediately above Control Flow Spawning Channel; complete barrier.

Hydro diversion dam at mile 33, (53.09 km); complete obstruction. 28' (8.53 m) vertical and approximately 190' (57.91 m) horizontal in left bank, maximum slope of approximately 7.5' to 7.5'. (2.28 m) horizontal. Right bank has a vertical drop from bedrock into a trough containing the main flow of water and the steepest slope.

Burnt Berry Brook (Tributary):

Falls at mile 1.5 (2.41 km) 26.5' high, consists of 3 rises; complete obstruction.

Falls at mile 2 (3.21 km) 5' high; complete obstruction

Falls at mile 3 (4.8 km), 5' high.

Falls at mile 4 (6.4 km), height 10'. Below falls there is a 100' long gorge with a series of shallow drops.

Falls at mile 12 (19.3 km), height 6'.

Falls at mile 14 (22.5 km) height, 15'.

Black Brook (Tributary):

Falls at mile 1.3 (2.09 km); complete obstruction.

INDIAN BROOK, HALL'S BAY

Location—

In Hall's Bay, Notre Dame Bay, on East Coast.

General Remarks—

This stream has some excellent fishing pools on the main river and its tributary coming in from Davie's Pond on the north. The best fishing is at the falls where 3 or 4 good pools are located. The road from Springdale runs directly to the falls; this road crosses the branch from Davie's Pond and a branch road to Little Bay leads to Davie's Pond, and the river to the falls can be fished daily from Springdale.

For anyone desiring a good canoe and fishing trip, this river offers exceptional opportunities. From its headwaters a portage of 3 to 4 miles brings one to the headwaters of Birchy Pond River, which flows into Sandy Lake, which empties into Grand Lake. Camping sites are numerous and splendid salmon and trout fishing can be had over its entire length. Salmon of up to 20 lbs. in weight can readily be caught, also trout of 4 to 6 lbs.

Tributaries:

Hermans Brook	12H/7
North Brook	12H/7
Oxfords Brook	12H/7
Black Brook	12H/8
White Horn Brook	12H/8
Davis Brook	12H/9

Notes:

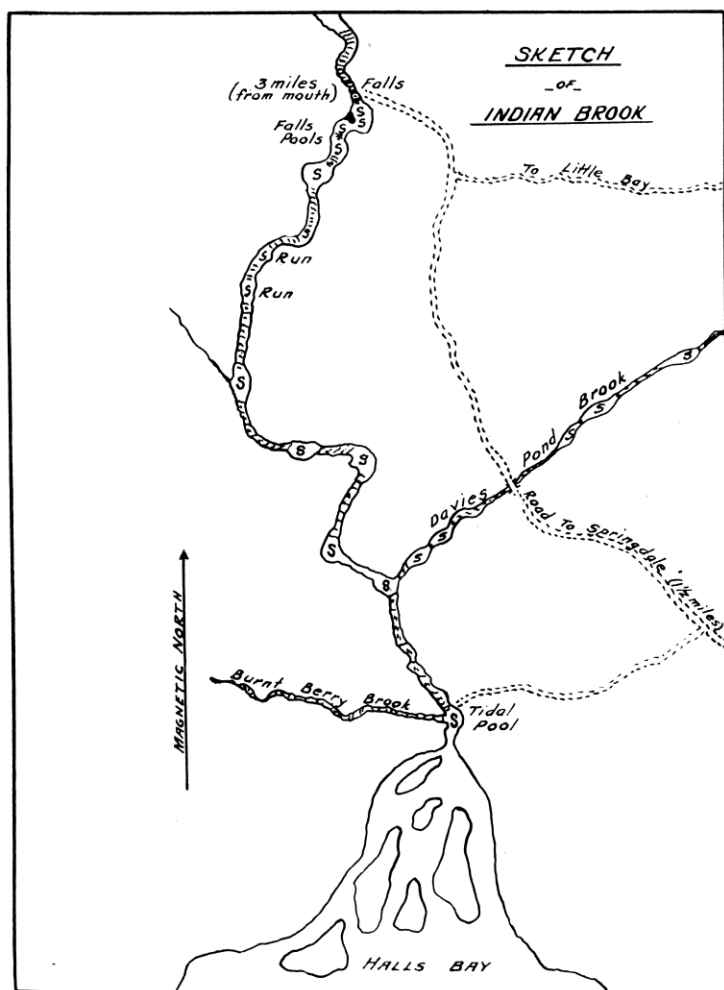
Davies Brook now Davis Brook.

Rises in Lake Buck and Upper

Indian Pond. 12H/7

Pools:

Tidal Pool, Falls Pools, 12 unnamed poo



WEST RIVER (Riverhead Brook)

Location: 49° 25' 45" N. 56° 08' 10" W. Halls Bay, Notre Dame Bay.

Map Reference: Springdale. 12 H/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 186.9 miles², (484.07 kilometers²). Mean width, 4.9 miles, (7.88 kilometers).

Perimeter, 95.5 miles, (153.65 kilometers). Axial length, 37.1 miles, (59.69 kilometers).

Maximum basin relief, 1,822 feet, (555.34 meters).

Geology:

About half Ordovician sedimentary with the remainder consisting of about equal amounts of gneiss and Devonian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Total length of all streams, not including standing water, equals 25 miles, (40.22 kilometers).

Barriers to Fish Migration:

Main river:

Falls, 6 miles (9.65 kilometers) upstream from head of West Pond, 15' (4.57 meters) vertical; complete obstruction.

Logging dam at mile point 1.3 (2.09 kilometers) (outlet of West Pond), partial obstruction.

In 1953, two wooden fishways constructed over dam at mile point 1.3 (2.09 kilometers) did not function well at high water, dam gates removed by A.N.D. since 1960; no holdup at present, dams removed prior to 1973. Barney's Brook (Tributary flowing into West Pond);

Falls at mile point 2.8 (4.50 kilometers) from West Pond; partial obstruction. In 1955, one section of falls lowered from 8' (2.62 meters) to 4' (1.26 meters).

SOUTH BROOK

Location: 49°25'35" N. 56°05'30" W. Hall's Bay..

Map Reference: Springdale. 12 H/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 259.5 miles², (672.10 km²). Mean width, 7.3 miles, (11.74 km).

Perimeter, 127.0 miles, (204.34 km). Axial length, 35.4 miles, (56.95 km).

Maximum basin relief, 1,822 feet, (555.34 meters).

Geology:

About equal amounts of gneissis, Devonian sedimentary.

Devonian volcanic and some intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Main River: Falls at mile 10.4 (16.73 km) from mouth. 40' (12.2 m) vertical, overall length 150' (45.75 m), complete obstruction. Gull Pond Brook - accessible to headwaters.

SOUTH BROOK, HALL'S BAY

Location—

Flows into the bottom of Hall's Bay in Green Bay, on the East Coast.

General Remarks—

The Badger-Hall's Bay road runs alongside this river from Gull Pond, 8 miles inland, to the sea, and from it the various pools can readily be reached, no boats or canoes being necessary. A splendid run of salmon frequent this river. Camping sites are numerous.

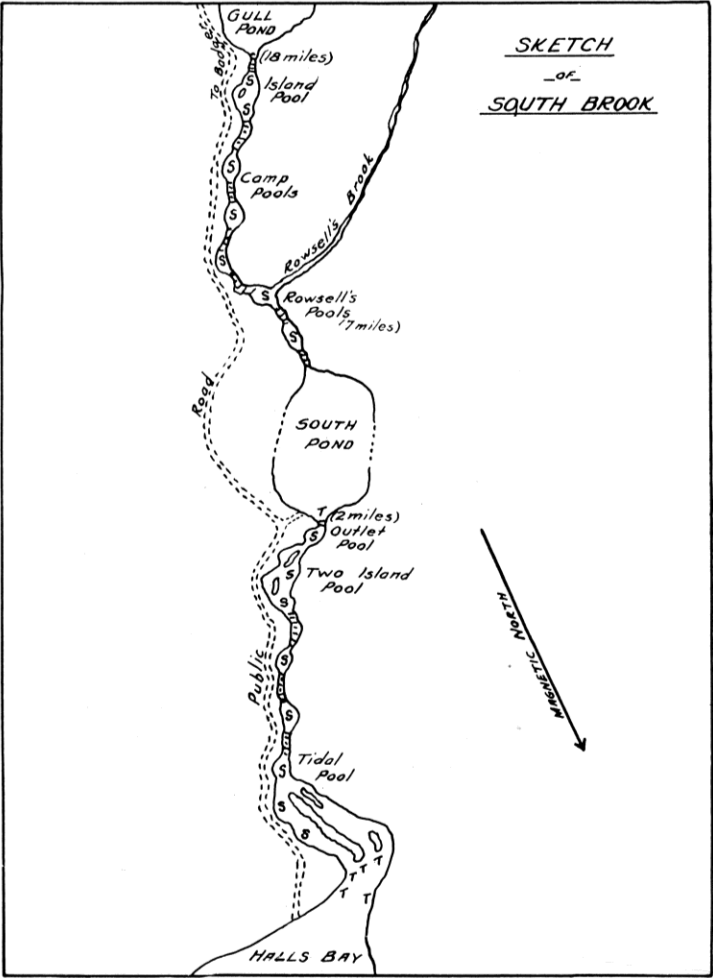
Tributaries:

Gull Brook	12H/8
Little Joe Brook	12H/1
Sandy Brook	12H/1
Glodes Brook	12H/1
Kings Brook	12H/1

Pools:

Tidal Pool, Two Island Pool, Outlet Pool, Rowsell's Pool, Camp Pools, Island Poo





TOMMY'S ARM RIVER

Location: 49°28'00"N. 55°48'10" W. Tommy's Arm, Notre Dame Bay.

Map Reference: Robert's Arm. 2E/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 93.5 miles², (242.16 km²). Mean width, 3.5 miles, (5.63 km).

Perimeter, 71.0 miles, (114.23 km). Axial length, 26.0 miles, (41.83 km).

Maximum basin relief, 1,000', (304.80 m).

Geology:

About half Ordovician volcanic with the remainder consisting of Ordovician sedimentary, acidic intrusive rocks and a small amount of intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Falls, three miles, (4.82 km) upstream from Crescent Lake, series of drops total height about 15', (4.57 m).

Partial obstruction. Artificial channel, 16 miles, (25.74 km), from the mouth, artificial channel blasted around log jam, downstream end has a drop of 6', (1.82 m), over 15', (4.57 m), 50°.

Partial obstruction. Falls, 19 miles, (30.57 km), from mouth. 15', (4.57 m), vertical, left side about 3', (0.91 m) lower. Complete obstruction.

Logging dam, outlet of Crescent Lake. Partial obstruction (minor)

Several logging dams on system. The future of these dams is uncertain since logging ceased here in 1968.

TOMMY’S ARM RIVER

Location—

In the bottom of Tommy’s Arm, Green Bay, on the East Coast.

General Remarks—

Tommy’s Arm River flows out of Crescent Lake. This river is only 1½ miles long, but contains some excellent pools along its course. The South West Brook flowing into Crescent Lake also offers good fishing. Both rivers are easily reached from Rabbit’s Arm, distant 6 miles from Pilley’s Island. Good sea-trout fishing can also be obtained. Salmon range in weight from 5 to 15 lbs.

Tributaries:

Gummy Brook	2E/5
Black Brook	2E/5
Five Island Pond Brook	2E/5
South Brook	2E/5
Loon Brook	12H/8
Moose Brook	12H/8

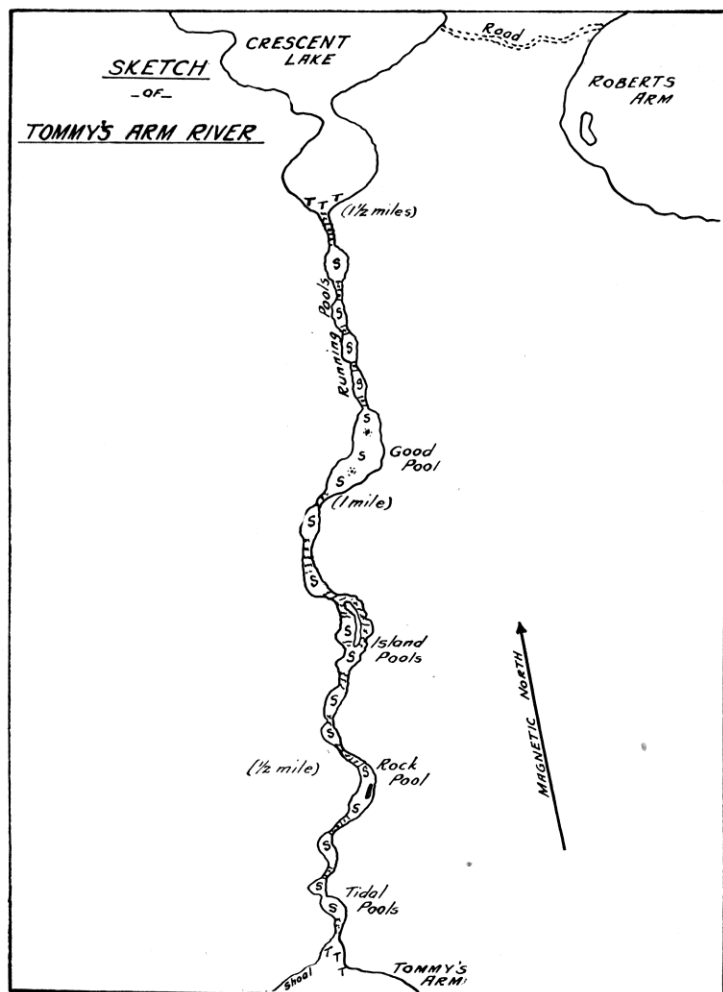
Notes:

Rises in Rocky Pond.	12H/8
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Pools:

Tidal Pools, Rock Pool, Island Pool, Good Pool, Running Pools





SOPS ARM BROOK

Location: 49°26'25" N. 55°48'35" W. Sops Arm, Notre Dame Bay.

Map Reference: Robert's Arm, 2 E/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.8 miles², (61.64 km²). Mean width, 2.2 miles, (3.53 km).

Perimeter, 27.8 miles, (44.73 km). Axial length, 9.7 miles, (15.60 km).

Maximum basin relief, 1,000 feet, (304.80 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SOP'S ARM RIVER

Location—

On East Coast, river flows into Sop's Arm of White Bay.

General Remarks—

This is a wide shallow river, with the pools not very close together, but unusually well filled with fish owing to the shallow nature of the river between. Good sea-trout fishing can be had at the river's mouth and on the small brook that flows in on the south.

Tributaries:

Doucers Brook	12H/15
Little Brook	12H/15
Otter Trap Brook	12H/15

Notes:

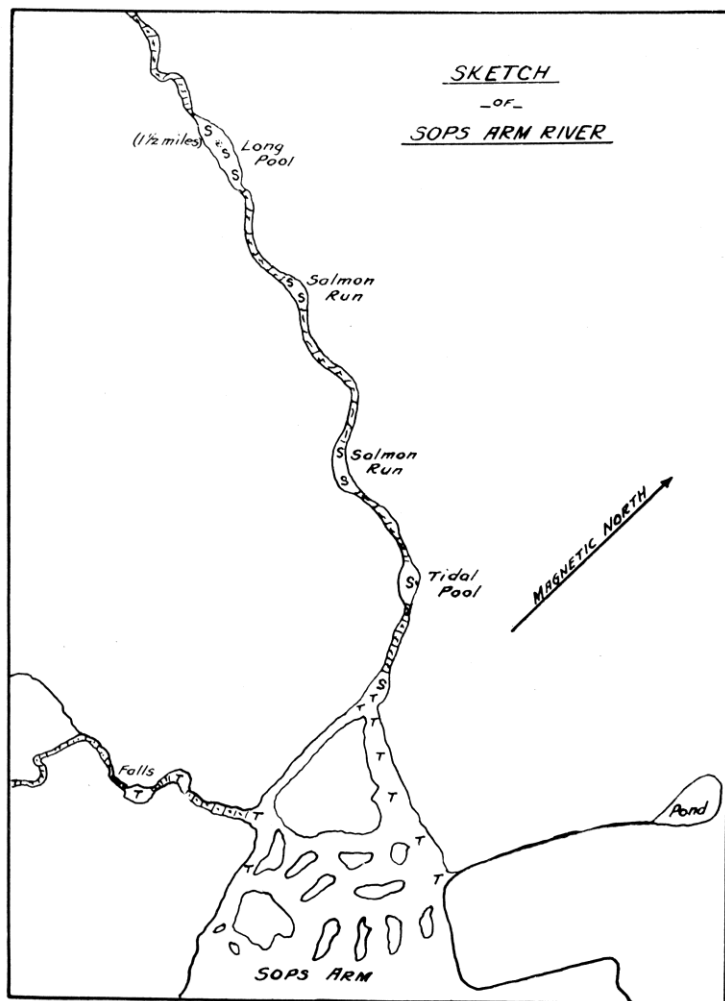
Now Main River.

Rises in Long Range Mountains. 12H/14

Pools:

Tidal Pool, Long Pool





SHOAL ARM BROOK

Location: 49°24'35" N. 55°44'50" W. Badger Bay.

Map Reference: Roberts Arm. 2 E/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 33.6 miles², (87.02 km²). Mean width, 2.2 miles, (3.53 km).

Perimeter, 34.8 miles, (55.99 km). Axial length, 14.3 miles, (23.00 km).

Maximum basin relief, 1,000, (304.80 m).

Geology:

About half Ordovician sedimentary with the remainder consisting of gneiss and small amounts of ordovician volcanic and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Brook trout, small run of Atlantic salmon.

No angling data available on this stream.

PENNY'S BROOK

Location: 49°23'36" N. 55°41'40" W. Badger Bay.

Map Reference: Roberts Arm. 2 E/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 22.2 miles², (57.49 km²). Mean width, 2.8 miles, (4.50 km).

Perimeter, 22.6 miles, (36.36 km). Axial length, 8.3 miles, (13.35 km).

Maximum basin relief, 1,000 feet, (304.80 m).

Geology:

Almost entirely Ordovician sedimentary with small amounts of Ordovician volcanic and intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration

BADGER BAY BROOK

Location: 49°23'22" N. 55°39'45" W. Badger Bay.

Map Reference: Roberts Arm. 2 E/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 20.0 miles², (51.80 km²). Mean width, 2.3 miles, (3.70 km).

Perimeter, 24.8 miles, (39.90 km). Axial length, 7.9 miles, (12.71 km).

Maximum basin relief, 1,050 feet, (320.04 m).

Geology:

Almost entirely Ordovician sedimentary with small amounts of Ordovician volcanic and intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SEAL BAY BROOK

Location: 49°21'20" N. 55°35'00" W.

Map Reference: Roberts Arm. 2 E/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 24.3 miles², (62.93 km²). Mean width, 2.4 miles, (3.86 km).

Perimeter, 25.1 miles, (40.38 km). Axial length, 9.6 miles, (15.44 km).

Maximum basin relief, 1,177 feet, (358.75 m).

Geology.

Almost entirely Ordovician sedimentary with some intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

WEST ARM BROOK (Western Arm Brook)

Location: 49°20'50" N. 55°27'55" W. New Bay.

Map Reference: Point Leamington. 2 E/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 100.7 miles², (260.83 km²). Mean width, 3.3 miles, (5.30 km).

Perimeter, 72.4 miles, (116.49 km). Axial length, 26.0 miles, (41.83 km).

Maximum basin relief, 1,177 feet, (358.75 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of Ordovician sedimentary and a small amount of intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Partial obstruction at mile 3. Complete obstruction downstream from Frozen Ocean Lake.

Location: 49°19'13" N. 55°24'25" W. Southwest Arm, New Bay.

Map Reference: Point Leamington. 2 E/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.8 miles², (40.92 km²). Mean width, 2.4 miles, (3.86 km).

Perimeter, 17.4 miles, (27.99 km). Axial length, 6.2 miles, (9.97 km).

Maximum basin relief, 650 feet, (198.12 m).

Geology:

About half intermediate intrusive rocks with the remainder consisting of Ordovician sedimentary and a small amount of Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NEW BAY RIVER (LEAMINGTON RIVER)

Location: 40° 19' 21" N. 55° 24' 00" W.

New Bay, Notre Dame Bay.

Map Reference: Point Leamington. 2E/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 79.2 miles², (205.12 kilometers²). Mean width, 3.7 miles, (5.95 kilometers).

Perimeter, 56.4 miles, (90.74 kilometers). Axial length, 21.5 miles, (34.95 kilometers).

Maximum basin relief, 1,004 feet, (306.01 meters).

Geology:

About half Ordovician sedimentary with the remainder consisting of acidic intrusive rocks and a small amount of intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls and rapids at mouth of river. Approximately 50' (15.24 meters) high and 200' (60.96 meters) long at 30° angle. Partial obstruction. Two sections of falls at mouth were lowered from 10' (3.04 meters) to 6' (1.82 meters) and a run around cut in the top section in 1955.

Falls 0.25 miles (0.4 kilometers) from mouth; 6' (1.82 meters) high, 10' (3.04 meters) long at 75° angle. Partial obstruction. Enlarged pool below falls and blasted large rock at top of falls in 1971.

Falls 0.4 miles (0.64 kilometers) from mouth; 4' (1.21 meters) vertical. Partial obstruction.

Falls 9.25 miles (14.88 kilometers) from mouth; 11' (3.35 meters) high, 35' (10.66 meters) long at 50° angle. Partial obstruction.

Falls 10.4 miles (16.73 kilometers) from mouth; 8' (2.43 meters) high in two drops at 40° and 80° angles. Partial obstruction at low water.

Falls 11 miles (17.69 kilometers) from mouth;

10' (3.04 meters) high, 20' (6.08 meters) long at 80° angle. Passable but difficult. In 1971 rock was removed by blasting at top of falls.

Falls 11.1 (17.85 km) from mouth; 4' (1.21 m) vertical. Partial obstruction at low water.

Falls 11.2 miles (18.02 km) from mouth; 4' (1.21 m) high, 10' (3.04 m) long at 60° angle. Partial obstruction at low water.

In 1957, logging dam, 2 miles (3.21 km) above Indian Pond was removed, also dam at outlet of Indian Pond was removed.

NORTHERN ARM RIVER (Brook)

Location: 49°09'07" N. 55°23'20" W. Bay of Exploits. Notre Dame Bay.

Map Reference: Botwood. 2 E/3 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 69.9 miles², (181.04 km²). Mean width, 3.2 miles, (5.14 km).

Perimeter, 48.4 miles, (77.87 km). Axial length, 18.5 miles, (29.76 km).

Maximum basin relief, 1,004 feet, (306.01 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of Devonian sedimentary and Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Main River: Falls at mile 0.25 (0.4 km)

12' (3.6 m) high, no problem to migrating fish except at low discharge. Falls at mile 12.2 (19.6 km) 15' (4.6 m) causes problem to migrating fish at all water levels. All logging dams removed from this system. In 1971 at upper falls (1/2 mile, (.80 km) below New Bay Road) flow of water was channelized above falls and pocket in falls was enlarged to concentrate water at periods of low flow.

NORTHERN ARM & PETER'S ARM BROOKS

Location—

These two rivers flow into Exploits Bay, Notre Dame Bay, on the East Coast.

Accessibility—

Both rivers are accessible from Botwood, Northern Arm being 2 miles and Peter's Arm 2¼ miles. Motor boats can readily be hired for the run to these two rivers.

General Remarks—

These two rivers carry a nice run of salmon and sea trout and there are numerous pools on both. The local fishermen from Botwood and Norris Arm fish these rivers. For parties fishing the Exploits River, these two rivers, in close proximity, offer additional opportunities for good sport. A road connects Botwood with the rivers, so that these rivers can be fished daily from Botwood.

Notes:

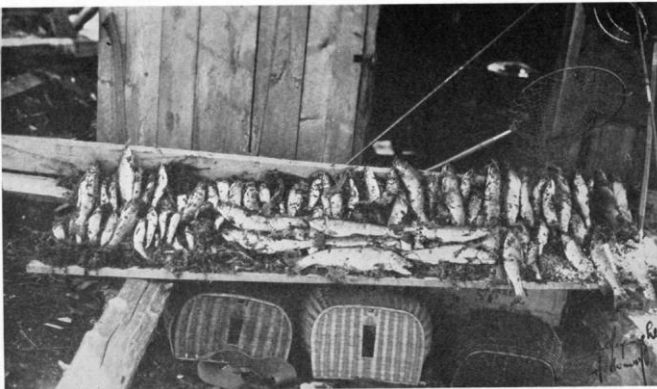
These streams flow into Exploits Bay
on either side of Botwood. 2E/3

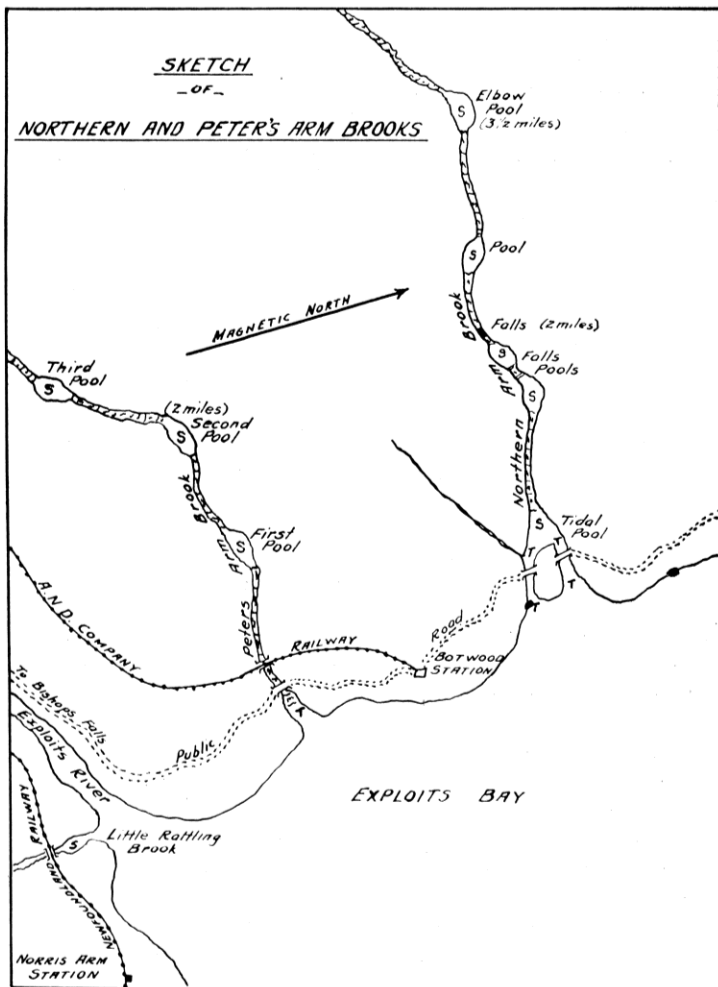
Northern Arm Brook Pools:

Tidal Pool, Falls Pools, Unnamed Pool, Elbow Pool

Peter's Arm Brook Pools:

First Pool, Second Pool, Third Pool





PETERS ARM BROOK

Location: 49°07'15" N. 55°21'58" W. Bay of Exploits.

Map Reference: Botwood. 2 E/3 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 72.0 miles², (32.68 km²). Mean width, 3.6 miles, (5.79 km).

Perimeter, 53.1 miles, (85.43 km). Axial length, 20.2 miles, (32.50 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

About half Devonian sedimentary with the remainder consisting of acidic intrusive rocks and some Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Minor obstructions near headwaters.

NORTHERN ARM & PETER'S ARM BROOKS

Location—

These two rivers flow into Exploits Bay, Notre Dame Bay, on the East Coast.

Accessibility—

Both rivers are accessible from Botwood, Northern Arm being 2 miles and Peter's Arm 2¼ miles. Motor boats can readily be hired for the run to these two rivers.

General Remarks—

These two rivers carry a nice run of salmon and sea trout and there are numerous pools on both. The local fishermen from Botwood and Norris Arm fish these rivers. For parties fishing the Exploits River, these two rivers, in close proximity, offer additional opportunities for good sport. A road connects Botwood with the rivers, so that these rivers can be fished daily from Botwood.

Notes:

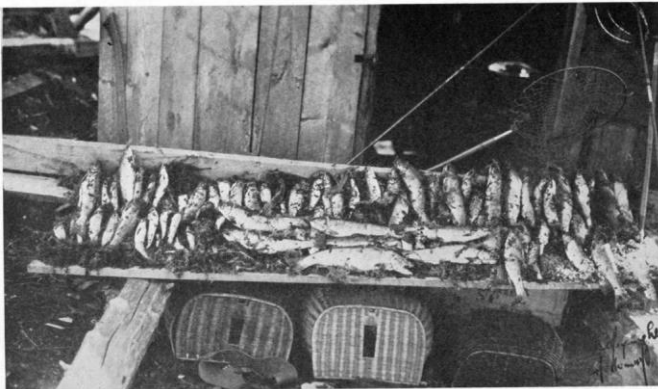
These streams flow into Exploits Bay
on either side of Botwood. 2E/3

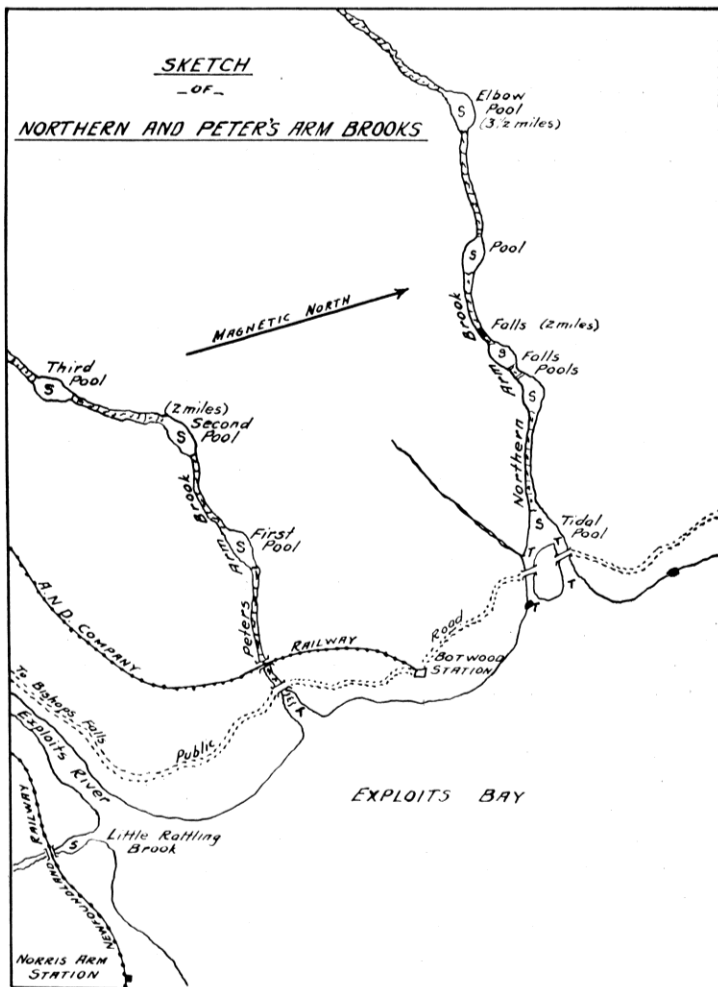
Northern Arm Brook Pools:

Tidal Pool, Falls Pools, Unnamed Pool, Elbow Pool

Peter's Arm Brook Pools:

First Pool, Second Pool, Third Pool





EXPLOITS RIVER

Location: 49° 04' 40" N. 55° 19' 40" W. Bay of Exploits,
Notre Dame Bay.
Map Reference: Botwood. 2 E/3 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4,352.3 miles², (11,272.45 kilometers²). Mean width, 29.7 miles, (47.78 kilometers).

Perimeter, 608.1 miles, (978.43 kilometers). Axial length, 147.4 miles, (237.16 kilometers).

Maximum basin relief, 2,150 feet, (655.32 meters).

Geology:

About half Ordovician volcanic with the remainder consisting of acidic intrusive rocks with small amounts of Ordovician sedimentary, Devonian sedimentary, intermediate intrusive rocks and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams in system, including standing water, is 966 to 1,066 miles, (1554.29 to 1,715.19 kilometers). Length of tributaries is 800 to 900 miles, (1,287.2-1,448.1 kilometers).

Main river: From mouth to mile point 70, (112.63 kilometers), (Exploits Dam):

Width range, 550 to 1,500 ft., (167.64-457.2 meters).

Bottom type, fine rubble, boulder and bedrock.

Spawning Areas:

Main river; From mouth to mile point 70, (112.63 kilometers), (Exploits Dam): Good to excellent spawning conditions from log boom landing to Badger Chute, distance 11.5 miles, (18.50 kilometers), presently inaccessible. Other sections along river bank.

Barriers to Fish Migration:

Main river: From mouth to mile point 70, (112.63 kilometers), (Exploits Dam): Falls and dam (Bishop's Falls) at mile point 3.4, (5.47 kilometers). Concrete dam 810 ft. (246.88 meters) long (bank to bank). Height of downstream side at east bank, 4 ft., (1.22 meters) at midsection and west bank, 35 ft. (10.66 meters).

Falls, (mostly rapids) 300 ft. (91.44 m) long, 19 ft. (5.79 m) high.

Dam located at top of falls. Passable with difficulty.

Falls, at mile 15.6 (25.10 km), 6 - 10 ft. (1.82-3.04 m) high, 600 to 700 ft. (182.88 - 213.36 m) wide; partial obstruction.

Falls. (Grand Falls) mile 15.8 (25.42 km) first falls, 25-30 ft. (7.62-9.14 m) high, 95 to 110 ft. (28.95-33.52 m) wide; complete obstruction. Second falls 500 ft. (152.40 m), further upstream 20 ft. (6.09 m) high; complete obstruction.

Dam, (Grand Falls dam) at mile 16.0 (25.74 km). Height range of downstream side, 14 to 20 ft. (4.26-6.09 m); length, bank to bank, 850 ft; complete obstruction.

Falls, at mile 16.5 (26.54 km), consists of three parts; partial obstruction. ("Run around" at east bank).

Falls (Goodyear Falls) at mile 17.9 (28.80 km), consists of two parts, west bank falls 4 to 8 ft. (1.21-2.42 m) high; east bank rapids 15 to 20 ft. (4.57-6.1 m) high, 700 ft. (213.36 m) long; partial obstruction.

Log boom landing at mile 19.9 (32.01 km), periodically passable.

Badger Chute Rapids at mile 31.6 (50.84 km), 10 to 12 ft. (3.04-3.65 m) high, 55 ft (16.76 m) long, 110 to 140 ft. (33.52-48.76 m) wide; partial obstruction.

Badger Chute Rapids at mile 31.7 (51.00 km), 15 ft. (4.57 m) high, 500 to 600 ft. (152.40-182.88 m) long, 500 to 600 ft (152.5-183.0 m) wide; partial obstruction.

Falls (Red Indian Falls) at mile 48.4 (77.87 km), 25 to 28 ft (7.62-8.53 m) high, 425 to 450 ft. (129.62-137.25 m) long, 300 to 500 ft. (91.5-152.4 m) wide; partial obstruction.

Dam (Exploits dam at outlet of Red Indian Lake) at mile 69.9 (112.46 km), height of downstream side 28 ft. (8.53 m). Length, bank to bank, 630 ft. (192.02 m); complete obstruction.

Stoney Brook, channel blasted over falls at mouth of river in 1959.

Sandy Brook, two logging dams constructed on this brook by A.N.D. Co. opening left in each dam for future fishway, 1958.

EXPLOITS RIVER

Location—

On East Coast, empties into Exploits Bay of Notre Dame Bay.

Season—

Good fishing can be had during July and August.

General Remarks—

This is the largest river in Newfoundland, ... 200 miles in length. An excellent ... trip can be had, starting from the mouth of the river, to Red Indian Lake, a few portages being necessary, ... [which] can be followed to its head, passing on through Lloyd's Lake to King George Fourth Lake. From here a portage of about 5 miles lands one on Victoria Lake and then down Victoria River to Millertown, at the foot of Red Indian Lake. A total distance of approximately 275 miles. Good salmon fishing can be obtained as far as Grand Falls, and above splendid trout and Ouananiche fishing. ... River boats or canoes are essential for a good fishing trip on the river.

Tributaries:

Great Rattling Brook	2D/13
Green Woods Brook	2D/13
Sandy Brook	2D/13
Stony Brook	2D/13
Wigwam Brook	2D/13
Middle Brook	2D/13
Junction Brook	12A/16
Noel Paul's Brook	12A/16
Pamehac Brook	12A/16
Black Duck Brook	12A/16

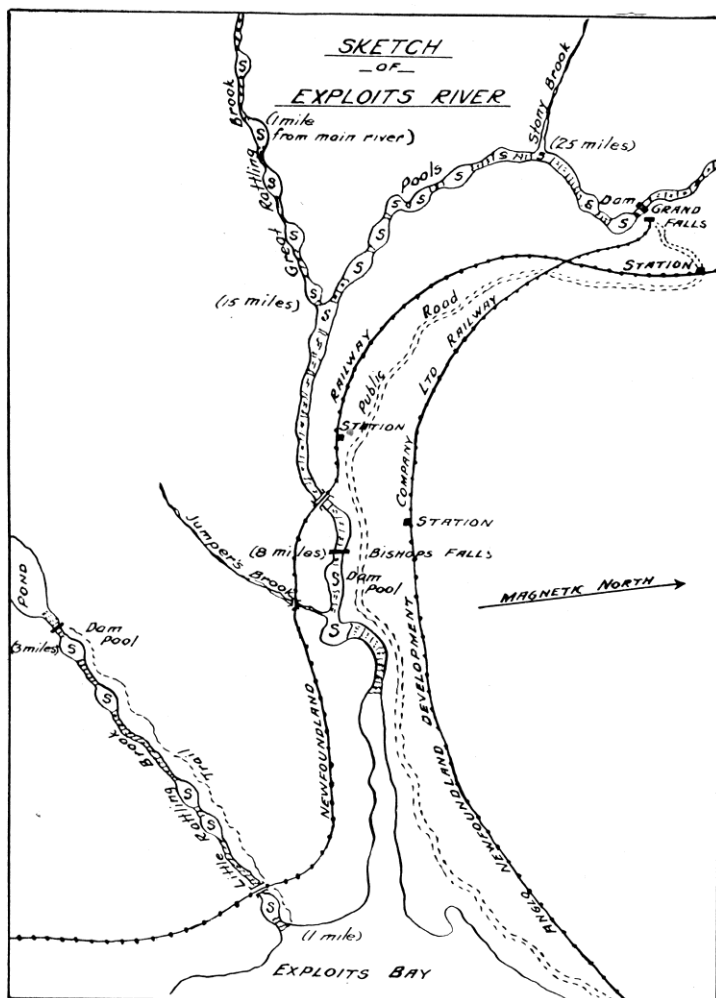
Notes:

Many more tributaries are not listed here.

Enhancement has created salmon habitat above Grand Falls.

Pools:

Dam Pool, 12 unnamed pools



RED INDIAN LAKE

Location:

Map Reference:

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 70.3 miles², (182.08 km²), (second largest body of water in insular Newfoundland). Mean width, 1.9 miles (3.05 km). Mean length, 20.1 miles (32.34 km). Maximum width, 3.5 miles (5.63 km). Maximum length, 37.5 miles (60.33 km). Average depth, 200 feet. (60.96 m). Maximum depth, 480 feet (146.30 m).

Drainage:

The lake drains an area of 2,200 mi² (5,698 km²). Main drainages from the south are Victoria and Lloyd's River; from the west Shanandithit Brook, Buchans Brook and Star River, and from the north Mary March Brook.

Geography:

The lake lies in a north east-south west direction at an altitude of 500 feet (152.5 m). It has a regular shoreline.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Rearing areas of selected tributaries are shown below:

	Linear		Width		Rearing Area	
	Miles	Kilometers	Yds.	M.	Sq.yd.	Sq.m.
Shanadidit Brook	3	4.8	100	91.4	528000	441471.6
(tributary)	17	27.4	30	27.3	897600	750501.7
(tributary)	80	128.8	10	9.1	140800	117725.8
Star Brook	28	45.1	30	27.3	1478400	1236120.4
(tributary)	56	90.2	10	9.1	985000	824080.3
Clench Brook	16	25.8	10	9.1	281600	235451.5

LLOYD'S RIVER

Location: 48°32'50" N. 57°13'25" W.

Map Reference: Star Lake. 12 A/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 184 miles², (476.6. km²).

Geology:

Sedimentary and volcanic rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Main river drains into upper end of Red Indian Lake, draining a large area of the Annieopsquotch Mountains.

Main River, from mouth to mile 15 (24.2 km), average width 100 yds. (91.4 m), estimated 2,640,000 sq.yds. (2,207,357.8 sq.m.) of rearing area.

Lloyd's River, tributary #1, mouth to mile 16 (28.8 km), average width 6 yds. (5.5 m), estimated 168,900 sq.yd. (141,220.7 sq.m). of rearing area.

Tributary #2, mouth to mile 4 (6.4 km), average width 100 yds. (91.4 m), estimated 704,000 sq.yd. (588,628.8 sq.m) of rearing area.

Main river. Lloyd's Lake to King George IV Lake, 20 miles (32.2 km) average width 50 yds. (45.7 m); estimated 1,408,000 sq.yd. (1,177,257.5 sq.m) of rearing area.

Tributary #3, mouth to mile 50 (80.5 km), average width 10 yds. (9.1 m), estimated rearing area of 880,000 sq.yd. (735,785.0 sq.m).

King George IV Lake to 29 miles (46.7 km) upstream, average width 25-30 yds (22.9-27.4 m), estimated rearing area of 1,276,000 sq.yd. (1,066,889.6 sq.m).

VICTORIA RIVER

Location: 48°44'40" N. 56°40'50" W.

Map Reference: Lake Ambrose 2 A/10 East

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 337 miles² (872.8 km²).

Geology:

Ordovician volcanic rocks, granites and granodiorites.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Lower Victoria River, mouth to mile 40 (64.4 km) average width 100 yds. (91.4 m), estimated 7,004,000 sq.yds. (5,856,187.2 sq.m) of rearing area.

Tributary #1, mouth to mile 24 (38.6 km), average width 5 yds. (4.6 m), estimated 21,100 sq.yd. (17,642.1 sq.m) of rearing area.

Quinn Brook, (tributary) mouth to mile 20 (32.2 km), average width 16 yds. (14.6 m), estimated 563,200 sq.yd. (470,903.0 sq.m) of rearing area.

Rodeross Brook (tributary) mouth to mile 18 (29.0 km), average width 10 yds. (9.1 m), estimated 316,800 sq.yd. (264,882.0 sq.m) of rearing area.

Long Brook (tributary) mouth to mile 1 (1.6 km), average width 15 yds (14.6 m), estimated 26,400 sq.yd. (22,073.6 sq.m) of rearing area.

Long Brook Tributary, mouth to mile 7 (11.3 km), average width 5 yds. (4.6 m), estimated rearing area of 61,600 sq.yd. (51,505.0 sq.m).

Bobby's Brook (tributary), mouth to mile 5 (8.1 km), average width 5 yds. (4.6 m), estimated 44,000 sq.yd. (36,789.3 sq.m) of rearing area.

Hydro dam 40 miles (64.4 km) from mouth diverts remainder of river and Victoria Lake to another watershed for reservoir. It is estimated that 5,227,200 sq.yd. (4,370,568.5 sq.m) of rearing area are above the dam.

Species Present: Brook trout, landlocked Atlantic salmon, Arctic char, three spined stickleback.

Miscellaneous Information:

This entire river is inaccessible to Atlantic salmon due to control dam at Red Indian Lake where it enter the Exploits River. Logging has been carried out on this river leaving many areas bulldozed and cut to the water's edge.

Victoria Lake, before the diversion had a maximum length of 18.5 miles (29.8 km), a mean width of .89 miles (1.4 km) and an area of 16.4 miles² (42.5 km²).

GREAT RATTLING BROOK

Location: 58° 58' 08" N. 55° 32' 43" W.

Map Reference: 2 D/13 East Half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas:

One of the major spawning areas is Tote Brook, (Code # 779-12-19).

Barriers to Fish Migration:

Main River:

Falls and dam at mile point 5 (8.04 kilometers), falls 19' (5.8 meters) high, dam 12' (3.7 meters) high. Accessible by fishway which was completed in 1959. Fishway made approximately 522 sq. miles (1351. sq. kilometers) accessible to salmon. Dam partially removed.

LeDrew's Dam, South Branch, fishway installed by A.N.D. Co. - 1964.

Counting trap installed 1964. Dam has since been removed.

Tote Lake Dam Fishway, Tote Brook, constructed by A.N.D. Co. in 1959, has since been removed. Cannings Lake Dam, Tote Brook, removed by A.N.D. Co. in 1964.

Upper Twin Lake Dam, removed by A.N.D. Co. in 1964. Lower Twin Lake Dam, removed by A.N.D. Co. in 1964. Nugents Lake Dams, Three Brooks, four dams removed by A.N.D. Co. in 1964.

Eagle Lake Dam, Three Brooks, removed by A.N.D. Co. in 1964.

Mud Pond Dam, Three Brooks, removed by A.N.D. Co. in 1964.

Peters Lake Dam, Three Brooks, removed by A.N.D. Co. in 1964.

Carey Lake Dam, Three Brooks, removed by A.N.D. Co. in 1964.

Three Brooks Steady Dam, Three Brooks, removed by A.N.D. in 1964.

Loan Lake Dam, Three Brooks, removed by A.N.D. Co. in 1964.

Luffs Lake Dam, Three Brooks, removed by A.N.D. Co. in 1964.

New Years Lake Dam, Three Brooks, removed by A.N.D. Co. in 1964.

Steve's Lake Dam, Crooked Knife Brook, removed by A.N.D. in 1964.

Moses Lake Dam, Crooked Knife Brook, removed by A.N.D. Co. in 1964.

Curlew's Lake Dam, Crooked Knife Brook, removed by A.N.D. Co. in 1964.

Long Lake Dam, Crooked Knife Brook, removed by A.N.D. Co. in 1964.

Lee's Lake Dam, Crooked Knife Brook, removed by A.N.D. Co. in 1964.

Harvey's Falls, natural run around improved by blasting around 12' (3.64 m) falls in 1957.

Salmon Falls, channel blasted around falls in 1959.

North Branch, Camp 45 dam fishway, installed by A.N.D. Co. in 1964; counting trap installed in 1964; has since been removed.

Camp One Lake dam fishway, chain link fence built around fishway in 1959. Wooden dam through dam rebuilt in 1962. Fishway repaired in 1971. 1972 will be the last year fishway will be operating over old dam. New fishway and control dam to be constructed in 1973.

BADGER BROOK (Tributary of Exploits River)

Location: 48°58'30" N. 56°02'00" W.

Map Reference: Flows into Exploits River 30 miles (48.27 km) downstream from outlet of Red Indian Lake.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Drainage Area: 275 miles², (712.25 km²).

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

The main river is 15 linear miles, (24.13 km); feeder streams 40 linear miles, (64.36 km); standing water, 45 miles² (116.55 km²).

Channel Characteristics:

Main River: From mouth upstream to Joes Lake, river is wide and mainly slow moving. Fast water section located within one mile (1.61 km) of outlet of Joes Lake.

Bottom Types:

The bottom, generally rock and mud, however, in some areas bark deposits cover bottom to depth of 4' (1.21 m).

Rearing Area:

There are 1,432,800 sq.yd. (1,197,993.3 sq.m) of rearing area.

Barriers to Fish Migration:

Dam at outlet of Joes Lake periodically in use causing obstruction.

MARY ANN BROOK (Tributary of Exploits River)

Location: 49°00'45" N. 56°02'15" W.

Map Reference:

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Drainage area 70 miles², (181.30 km²).

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Stream length not including standing water 10 miles, (16.09 km);

Tributaries 22 miles, (35.39 km);

Intermittent streams 18 miles, (28.96 km).

Drop in elevation from Mary Ann Lake to mouth, 150' (45.72 m).

Channel Characteristics:

Main River: From mouth to mile 3 (4.82 km), stream meanders continually. Bottom is generally mud and sand with some short areas of gravel. From mile 3 (4.82 km) to mile 6 (9.64 km), velocity medium.

Bottom types:

Gravel and Rubble.

Depth range 6 to 12 inches, (0.15-0.30 m). Several rapid areas in this area. From mile 6, (9.65 km) to Mary Ann Lake (Aerial survey). Velocity; fast, bottom types, rubble, bedrock, boulder.

Spawning Areas:

On main river, not surveyed. Mary Ann Brook (tributary), 138 (100 yd² units) (91.44 m²), of good gravel, and 391 (100 yd² units) (91.44 m²) of medium condition gravel.

Rearing Area:

There are 448,700 yd² (375,167.2 m²) of rearing area.

Barriers to Fish Migration: Main River: Dam; exit Joes Lake, partial obstruction. (gates removed); has since been removed.

Dam, exit Rocky Lake, partial obstruction. (gates removed); has since been removed.

Dam, outlet Mary Ann Lake partial obstruction; has since been removed.

FISH POPULATIONS

Species Present: Brook trout, ouananiche.

No angling data available on this stream.

LITTLE RED INDIAN BROOK (Tributary of Exploits River)

Location: 48° 58' 25" N. 56° 02' 20" W.

This tributary drains in a NE direction into the Exploits near South end of Badger which is 30 miles (48.27 kilometers), downstream from outlet of Red Indian Lake.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Drainage Area: 50 sq. miles, (80.45 sq. kilometers).

CHARACTERISTICS OF STREAMS TO DRAINAGE BASIN

Main Stream Length: 12 linear miles, (19.30 kilometers); Tributaries 16 linear miles, (25.74 kilometers). Intermittent streams 9 linear miles, (14.48 kilometers).

Standing water 2 sq. miles, (5.18 sq. kilometers).

Channel Characteristics:

Main River: From Little Red Indian Pond to the mouth there is a drop in elevation of 220 feet, (67.05 meters), the descent being on the whole, gradual. There are several rapid areas. The river width varies from 60 feet to 20 feet, (18.30-6.09 meters). In the section from Little Red Indian Pond downstream to next pond - the flow is slow because of grass and bog interference, and this also causes muddy water in places.

Above Little Red Indian Pond: 10-15 ft., (3.04-4.57 meters), in width with 50% gravel. Riffle areas in lower section and slow moving water in upper section.

Tributary at 7.5 mile, (12.06 kilometers), from mouth contains 9 linear miles (14.48 kilometers), of stream, contributes 1/3 volume of stream at point of entry. From mouth upstream flow fast over rubble and boulder bottom. Above this, river is 10-20', (3.04-6.08 meters), wide and flows for short stretches between ponds and steadies.

Barriers to Fish Migration: Logging dams are the only obstructions

Dam #1 - 9.5 miles, (15.28 kilometers), upstream from mouth on outlet of 1st pond - Total obstruction.

Dam #2 - 10.3 miles, (16.57 kilometers), upstream from mouth at outlet of Cox's Lake - Partial obstruction.

Dam #3 - Outlet of Little Sand Lake, mile point 12, (19.30 kilometers), Total obstruction.

Dam #4 - 1.5 miles, (2.41 km) upstream from mouth of tributary - total obstruction.

Dam #5 - 2.5 miles, (4.02 km) upstream from mouth of tributary - partial obstruction believed.

Spawning Areas:

Mostly in upstream area - approximately 1/2 mile, (0.80 km) (between Red Indian Pond and Little Sandy Pond).

Tributaries have good bottom for spawning but during summer would have water level lowered, reducing available spawning gravel.

Considering both the stream and its tributaries, approximately 134.5 yd^2 (112.57 m^2) units are good spawning areas - 394.5 yd^2 , (330.19 m^2), are medium spawning areas, and $2,791. \text{ yd}^2$, ($2,336.06 \text{ m}^2$), of rearing area.

FISH POPULATIONS

Species Present: Eastern brook trout, ouananiche.

No angling data available on this stream.

NOEL PAUL BROOK (Tributary of Exploits River)

Location: 48° 49' 13" N. 56° 18' 35" W.

Flows into Exploits River fourteen miles (22.52 kilometers), downstream from outlet of Red Indian Lake.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 410 miles², (106.19 kilometers²). (Approx. one-tenth of the whole Exploits drainage system).

Vegetational Cover:

The soil is one of the most fertile on the Island of Newfoundland. Thick tree growth and tall grass cover the greater part of the surrounding country and extends down to the shoreline.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

The main river is 55 miles, (88.49 kilometers), long (including standing water) and feeding into it are 20 streams averaging 5 - 10 miles, (8.04 - 16.08 kilometers), long for a total of 120 tributary miles.

Main river:

From mouth to Lake Douglas; 3/4 distance upstream the river is wide and has a medium velocity flow. From Lake Douglas upstream, river is narrow with a somewhat fast velocity flow. Width range - 100 to 400 ft. - (est.), (30.48 - 122.0 meters).

Spawning Areas:

Main river below John Pauls Dam 1757 (100 sq. yd. units) (83.7 sq. meter units), of good condition gravel and 335 (100 sq. yd. units), (83.7 sq. meter units), of medium condition gravel.

Main river above John Pauls Dam 248 (100 sq. yd. units), (83.7 sq. meter units), of good condition gravel and 563 (100 sq. yd. units), (83.7 sq. meter units), of medium condition gravel.

Barriers to Fish Migration:

Main river:

Dam, at outlet of John Paul Steady height downstream side, 20 ft. (6.09 meters), length bank to bank 250 ft. (76.20 meters), number of gates 4. No obstruction when gates are opened. Dam was removed by attrition prior to 1974.

Falls (Pine Falls) mile 21, (33.78 km), the falls is a series of drops with an overall height of 30 feet, (9.14 m), and a length of 150 feet, (45.72 m). The highest drop is 5 feet, (1.52 m), considered passable to Atlantic salmon.

Dam, 5-1/2 miles, (8.84 km), upstream from Pine Falls. An abandoned dam is a state of disrepair, a partial obstruction.

Dam, at outlet of Haven Steady, presently passable, however, the pileup of debris at dam face could cause it to become a barrier to fish.

Dam, outlet of Lake Douglas, not presently in use, one gate is missing, no obstruction.

Falls, approximately 1/2 mile, (0.80 km), upstream from Lake Douglas. This is a series of falls and rapids with a length of 250 feet, (76.2 m). Lower fall - 10 feet, (3.04 m), high 70° angle.

2nd Fall - Island at centre forming 6 feet, (1.82 m), drop on right and 15 feet, (5.71 m), drop on left side.

Rapids, turbulent rapids and low falls, flowing through 121 feet (36.88 m), gorge.

3rd Fall - Sloping 15 feet, (5.71 m), high.

4th Fall - 12 feet, (3.64 m), high almost vertical, complete obstruction.

5th Fall - 150 feet, (45.72 m) above 4th Falls, 6 to 8 feet, (1.82 - 2.43 m), high, passable.

Dam, outlet Snowshoe Pond, a complete obstruction when gates closed.

Tributary

Tributary obstructions are almost wholly limited to unused logging dams, which are in a generally decaying condition.

Many prohibit free fish movement.

HARPOON BROOK (Tributary of Exploits River)

Location: 48°46'00" N. 56°32'55" W.

This tributary drains into the Exploits River 2.5 mile (4.02 km), downstream from the outlet of Red Indian Lake.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Drainage Area: 165 miles² (265.48 km²).

Other Topographical Information: Length of main river 30 miles (48.27 km); tributary length - 24 miles (38.61 km);

Intermittent streams - 12 miles (19.30 km); standing water 10 miles² (25.90 km²).

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

(a) Mouth - 5 mile steady (8.04 km), varies from 50-80' (15.24-24.38 m), in width and is approximately 6" (.15 m) in depth.

(These are not normal readings as dam gates were closed when readings made). A large portion of bottom is of bedrock and boulder constituency, although upstream rubble is present.

Along stream bottom in the 1/2 mile (0.80 km), before the dam, bark was present along with some pulpwood. Pulpwood also present near shore. This area is wider than the other and is about 4 ft. (1.21 m) in depth, with pools being limited.

(b) Mile 5 (8.04 km), Junction Harpoon Brook and East Brook Stream width varies from 20-70 ft. (6.09-21.33 m) in width, but averages about 30-50' (9.14-15.24 m). For first three miles (4.82 km) bottom contains gravel and small rubble, with the last two miles (3.21 km) having a predominance of rubble and boulder. This section has a faster flow. The first section has a good spawning potential with a depth ranging from 1/2" to 1 ft. (0.1-0.3 m). The latter section has several possible spawning areas, for salmon.

(c) Junction East Brook - Outlet Rogerson Lake. 9 miles (14.48 km) in length, with a width from 100-120 ft. (30.48-36.57 m), in the quiet sections, and a width of 25-50 ft. (7.62-15.24 m), in the medium-fast flowing areas. Water depths from 1/2-2 ft. (0.15-.60 m) with 3-4 ft. (.91-1.21 m), in some areas. First five miles (8.04 km), predominantly boulder composition in bottom. Some rubble areas

present, but on the whole, this section has little spawning and rearing area.

N.B. Throughout the brook, shade from overhanging trees provides good protection for the fish.

Spawning and Rearing Areas:

Estimated that 24 miles, (38.61 km) of stream would be suitable rearing areas, for a total of 5,280 (100 yd²), 83.7 m²), units) and 390 (100 yd² units) (83.7 m²), of suitable spawning area.

Barriers to Fish Migration:

Intensive logging activity has resulted in presence of logging dams.

- (1) Outlet of 5 mile, (8.04 km), steady - with gates closed - a total obstruction.
- (2) 12-13 miles, (19.30-22.52 km), upstream from mouth - an abandoned dam, filled with debris - total obstruction.
- (3) 19 miles, (30.57km), upstream - no barrier to fish.
- (4) Log dam - (Outlet Lake Ambrose on East Brook) with gates closed - a total obstruction.

Miscellaneous Information:

Industrial activity - extensive logging is carried out with many dams being operated. Manipulation of flow through the dam causes scouring of the bottom during log drives and very high temperature when the flow is reduced to a mere trickle.

NB. It is presumed that, prior to water control through the construction of the dams, the river originated at Hospital Pond, flowed into Wilding Lake, Rogerson Lake and down through Harpoon Brook.

RATTLING BROOK

Location: 49°04'18" N. 55°18'25" W. Norris Arm, Notre Dame Bay.

Map Reference: Botwood. 2 E/3 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 148.6 miles², (384.87 km²). Mean width, 6.7 miles, (10.78 km).

Perimeter, 67.5 miles, (108.60 km). Axial length, 19.5 miles, (31.37 km).

Maximum basin relief, 1,400 feet, (426.72 m).

Geology:

Predominantly intermediate intrusive rocks with the remainder consisting of acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams, not including standing water, is 30 miles, (48.27 km).

Barriers to Fish Migration: Main river: Hydro dam at a point 400 feet, (121.92 m) upstream; complete obstruction. Hydro dam located on two of the major lakes; complete obstruction.

NORRIS ARM BROOK

Location: 49°07'50" N. 55°11'03" W. Bottom of Norris Arm,
Bay of Exploits.

Map Reference: Botwood. 2 E/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 18.3 miles² (47.4 km²). Mean width 4.7 miles,
(7.6 km).

Perimeter 17.0 miles (27.4 km). Axial length 5.6 miles,
(.90 km).

Maximum basin relief, 400 feet, (1,312 m).

Geology:

Silurian sandstone, conglomerate, and acidic to mafic volcanic rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil

FISH POPULATIONS

Species Present: American smelt, brook trout.

No angling data available on this stream.

Gene Frequency: Not completed.

SOUTHWEST BROOK

Location: 49°13'00" N. 55°03'04" W. Burnt Bay, Notre Dame Bay.

Map Reference: Botwood. 2 E/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 16.9 miles², (43.77 km²). Mean width, 1.5 miles, (2.41 km).

Perimeter, 26.4 miles, (42.47 km). Axial length, 10.6 miles, (17.05 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology:

Predominantly Ordovician sedimentary with some intermediate intrusive rocks and a small amount of Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Several partial obstructions to headwaters.

FISH POPULATIONS

Species Present: Brook trout, small run of Atlantic salmon.

No angling data available on this stream.

INDIAN ARM BROOK (Campelton River)

Location: 48°16'45" N. 54°55'25" W. Bay of Exploits, Notre Dame Bay.

Map Reference: Comfort Cove. 2 E/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 114.1 miles², (295.51 km²). Mean width, 4.6 miles, (7.40 km).

Perimeter, 71.0 miles, (114.23 km). Axial length, 25.0 miles, (40.22 km).

Maximum basin relief, 1,250 feet, (381.00 m).

Geology:

About half intermediate intrusive rocks with the remainder consisting of Ordovician sedimentary, Ordovician volcanic and a small amount of acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Main River: Nil.

Photographs on file; Nos. 120

Stream Improvements for Fisheries Purposes:

On the main river and Nyles Brook (Tributary) 22 logging dams removed by Price (Nfld.) Ltd., under supervision of Fisheries Department personnel in 1966.

CAMPBELLTON RIVER

Location—

In Lewisport Bay, Notre Dame Bay, on the East Coast.

Season—

July and August.

General Remarks—

This river is 10 miles out the Bay and can be reached by coastal boat S.S.

“Clyde” in an hour, or by motor boat from Lewisport where boats can be hired.

This river offers good salmon (medium-sized) and sea-trout fishing.

Notes:

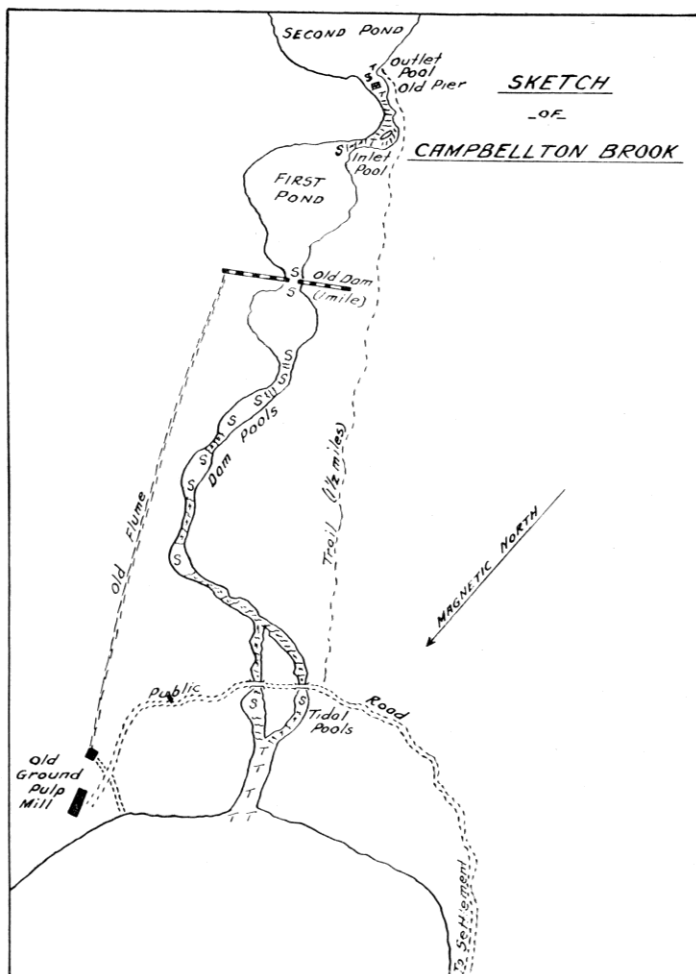
Now Indian Arm Brook.

2E/2

Pools:

Tidal Pools, Dam Pools, Inlet Pool, Outlet Pool





JUMPER BROOK

Location: 49°12'15" N. 54°44'38" W. Birchy Bay, Notre Dame Bay.

Map Reference: Comfort Cove. 2 E/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.6 miles², (45.58 km²). Mean width, 1.2 miles, (1.93 km).

Perimeter, 29.4 miles, (47.30 km). Axial length, 13.6 miles, (21.88 km).

Maximum basin relief, 350 feet, (106.68 m).

Geology:

Almost entirely Ordovician sedimentary with the remainder consisting of a small amount of acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

DOG BAY RIVER (Horwood River)

Location: 49°25'20" N. 54°34'10" W. Horwood Bay, Notre Dame Bay.

Map Reference: Comfort Cove. 2 E/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 140.7 miles², (364.41 km²). Mean width, 3.9 miles, (6.27 km).

Perimeter, 81.0 miles, (130.32 km). Axial length, 31.8 miles, (51.16 km).

Maximum basin relief, 400 feet, (121.92 m).

Geology:

Almost entirely Ordovician sedimentary with small amount of Ordovician volcanic and silurian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River: One small rapids at mile 10, (16.09 km). No problem to migrating fish at any water level.

Tributary #2, one small rapids; no problem to migrating fish at any water level.

DOG BAY RIVER

Location—

At the bottom of Dog Bay, Notre Dame Bay, on the East Coast.

Season—

July and August are the best months.

General Remarks—

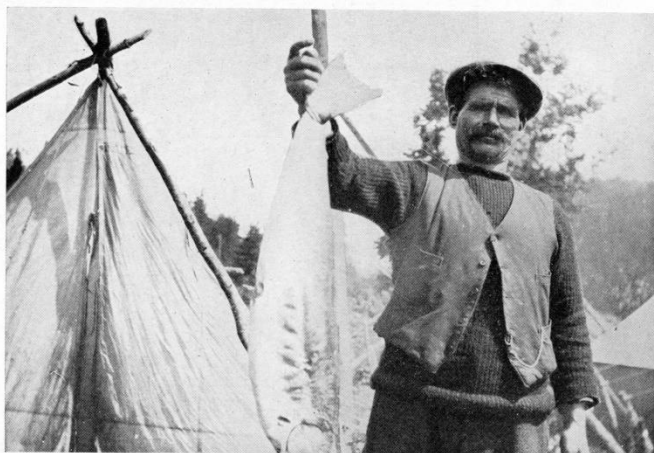
Numerous pools are located on this river as far as Punt Pond and good camping sites are numerous. The river offers good canoeing to head of pond. A nice run of medium-weight (10 lbs.) salmon frequent this river.

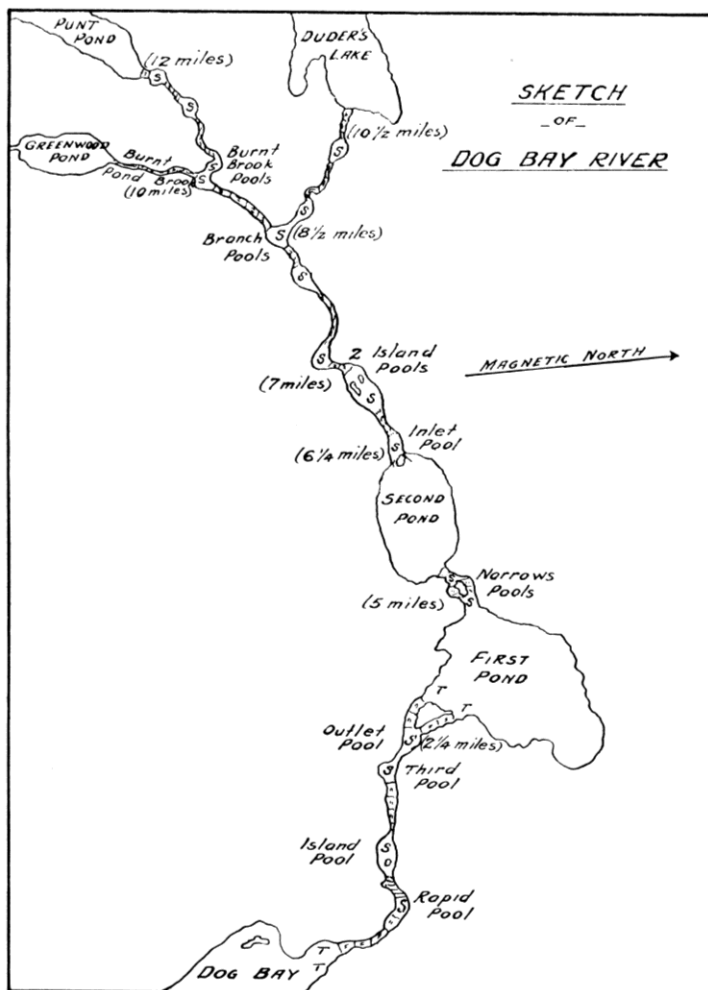
Notes:

Unnamed on 2E/7

Pools:

Rapid Pool, Island Pool, Third Pool, Outlet Pool, Narrows Pool, Inlet Pool, 2 Island Pool, Branch Pools, Burnt Brook Pools





SOUTHWEST BROOK

Location: 49°26'55" N. 54°33'30" W. Horwood Bay, Notre Dame Bay.

Map Reference: Comfort Cove. 2 E/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

FISH POPULATIONS

Species Present: Arctic char, brook trout (resident and sea run), sea run smelt.

No angling data available on this stream.

GANDER RIVER

Location: 49°15'00" N. 54°30'00" W. Gander Bay, Notre Dame Bay.

Map Reference: Carmanville. 2 E/8 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 2,470.2 miles², (6,397.81 km²). Mean width, 17.8 miles, (28.64 km).

Perimeter, 350.9 miles, (564.59 km). Axial length, 97.4 miles, (156.71 km).

Maximum basin relief, 1,400 feet, (426.72 m).

Geology:

About half Ordovician sedimentary with some acidic intrusive rocks and small amounts of Devonian sedimentary, ultrabasic intrusive rocks. Ordovician volcanic and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: Extends from Gander Lake to Gander Bay, 27 miles, (43.44 km).

No. of tributaries, 16.

North West Gander: Length 60 miles, (96.54 km), No. of tributaries, 36. The river mouth is wide and has several islands.

South West Gander: Length 48 miles, (77.23 km), No. of tributaries, 17. The river mouth is wide.

Both the Northwest and Southwest Gander flow into Gander Lake.

River flowing from South West Pond: 50 feet wide, (15.24 m).

Big Dead Wolf Brook: (one of the main tributaries of the South West Gander): 70 feet, (21.33 m) wide, at mouth and has a steady flow.

Boulder and gravel beds are abundant.

Caribou Brook: (Main tributary of Big Dead Wolf Brook):

Drains from Caribou Lake, 20 feet, (6.09 m) wide, at its upper end with some gravel bottom.

Big Carless Brook: (Tributary flowing into Gander Lake): Channel width, 15 feet, (4.57 m). Good gravel bottom mile 0 to mile 2 (3.21 km) beyond this boulders and bedrocks are common.

Salmon Brook: (Largest tributary on the main river): Lower section is mostly bedrock with a few gravel patches and large boulders. Upper section is Salmon Pond which leads into a large system of ponds and streams.

Joe Batt's Brook: (Tributary to the main river): Channel width 25 feet, (7.62 m) from mile 0 to mile 2 (3.21 km), upstream. Bottom types, mostly gravel.

Millers Brook (Tributary of the main river): Channel width 15-20 feet, (4.57-6.09 m). Bottom type, mostly gravel.

Note: Even flowing water, between banks heavily grown with alders.

Johnathans Brook (Tributary to the main river): The mile 0-1 of streams flows through a level marsh, then widens to 30 or 40 feet, (9.14-12.18 m), with many rapids, boulders and bedrocks.

Island Pond Brook: (Tributary to the main river): Channel width 30 feet, (9.14 m). Bottom type, shallow gravel riffles with much boulder and bedrock.

Weirs Brook (Tributary to the main river): Channel width, 50 feet, (15.24 m). Bottom type, many gravel patches.

Bellmans Brook: (Tributary to the main river): Channel width, 35 feet, (10.66 m). Bottom type, bedrock with many rapids.

Spawning Areas:

Main River: Mile 19 to mile 20, (30.57-32.18 km), and other smaller sections in various parts of the main river - approximate total 2.5 miles, (4.02 km).

North West Gander: Mouth area has good spawning ground.

Good spawning on many of the tributary streams.

South West Gander: Gravel beds mile 0-10, (16.09 km). River flowing from South West Pond: Good spawning and nursery area.

Big Dead Wolf Brook: Abundant gravel beds.
 Caribou Brook: Gravel bottom in upper regions.
 Big Carless Brook: Gravel bottom mile 0-2, (3.21 km).
 Salmon Brook: Few gravel patches.
 Joe Batt's Brook: Mostly gravel bottom.
 Millers Brook: Mostly gravel bottom.
 Island Pond Brook: Shallow gravel riffles in this area.
 Weirs Brook: Many gravel patches.

Barriers to Fish Migration:

No major obstructions on two main water courses; main river and North West Gander river.

Main Southwest Gander River: Falls at mile 13 (20.91 km), 10'-12' (3.05-3.66 m) high, sloping 50°-60°. There is a run around on the left bank with a drop of from 6'-8', (1.83-2.44 m). Partial obstruction.

T-5-Weirs Brook: Falls, 3'-4', (0.91-1.21 m) high, at mile 1 (1.61 km) partial obstruction. Culverts under the Gander Bay Road present a temporary holdup since installation in 1965. Some rock removal and a temporary wood baffle installed at end of one culvert in 1966. Situation deteriorated in 1967. This problem is currently under investigation by the Engineering section.

T-6-Island Pond Brook: Falls, 4 feet, (1.21 m) high, at mile 2 (3.21 km), partial obstruction. Falls, 10'-12', (3.04-3.65 m) high, at mile 4 (6.44 km). Culverts under the Gander Bay Road present a temporary holdup since installation in 1965. Wood shute built at end of culvert by Department of Highways in 1966. This problem is currently under investigation by the Engineering section.

T-9-Millers Brook: Falls, 6 feet, (1.82 m) high, at mile 2-3 (3.21-4.83 km), partial obstruction.

T-15-Salmon Brook: Falls, 12'-15', (3.65-4.57 m) high, at mile 1.5 (2.41 km). Fishway built around falls in 1955. Chain link fence erected around fishway in 1959. In 1971 trap installed and pool at falls blasted to obtain more attraction of water at fishway entrance.

Tributaries of Northwest Gander River:

T-1-Red Rock Brook: Falls, 30'-40', (9.15-12.2 m) high, at mile 3 (4.82 km), complete obstruction. Little, if any rearing area is available above.

T-6-Coopers Brook: Falls, 40' vertical (12.2 m), complete obstruction.

There is an insufficient amount of rearing area above to justify any further work here.

T-10-Great Gull River: A series of 3 falls approximately 100' (30.5 m) apart in a gorge at mile 1.5 (2.41 km) form a temporary holdup.

Falls #1 is 6' (1.82 m) high, 15' (4.58 m) long at 60° angle.

Removal of bedrock lip by blasting is required.

Falls #2 is 12' (3.76 m) high sloping 75° on flat bedrock on L.H.S.

This side is not passable. The right hand side consists of an 8' (2.44 m) vertical drop. This side is passable but difficult at medium and high water levels. Improvements should consists of deepening the pool below and removing rock outcrop from the base of the falls.

Falls #3 is 7' (2.13 m) high, 15' (4.58 m) long at 45°. There is a run-around on left bank which requires rock clearing.

Falls, 4' (1.22 m) high, 10' (3.05 m) long at mile 12 (19.3 km) presents no problem at any water level.

T-16-Miguels Brook: Several old logging dams completely halt fish movement. These dams are in extremely poor condition and have not been used for several years.

Tributaries of Southwest Gander River:

T-4-Dead Wolf Brook

Obstruction number	Type of obstruction	Distance from the mouth	Description	Degree of obstruction
1	Falls	2.0 mi (3.21 km).	9' (2.8 m) high 15' (4.6 m) long	Passable only at high water
2	Falls	2.0 mi (3.21 km).	5' (1.5 m) high 8' (2.4 m) long at 70°	Passable all levels
3	Falls	2.0 mi (3.21 km)	8' (2.4 m) vertical	Passable medium and high water levels
4	Falls	2.1 mi (3.4 km)	5' (1.5 m) high at 75°	Holdup low water
5	Falls	2.2 mi (3.5 km)	20'(6.1 m) high 50'(15.3 m)long bedrock shute 50°-60° slope	Complete all water levels

GANDER RIVER

Location—

On the East Coast, flows into Gander Bay, Notre Dame Bay.

Season—

From 15th July till close of season 15th September.

General Remarks—

From Glenwood down the river to the sea, a distance of 25 miles, offers an excellent canoe and fishing trip.

There are four narrow ponds or steadies on the Main River. The salmon pools are numerous and good camping sites readily found. *Salmon Brook* flows into the Main River near Glenwood. This brook also contains some good pools. River boats or canoes are essential. *North West River* and *South West River* flow into Gander Lake about 10 miles from Glenwood and during the latter part of the season offer excellent fishing.

A large and heavy run of fish frequent this river. Any fish over 30 lbs. in weight have been caught.

Tributaries:

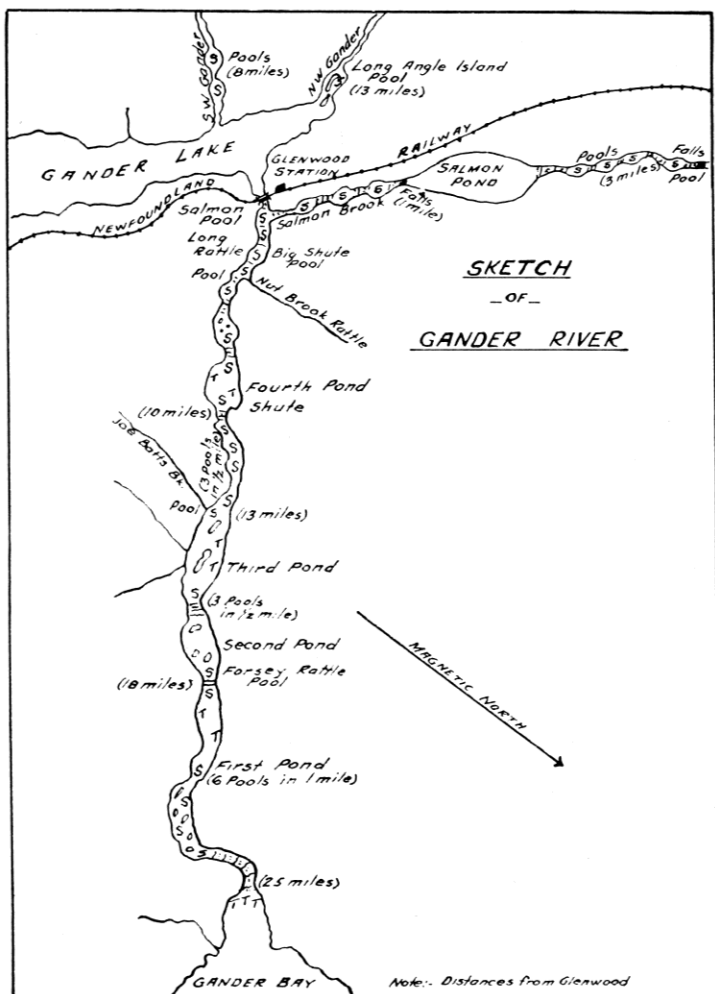
Bellman's Brook	2E/2
Weir's Brook	2E/2
Island Pond Brook	2E/2
Joe Batts Brook	2E/2
Millers Brook	2E/2
Jonathan's Brook	2E/1
Salmon River	2E/2

Notes:

"The Gander River rises in the Partridgeberry Hills" refers to Northwest Gander River. It and Southwest Gander River are the main feeders of Gander Lake

Pools:

Forsey Rattle Pool, Long Rattle Pool, Big Shute Pool, Salmon Pool, Long Angle Island Pool, Falls on Salmon Brook Pool



BARRY'S BROOK

Location: 49° 16' 10" N. 54° 29' 20" W. Gander Bay,
Notre Dame Bay.

Map Reference: Carmanville. 2 E/8 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 28.5 miles², (73.81 kilometers²). Mean width, 2.5 miles,
(4.02 kilometers).

Perimeter, 30.1 miles, (48.43 kilometers). Axial length, 9.1 miles,
(14.64 kilometers).

Maximum basin relief, 350 feet, (106.68 meters).

Geology:

Almost entirely Ordovician sedimentary, the remainder consisting
of small amounts of Ordovician volcanic, ultra basic intrusive
rocks and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river:

From mouth to mile point 1.5, (2.41 kilometers).

Bottom type: Mainly bedrock. Velocity: Swift.

Upstream from mile point 1.5, (2.41 kilometers).

Channel width: 25 - 30 ft., (7.62-9.14 meters) Bottom type: Mostly gravel.

Velocities: slow:

Spawning Areas:

Gravel bottom in the upper regions of the river.

Barriers to Fish Migration:

Obstructions, main stem of Barry's Brook.

Obstruction number	Type of obstruction	Location from mouth	Description	Degree of obstruction
1	Falls	1500' (457.5 m)	7' (2.1 m) high 20' (6.1 m) long at 45° angle.	Holdup at low water
2	Falls	2000' (610 m)	12' (3.7 m) high 24.92' (7.6 m) long, 45° angle.	Serious hold-up at low water.
3	Falls	2400' (732 m)	10' (3.1 m) high 60' (18.3 m) long 30° angle overall	Complete at very high and very low levels. Passable with difficulty.
4	Falls	1.0 miles (1.60 km)	8' (2.4 m) in 2 drops; 3' and 5' (.9-1.5 m) 40' (12.2 m) long overall.	No serious holdup at any water level.
5	Falls	6.0 miles (9.65 km)	17' (5.2 m) vertical.	Complete obstruction all water levels.

In 1971, channeling and general clearing of the stream was done from mouth to, and including obstruction no. 3. This now presents no holdup problem at any water level. Five dams built by lumber company during the early 1950's were removed by Department personnel in 1966.

RAGGED HARBOUR RIVER

Location: 49°25'35" N. 54°02'50" W. Ragged Harbour, Notre Dame Bay.

Map Reference: Carmanville. 2 E/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 169.7 miles², (439.52 km²). Mean width, 6.9 miles, (11.10 km).

Perimeter, 67.1 miles, (107.96 km). Axial length, 22.4 miles, (36.04 km).

Maximum basin relief,

Geology:

Almost entirely Ordovician with small amounts of Ordovician volcanic, ultrabasic intrusive rocks and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River: Falls at mile 0.5 (0.80 km), 10' (3.04 m) high (sloping) passable.

1969, wooden barrier and diversion dam constructed at falls.

Falls, location unavailable, 4' (1.22 m) high, passable.

Falls, location unavailable, 8' (2.42 m) high, passable.

Salmon holdup at obstruction during periods of low water.

RAGGED HARBOUR BROOK

Location—

In Ragged Harbour on the East Coast.

Season—

July and August are the best months.

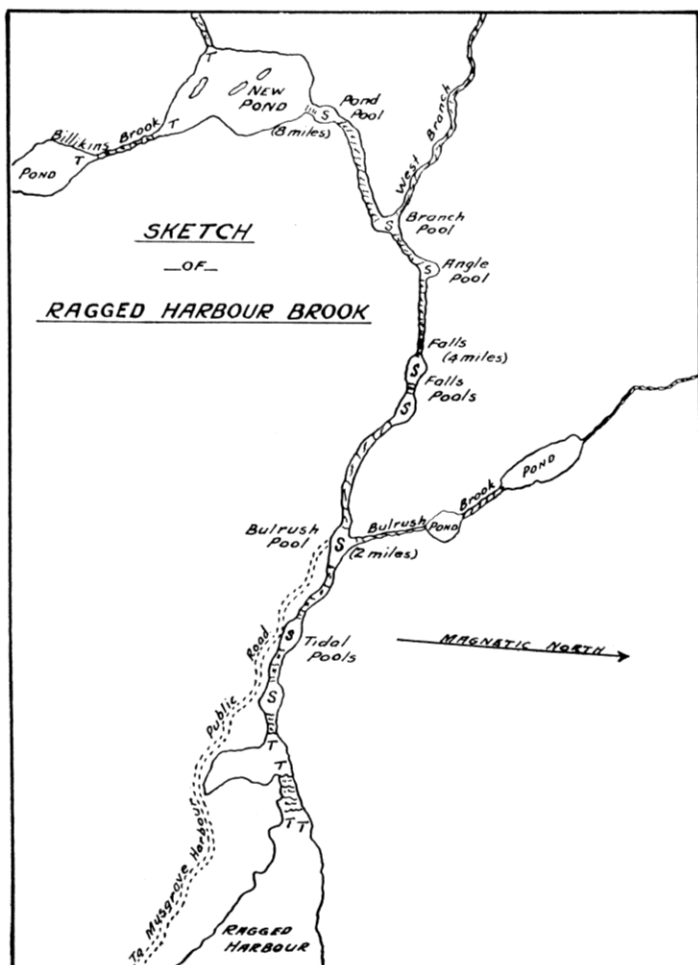
General Remarks—

This river has some fine pools over a distance of about 8 miles to New Pond. A fine run of medium-weight (10 lbs.) salmon and trout frequent this river.

Pools:

Tidal Pools, Bulrush Pool, Falls Pools, Angle Pool, Branch Pool, Pond Pool





DEADMAN'S BROOK (Deadman's Bay River)

Location: 49°20'22" N. 53°42'30" W. Deadman's Bay.

Map Reference: Musgrave Harbour. 2 F/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 128.6 miles², (333.07 km²). Mean width, 6.2 miles (9.97 km).

Perimeter, 56.8 miles, (91.39 km). Axial length, 20.2 miles, (32.50 km).

Maximum basin relief, 528 feet, (160.93 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migrations:

No obstructions on this system except low water conditions near the mouth during dry seasons.

At mile 0.5 (.80 km) there is a section of rapids; 6' (1.82 m) over a length of 30'-40' (9.14-12.19 m); consists of large boulders closely packed together. Obstruction only at low water levels.

Miscellaneous Information:

Topographic map shows this stream draining from the same region as Anchor Brook (E-09-894). Anchor Brook enters the sea 6.5 miles (10.45 km), west of Deadman's Brook.

DEADMAN'S BAY BROOK

Location—

In Deadman's Bay on the East Coast.

Season—

July and August are good months.

General Remarks—

From the sea to Deadman's Pond there are some fine pools, those in the first 2 miles being noted for their good fishing. A fine run of medium fish frequent this brook.

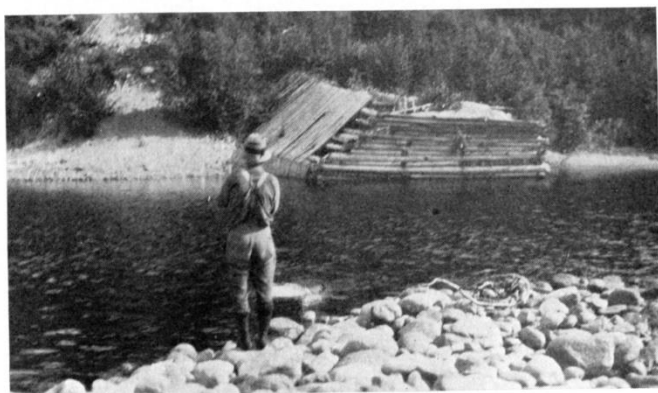
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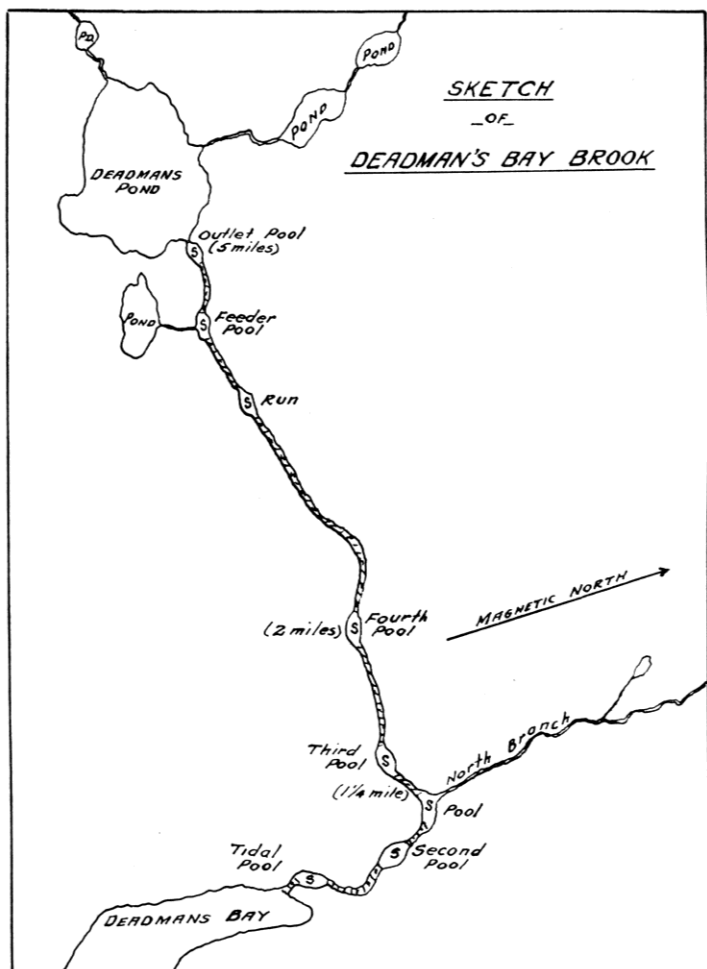
Now Deadman's Brook.

Part of the Anchor Brook-Deadman's Brook drainage system.

Pools:

Tidal Pool, Second Pool, Third Pool, Fourth Pool, Feeder Pool, Outlet Pool





WINDMILL BROOK

Location: 49°16'50" N. 53°33'58" W.

Map Reference: Musgrave Harbour. 2 F/5 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.5 miles², (11.65 km²). Mean width, 1.4 miles, (2.25 km).

Perimeter, 9.1 miles, (14.64 km). Axial length, 2.7 miles, (4.34 km).

Maximum basin relief, 150 feet, (45.72 m).

Geology.

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Nil, except for several minor partial obstructions near headwaters.

SOUTH WEST ARM VALLEYFIELD

Location: 49°06'03" N. 53°41'48" W. Bonavista Bay.

Map Reference: Wesleyville. 2 F/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 38.0 miles², (98.42 km²). Mean width, 4.8 miles, (7.72 km).

Perimeter, 31.2 miles, (50.20 km). Axial length, 8.2 miles, (13.19 km).

Maximum basin relief, 734 feet, (223.72 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Nil

INDIAN BAY BROOK

Location: 49°02'20" N. 53°52'45" W. Indian Bay, Bonavista Bay.

Map Reference: Wesleyville. 2 F/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 271.3 miles², (702.66 km²). Mean width, 6.4 miles (10.29 km).

Perimeter, 95.2 miles (153.17 km). Axial length, 24.4 miles (39.25 km).

Maximum basin relief, 571 feet (174.04 m).

Geology:

Predominantly Ordovician sedimentary with small amounts of acidic intrusive rocks and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Area:

Upper and Lower end of Wings Brook to Little Wings Brook.

Barriers to Fish Migration:

Main River:

Falls at mile 8.5 (13.67 km); forms holdup at extreme low water.

Lower portion has a total drop of 9' (2.74 m) over a length of 12' (3.65 m) at 70° angle. A low spot in the centre of this drop approximately 15' long (4.57 m) at 30°. Total width of the falls is about 80' (24.38 m). Approximately 50' (15.24 m) above this obstruction there is a smaller falls separated by an island in the centre. The left side has a height of 2.5' (0.76 m) and the right side has a drop of 4' (1.21 m). Logging activity in this area terminated. Dam at mile 4.5 (7.24 km) removed, no obstruction to salmon. Dam at mile 9 (14.48 km) has gates removed. No obstruction to salmon.

INDIAN BAY BROOK

Location—

At the bottom of Indian Bay, Bonavista Bay, on the East Coast.

Season—

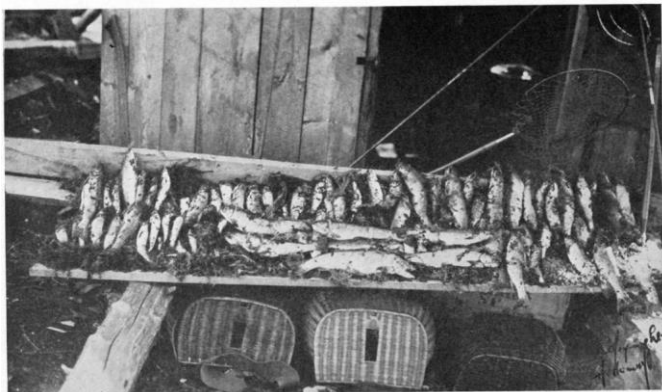
July and August are the best months.

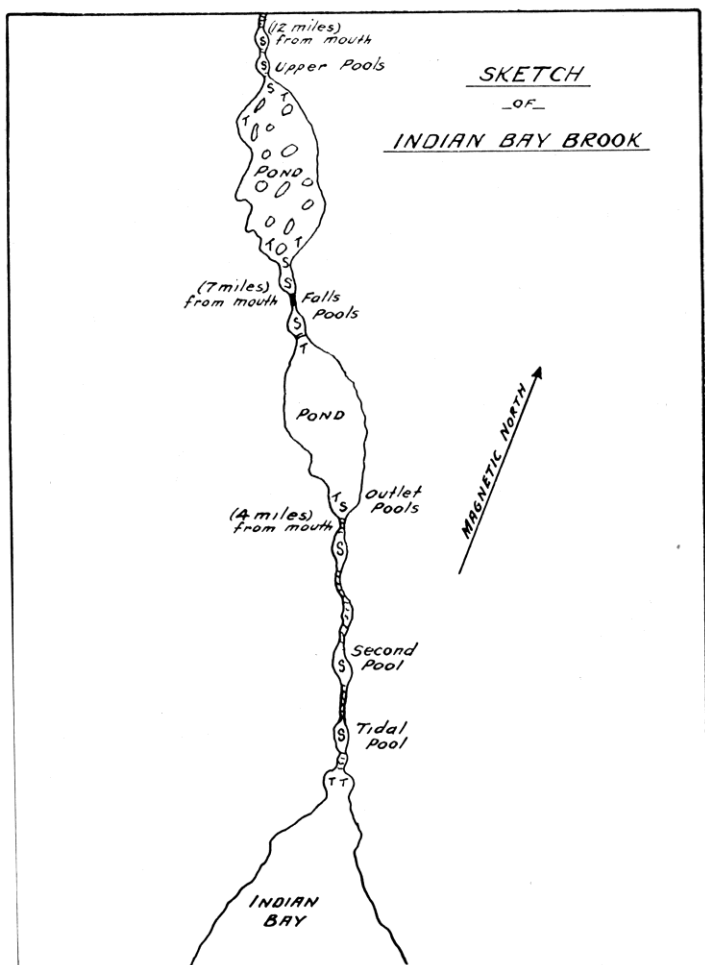
General Remarks—

A nice river and the pools are readily accessible by canoe. A large run of medium-weight salmon (10 lbs.) and sea trout frequent this river.

Pools:

Tidal Pool, Second Pool, Outlet Pools, Falls Pools, Upper Pools





TRAVERSE BROOK

Location: 48°50' N. 54°04'56" W. Freshwater Bay, Bonavista Bay.

Map Reference: Gambo. 2 D/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 156.0 miles², (404.04 km²). Mean width, 5.4 miles, (8.68 km).

Perimeter, 77.2 miles, (124.2 km). Axial length, 24.3 miles, (39.09 km).

Maximum basin relief, 469 feet, (142.95 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of about equal amounts of gneiss and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

No natural obstructions.

Stream Improvements for Fisheries purposes:

On this river system, in 1966, 13 logging dams were removed by Bowater's Pulp and Paper Ltd. under supervision of Fisheries Department personnel. Another dam was removed in 1967. All dams have now been removed from this river system.

MIDDLE BROOK

Location: 48° 48' 25" N. 54° 12' 30" W. Freshwater Bay, Bonavista Bay.

Map Reference: Gambo. 2 D/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 106.4 miles² (275.57 kilometers²). Mean width, 3.7 miles, (5.95 kilometers).

Perimeter, 65.5 miles, (105.38 kilometers). Axial length, 26.0 miles, (41.83 kilometers).

Maximum basin relief, 850 feet, (261.25 meters).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of gneissis.

Vegetational Cover:

Well forested with black spruce, areas of birch where the spruce has been cut over. Bog areas occur along the whole drainage basin.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams, not including standing water, equals 15 miles.

Bottom types:

Section: Butt's Pond: Rubble, gravel, sand, mud and muck.

Spawning areas:

- (1) Between Square Pond and 1st Burnt Pond, mile points 10 - 11.5 (16.09 - 18.50 kilometers);
- (2) between 1st Burnt Pond and 2nd Burnt Pond, mile points 15 to 20, (24.13 to 32.18 kilometers).

Barriers to Fish Migrations:

Falls at mile point 1.5 (2.41 kilometers), on main river;

Fishway built along side of falls in 1954. Fishway fenced in 1958.

Twelve foot (3.64 meters) section of abandoned dam blasted out, 200 yds. (182.8 meters) upstream from Butts Pond; poses no problem to salmon at any water levels - 1957. Dam constructed at falls below fishway to divert water from runarounds, blasted at falls and at outlet of pools below falls in 1971. In 1972 a small amount of ledgerock blasted in front of falls.

MIDDLE BROOK

Location—

In Freshwater Bay, Bonavista Bay, on the East Coast.

Season—

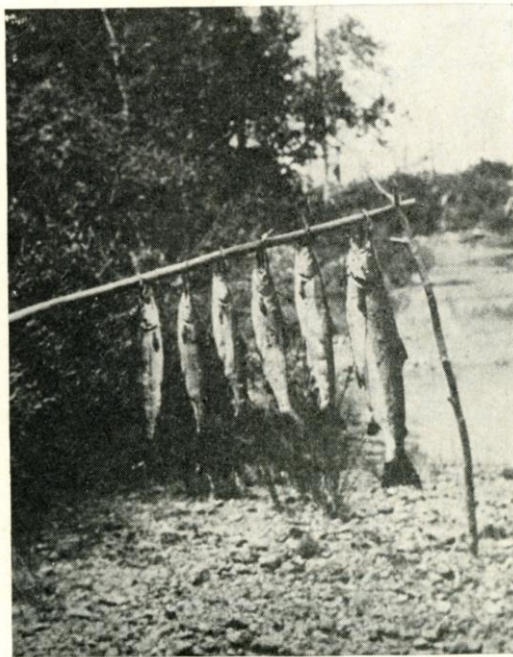
July and August are the best months.

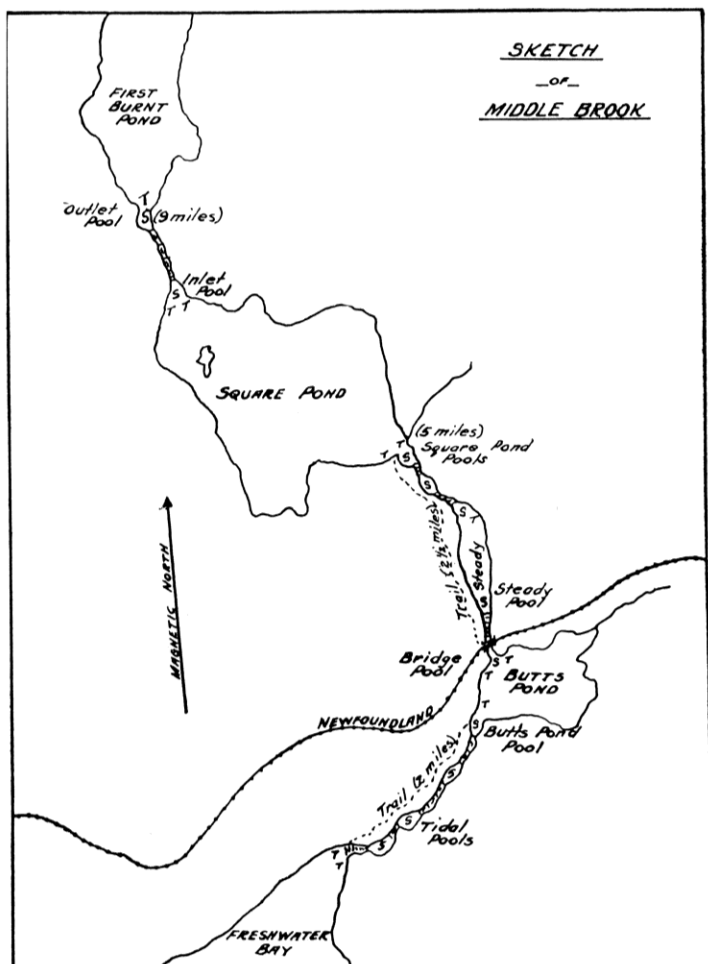
General Remarks—

This river contains some fine salmon pools which are accessible by trails. A heavy run of medium salmon and sea trout frequent the river, and being only 4 miles from Gambo can be fished daily out of there.

Pools:

Tidal Pools, Butts Pond Pool, Bridge Pool, Steady Pool, Square Pond Pools, Inlet Pool, Outlet Pool





GAMBO RIVER

Location: $48^{\circ} 45' 50''$ N. $54^{\circ} 13' 30''$ W. Gambo, Bonavista Bay.

Map Reference: Gambo. 2 D/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 444.8 miles², (1152.03 kilometers²). Mean width, 9.0 miles, (14.4 kilometers).

Perimeter, 129.6 miles, (208.52 kilometers). Axial length, 40.0 miles, (64.36 kilometers).

Maximum basin relief, 1,100 feet, (335.28 meters).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of Ordovician sedimentary and a small amount of gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river:

This is that part of the system from the outlet of Gambo Pond north to the sea. Total distance, 1 mile (1.60 kilometers). Width range, 50 to 150 yds., (45.72 to 137.16 meters). Bottom type, mostly boulder.

Gambo Pond North:

Max. width, 0.6 miles, (0.96 kilometers). Mean width, 0.4 miles, (0.64 kilometers). Max. length, 9.2 miles, (14.80 kilometers).

Mean length, 6.5 miles, (10.45 kilometers). Max. depth, 46 ft. (14.02 meters). Mean depth, 21.5 ft., (6.55 meters).

Area, 5.0 miles², (12.9 kilometers²). Bottom type, mud.

Shoreline; boulder, rock and rubble.

Gambo Pond South:

Max. width, 1.0 miles, (1.60 kilometers). Mean width, 0.6 miles, (0.96 kilometers). Max. length, 8.0 miles, (12.87 kilometers).

Max. length, 4.7 miles, (7.56 kilometers). Max. depth, 140 ft. (42.67 meters). Mean depth, 65.4 ft., (19.9 meters).

Area, 6.0 miles², (15.54 kilometers²). Bottom type, gravel and rock.

Shoreline, boulder and rubble.

Spawning areas:

Main River:

Gravel beds located 200 yds. (182.88 m), upstream from mouth.

Gravel beds located downstream from outlet of Gambo Pond South.

"The Narrows" (Narrow channel separating Gambo Pond South from Gambo Pond North): Good gravel beds. Salmon observed spawning in this area in 1961

Triton Brook (Tributary flowing into Gambo Pond South):

It has been estimated by Departmental personnel in this area that 60% of the salmon and sea trout entering Gambo River travel up this tributary to spawn. Good pools and spawning areas from the road junction to the mouth of Triton Brook. Very little spawning area on Upper Triton Brook.

Mint Brook (Tributary flowing into Gambo Pond North):

It has been estimated that 40% of the total run of salmon and sea trout spawn in this brook.

Salmon have been reported in Parson's Brook (Tributary of Gambo Pond North). Spawning is suspected to occur here.

Barriers to Fish Migration:

Main River: No obstructions.

Riverhead Brook (Tributary flowing into Gambo Pond South): Falls at mile 2.5, (4.02 km) complete obstruction.

North West Branch of Triton Brook: Falls at mouth; complete obstruction.

Blood Brook (Tributary of Triton Brook): Falls near mouth, complete obstruction.

Dam: Upper Triton Brook. Two holes cut in dam to allow access to fish.

North Pond Dam Fishway rebuilt in 1962, now presents no problem to migrating fish.

Parson's Brook: Series of falls 0.5 to 1.0 miles upstream, serious partial obstruction.

GAMBO RIVER

Location—

In the bottom of Freshwater Bay, Bonavista Bay, on the East Coast.

Season—

July and August are good months.

General Remarks—

This is a fine large river and fishing can be undertaken with ease as all the pools can be reached by boat from Gambo. A large and heavy run of salmon frequent this river. There is also good sea-trout fishing. Salmon up to 30 lbs. in weight have been caught. Boats or canoes are essential.

Gambo being at the river's mouth, and the lower pools being accessible by boat, the angler can stay at Gambo and fish the river daily.

Tributaries:

Mint Brook

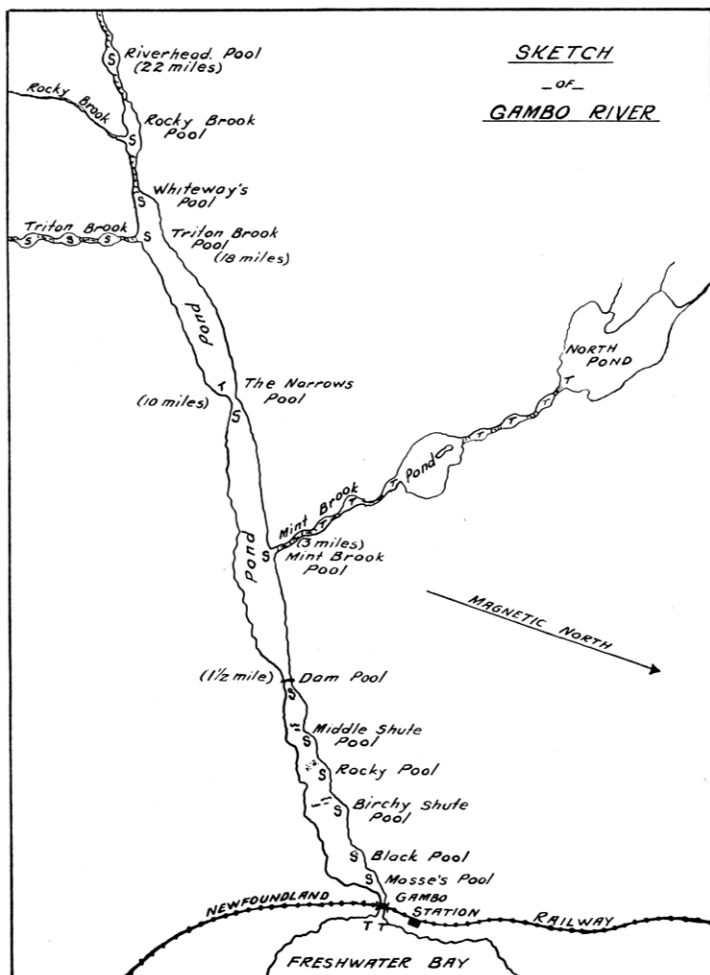
Notes:

Now Gambo Brook.

Flows from Gambo Pond to the sea. 2D/9

Pools:

Mosse's Pool, Black Pool, Birchy Shute Pool, Rocky Pool, Middle Shute Pool, Dam Pool, Mint Brook Pool, The Narrows Pool, Triton Brook Pool, Whiteway's Pool, Rocky Brook Pool, Riverhead Pool



NORTHWEST BROOK

Location: 48°44'30" N. 54°03'10" W. Alexander Bay,
Bonavista Bay.

Map Reference: Glovertown. 2 D/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 37.5 miles², (97.12 km²). Mean width, 3.1 miles,
(4.98 km).

Perimeter, 32.7 miles, (52.61 km). Axial length, 11.5 miles,
(18.50 km).

Maximum basin relief, 600 feet, (182.88 m).

Geology:

Almost entirely acidic intrusive rocks with a small amount of
Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil

TERRA NOVA RIVER

Location: 48° 40' 15" N. 50° 00' 20" W. Alexander Bay,
Bonavista Bay.

Map Reference: Glovertown. 2 D/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 727.1 miles², (1883.18 kilometers²). Mean width, 9.9 miles, (15.92 kilometers).

Perimeter, 198.5 miles, (319.38 kilometers). Axial length 65.5 miles, (105.38 kilometers).

Maximum basin relief, 1,234 feet, (376.12 meters).

Geology:

About half Ordovician sedimentary, the remainder consisting of acidic intrusive rocks and smaller amounts of gneiss, Precambrian volcanic and Ordovician sedimentary.

Vegetational Cover:

Forest, with the exception of its extreme headwaters. Most of the area has been cut over for pulpwood.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

The length of all streams not including standing water is 150 miles, (241.35 kilometers).

Main River: Below Terra Nova Lake has sections of fast velocity over bedrock and very slow velocity in the area of steadies.

Tributaries:

Pinsent's Brook; Velocity, fast to medium. Shallow depths.

Dewey's Brook: The mouth and shoreline of the brook is marshy and heavily sedimented. Water depth, 6 to 8 in., (.15 - .20 meters), becoming shallower upstream.

Maccles Brook: This is the largest brook flowing into the Terra Nova River. It arises from Maccles Lake and flows into the river about 4 miles, (6.43 kilometers), above the sea. The mouth of Maccles Brook is wide and shallow. Farther upstream the brook narrows to about 50 feet, (15.24 meters), and flows fast and clear with a depth up to 2 feet,

(0.60 m), in many areas. The bottom consists of large numbers of boulders with very little sediment. Large numbers of salmon parr are there. Land-locked salmon up to 3 pounds have been reported in Maccles Lake.

Spar Brook: This brook is about 10 to 15 feet, (3.04 to 4.57 m), wide and its deepest place 12 to 15 inches, (.30 to .38 m). This brook is slow moving. The bottom sedimented. There are some trout in this brook.

Spawning Areas:

Between Lake St. John and Kepenkeck Lake and on Pinsents Brook.

From Pinsents downstream to Terra Nova Lake.

Barriers to Fish Migration:

Falls at mile 5 and 14, (8.04 - 22.52 km), on the main river.

Fishway built around falls at mile 5 (8.04 km) in 1954 and mile 14 (22.52 km) in 1952. Dam built at top of falls at mile 5 (8.04 km) to raise pool and put more water through fishway at low water in 1959.

Three pools added to upper fishway at mile 14 (22.52 km) in 1961. Falls, 21 fet. (6.40 m) high, on the main river 10 miles (16.1 km) above west end of Terra Nova Lake, accessibility questionable, Mollyguajeck falls.

Maccles Brook, construction of a wooden diversion dam and cleaning out of a natural run around, 1.5 miles (2.4 km) from mouth, completed in 1953. There are no logging dams remaining on this river or tributaries which constitute an obstruction to salmon. Any remaining dams are above complete natural obstructions and all gates are open.

George's Brook, Butt's Brook, Pinsents Brook - no obstructions.

TERRA NOVA RIVER

Location—

On the East Coast, this river flows into the middle arm of Alexander Bay, Bonavista Bay.

Season—

July and August are the best months.

General Remarks—

This is one of the large rivers of the Island and good fishing can be had from its mouth to the falls, a distance of 7 miles. Sea trout can also be caught. Camping sites are numerous. The run of salmon is large, fish up to 30 lbs. in weight having been caught

Tributaries:

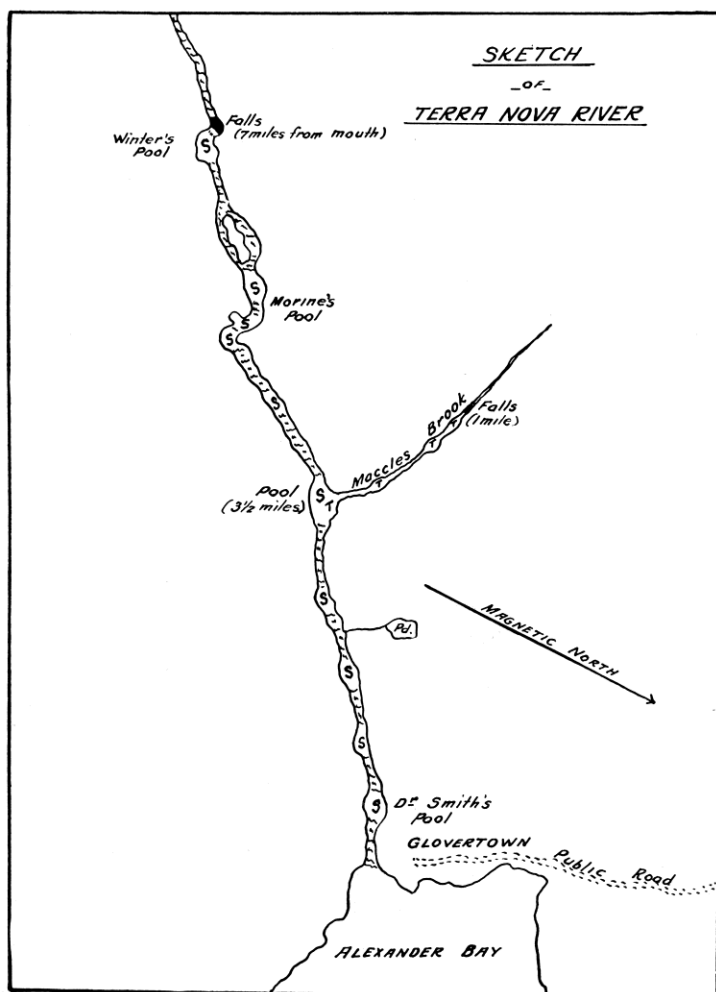
Maccles Brook

2D/9

Pools:

Dr. Smith's Pool, Marine's Pool, Winter's Pool, 8 unnamed pools





Location: 48°33'45" N. 53°52'50" W. Newmans Sound, Bonavista Bay.

Map Reference: Eastport. 2 C/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.2 miles², (19.06 km²). Mean width, 1.1 miles, (1.76 km).

Perimeter, 10.6 miles, (17.05 km). Axial length, 3.4 miles, (5.47 km).

Maximum basin relief, 400 feet, (121.92 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BIG BROOK

Location: 48°32'15" N. 53°38'20" W. Newmans Sound, Bonavista Bay.

Map Reference: Eastport. 2 C/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.2 miles², (60.08 km²). Mean width, 2.5 miles, (4.02 km).

Perimeter, 20.9 miles, (33.62 km). Axial length, 8.2 miles, (13.19 km).

Maximum basin relief, 709 feet, (216.10 m).

Geology:

Predominantly Precambrian volcanic with the remainder consisting of Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Nil.

BREAD COVE BROOK

Location: 48°28'55" N. 53°55'30" W. Clode Sound, Bonavista Bay.

Map Reference: Sweet Bay. 2 C/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 28.4 miles², (73.55 km²). Mean width, 2.0 miles, (3.21 km).

Perimeter, 31.6 miles, (50.84 km). Axial length, 10.7 miles, (17.21 km).

Maximum basin relief, 1,050 feet, (320.04 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTHWEST RIVER

Location: 48°23'30" No. 54°11'45" W. Port Blandford, Bonavista Bay.

Map Reference: Port Blandford. 2 D/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 266.1 miles², (689.19 km²). Mean width, 5.8 miles, (9.33 km).

Perimeter, 118.5 miles, (190.66 km). Axial length, 37.3 miles, (60.01 km).

Maximum basin relief, 950 feet, (289.66 m).

Geology.

Predominantly acidic intrusive rocks with the remainder consisting of gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

In 1948, channel blasted around falls at mile 2 (3.21 km), on the main river. In 1956, channel improved by widening and deepening. Improvements considered effective. Several small rapids near the mouth do not present problems for migrating fish at any water level. In 1972 diversion dams at previously blasted fish passage repaired.

NORTH WEST, SOUTH WEST AND SALMON RIVERS, PORT BLANDFORD

Location—

These three rivers are located at the bottom of Clode Sound, Bonavista Bay.

Season—

July and August are good months.

General Remarks—

A sportsman fishing here has 3 rivers, all readily accessible from the railway. Each river offers good salmon and sea-trout fishing over a distance of approximately 5 miles from their respective mouths and can be fished daily from Port Blandford. A fine run of medium-sized (10 lbs.) salmon frequent these rivers.

Notes:

Now Salmon Brook

Pools:

North West River

Tidal Pool, Bridge Pools, Fourth Pool, Fifth Pool

Pools:

South West River

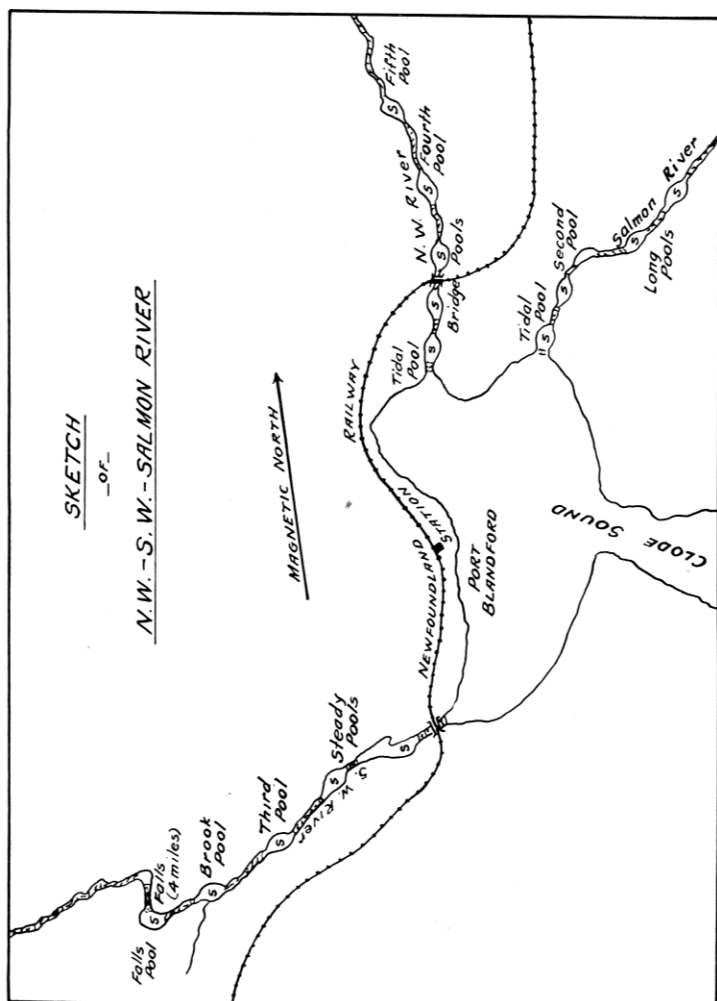
Steady Pools, Third Pool, Brook Pool



SKETCH

OF

N.W.-S.W.-SALMON RIVER



SALMON BROOK

Location: 48°23'15" N. 54°11'55" W. Clode Sound,
Bonavista Bay.

Map Reference: Port Blandford. 2 D/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 42.5 miles², (110.07 km²). Mean width, 3.2 miles,
(5.14 km).

Perimeter, 34.4 miles, (55.34 km). Axial length, 13.4 miles,
(21.56 km).

Maximum basin relief, 750 feet, (228.60 meters).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting
of Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

In 1972, boulders in and at bottom of falls just above highway
bridge blasted. Old dam at first steady that had become blocked
with debris and logs opened up.

NORTH WEST, SOUTH WEST AND SALMON RIVERS, PORT BLANDFORD

Location—

These three rivers are located at the bottom of Clode Sound, Bonavista Bay.

Season—

July and August are good months.

General Remarks—

A sportsman fishing here has 3 rivers, all readily accessible from the railway. Each river offers good salmon and sea-trout fishing over a distance of approximately 5 miles from their respective mouths and can be fished daily from Port Blandford. A fine run of medium-sized (10 lbs.) salmon frequent these rivers.

Notes:

Now Salmon Brook

Pools:

North West River

Tidal Pool, Bridge Pools, Fourth Pool, Fifth Pool

Pools:

South West River

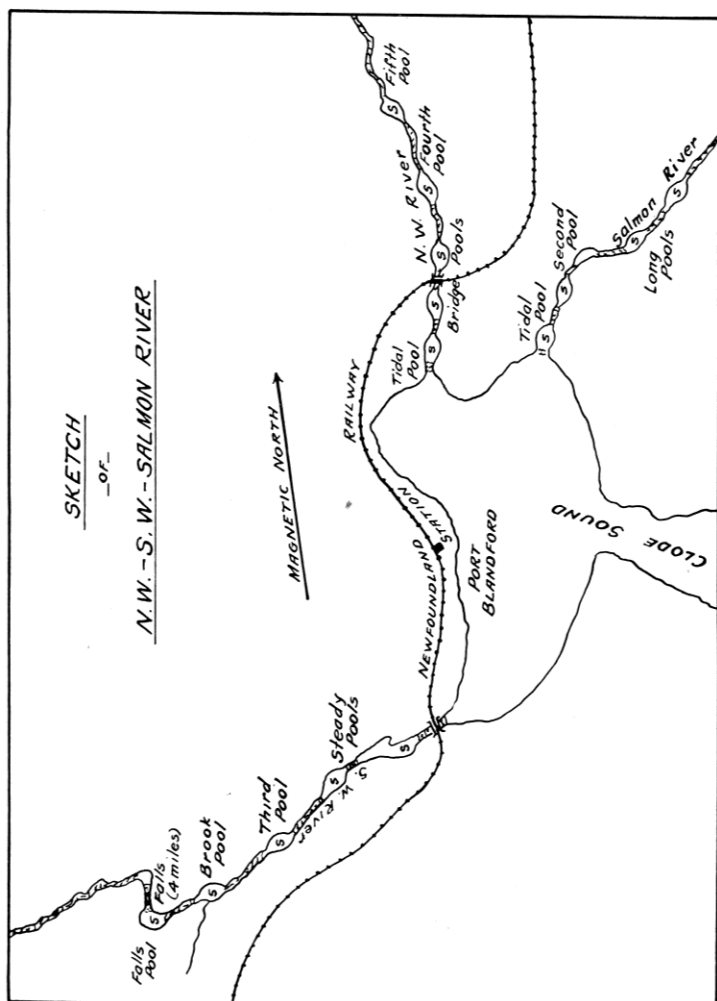
Steady Pools, Third Pool, Brook Pool



SKETCH

OF

N.W.-S.W.-SALMON RIVER



MIDDLE BROOK

Location: 48°21'25" N. 54°09'50" W. Clode Sound, Bonavista Bay.

Map Reference: Port Blandford. 2 D/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 24.3 miles², (62.93 km²). Mean width, 2.2 miles, (3.53 km).

Perimeter, 28.7 miles, (46.17 km). Axial length, 11.3 miles, (18.18 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Almost entirely Precambrian volcanic with small amounts of Precambrian sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

No major obstructions.

FISH POPULATIONS

Species Present: Brook trout.



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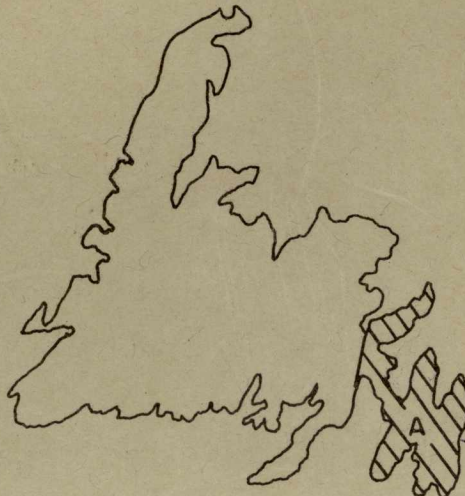
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CATALOGUE OF RIVERS IN
INSULAR NEWFOUNDLAND

by

T.R. Porter, L.G. Riche and G.R. Traverse

RESOURCE DEVELOPMENT BRANCH
FISHERIES & MARINE SERVICE
DEPARTMENT OF THE ENVIRONMENT

OCTOBER, 1974

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SOUTHWEST BROOK

Location: 48°19'55' N. 54°09' 35" W. Clode Sound, Bonavista Bay.

Map Reference: Port Blandford. 2 D/8 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 189.6 miles², (491.06 km²). Mean width, 6.8 miles, (10.94 km).

Perimeter, 85.9 miles, (138.21 km). Axial length, 23.5 miles, (37.81 km).

Maximum basin relief, 1,150 feet, (350.52 m).

Geology:

Predominantly Precambrian volcanic with the remainder consisting of Precambrian sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 4.3 (6.9 km): 50'-60' (15.3-18.3 m) high, 3 vertical drops: lower drop 20' (6.1 m) vertical; second drop 10'-15' (3.1-4.6 m) vertical; third drop 20' (6.1 m) vertical; complete obstruction.

Drop of 7'-8' (2.1-2.4 m) vertical located 100 yds. (84.80 m) upstream from the main obstruction.

Falls at mile 7.5 (12.06 km) 30' (9.15 m) high; passable at medium to high water levels. Three vertical drops of 4'-5' (1.2-1.5 m) each separated by a pool or channel are located in a run-around on the right hand side. Passable at medium to high water levels.

Photographs on file: Nos. 550

Water Quality Data, Sample Collected July 1972, August 1973

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
6.85	6.5	6.5	0.74	4.0	25.0	1.5	7.9

PORT UNION RIVER

Location: 48°29'50" N. 53°05'30" W. Catalina Harbour,
Trinity Bay.

Map Reference: Trinity. 2 C/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 28.0 miles², (45.05 km²). Mean width, 4.0 miles,
(6.43 km).

Perimeter, 28.4 miles, (45.69 km). Axial length, 7.1 miles,
(11.42 km).

Maximun basin relief, 650 feet, (198.12 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of main river is 10 miles, (16.09 km).

Barriers to Fish Migration:

Main river:

Dam at forebay of power house, at mile point 0.25, (0.40 km),
complete obstruction.

Dam, at mile point 1, (1.60 km), (Whirl Pool Pond), partial
obstruction.

Photographs on file; Nos.

Water Quality Data, Sample Collected July, 1973.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
6.20	2.0	6.0	1.0	5.5	31.0	0.6	-

CHAMPNEYS BROOK (Salmon Cove River)

Location: 48°23'35" N. 53°18'20" W. Champneys, Trinity Bay.
 Map Reference: Trinity. 2 C/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 28.7 miles², (74.33 km²). Mean width, 4.8 miles,
 (7.72 km).

Perimeter, 27.8 miles, (44.73 km). Axial length, 6.4 miles,
 (10.29 km).

Maximum basin relief, 500 feet, (152.40 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil

Photographs on file; Nos.

Water Quality Data, Sample Collected July 1973.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μmhos/cm)	Ca ppm.	HCO ₃ ppm.
6.85	4.0	5.0	0.8	6.5	35.0	1.2	4.88

LOCKSTON RIVER

Location: 48°23'50" N. 53°22'28" W. Northeast Arm, Trinity Bay.

Map Reference: Trinity . 2 C/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 27.3 miles², (70.70 km²) Mean width, 3.2 miles,
(5.14 km).

Perimeter, 32.4 miles, (52.14 km). Axial length, 7.6 miles,
(12.22 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main river:

Falls at mile point 2.5, (4.02 km), 8 ft. (2.43 m), 10'
(3.04 m) long at 50° angle; partial obstruction.

In 1972, boulder and some ledge rock was blasted at falls.

Hydro power house and dam forms complete obstruction on tributary which
enters main river at mile point 0.5 (0.8 km).

Hydro power house constructed in 1955.

Photographs on file; Nos 42, 545

Water Quality Data, Sample Collected July 1973.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25° C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
6.0	2.0	5.0	1.0	5.5	28.0	0.6	2.44

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout, eels.

No angling data available on this stream.

A small number of fish angled on this river each year.

TROUTY BROOK

Location: 48°19'40" N. 53°23' 15" W. Trouty, Trinity Bay.
 Map Reference: Trinity Bay. 2 C/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 34.6 miles², (89.61 km²). Mean width, 3.7 miles,
 (5.95 km).

Perimeter, 30.4 miles, (48.91 km). Axial length, 8.7 miles,
 (13.99 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Channelling carried out in 1973 to ease migration at low discharge.

Photographs on file. Nos. 119.

Water Quality Data, Sample Collected July 1973.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
5.55	<1.0	4.0	0.9	5.0	25.0	0.6	-

POPES HARBOUR RIVER

Location: 48°14'15" N. 53°33'30" W. Smith Sound, Trinity Bay.

Map Reference: Random Island. 2 C/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 51.0 miles², (132.09 km²). Mean width, 5.8 miles, (9.33 km).

Perimeter, 37.5 miles, (60.33 km). Axial length, 8.0 miles, (12.87 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

Almost entirely Ordovician sedimentary with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Sawmill dam at mouth of the main river; partial obstruction.

(This sawmill dam is equipped with fishway, but there is insufficient water for it to work efficiently when sawmills are in operation or at low water levels). Dam removed by C & P personnel 1973.

Photographs on file; Nos.

Miscellaneous Information:

Twelve sawmills in the area in 1943.

Water Quality Data, Sample Collected

	Total	Total			Conductivity		
	Alkalinity	Hardness	Turbidity	Cl	at 25°C	Ca	HCO ₃
pH	ppm.	ppm.	JTU	ppm.	(μ mhos/cm)	ppm.	ppm.

Location: 48°12'55" N. 53°34'55" W. Smith Sound, Trinity Bay.
Map Reference: Random Island. 2 C/4 East half.

Geomorphological Factors:

Basin area, 39.4 miles², (102.04 km²). Mean width, 3.8 miles, (6.11 km).

Perimeter, 43.0 miles, (69.18 km). Axial length, 10.9 miles, (17.53 km).

Maximum basin relief, 800 feet, (243.84 m).

Almost entirely Precambrian sedimentary with some Cambrian sedimentary.

Barriers to Fish Migration:

Three dams and seven sawmills between mouth and mile 1.5, (2.41 km), on the main river; partial obstruction. (Dams equipped with fishways but water insufficient at times). Dams removed by C & P personnel 1973.

Photographs on file; Nos.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
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Species Present: Atlantic salmon and brook trout.

No angling data available on this stream.

Location: 48°14'10" N. 53°56'25" W. Smith Sound, Trinity Bay.
Map Reference: Random Island. 2 C/4 West half.

Geomorphological Factors:

Basin area, 26.2 miles², (67.85 km²). Mean width, 6.3 miles, (10.13 km).

Perimeter, 27.1 miles, (43.60 km). Axial length, 3.4 miles, (5.47 km).

Maximum basin relief, 600 feet, (182.88 m).

About half Ordovician sedimentary with the remainder consisting of Cambrian sedimentary, Precambrian sedimentary and Precambrian volcanic.

Barriers to Fish Migration:

No obstructions.

Photographs on file; Nos.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
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Species Present: Brook trout.

No angling data available on this stream.

GEORGES BROOK

Location: 48°14'15" N. 53°57'30" W. Smith Sound, Trinity Bay.

Map Reference: Random Island. 2 C/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.1 miles², (44.28 km²). Mean width, 2.2 miles, (3.53 km).

Perimeter, 24.8 miles, (39.90 km). Axial length, 7.2 miles, (11.58 km).

Maximum basin relief, 1,382 feet, (421.23 m).

Geology:

Almost entirely Precambrian volcanic with some Cambrian sedimentary and Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Dam and sawmill at mile 2, (3.21 km), on the main river; partial obstruction.

Photographs on file: Nos.

Water Quality Data, Sample Collected July, 1973.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
6.80	4.0	7.0	0.7	4.5	24.0	1.5	4.88

FISH POPULATIONS

Species Present: No information.

Angling Data: Nil

SHOAL HARBOUR RIVER

Location: 48°10'59" N. 53°59'15" W. Northwest Arm, Trinity Bay.
 Map Reference: Random Island. 2 C/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 49.9 miles², (129.24 km²). Mean width, 4.6 miles,
 (7.40 km).

Perimeter, 35.9 miles, (57.76 km). Axial length, 10.7 miles,
 (17.21 km).

Maximum basin relief, 1,000 feet, (304.80 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

In 1972, channel blasted in rock at top of falls above Shoal
 Harbour road and boulders removed in channel at foot of falls.

Photographs on file: Nos.

Water Quality Data, Sample Collected August 1972, July 1973.

pH	Total Alkalinity ppm.	Total Hardness ppm.	Turbidity JTU	Cl ppm.	Conductivity at 25°C (μ mhos/cm)	Ca ppm.	HCO ₃ ppm.
6.87	6.0	11.5	0.75	8.0	40.0	2.1	7.4

NORTHWEST BROOK

Location: 48° 01' 47" N. 53° 57' 30" W. South West Arm,
Trinity Bay.

Map Reference: Random Island. 2C/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 21.4 miles², (55.42 kilometers²). Mean width, 3.2 miles,
(5.14 kilometers).

Perimeter, 23.4 miles, (37.65 kilometers). Axial length, 6.4 miles,
(10.29 kilometers).

Maximum basin relief, 1,200 feet, (365.76 meters).

Geology:

About equal amounts of Precambrian volcanic and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Obstructions, main stem of Northwest Brook

Obst. No.	Obst. Type	Location from mouth	Description	Degree of Obstruction
1	falls	mouth of river	6' high (low tide) 8' long at 80° overhanging lip	Holdup low tide, easily passable high tide.
In 1971, large rocks at top of falls removed by blasting.				
2	rapids	2.3 miles 3.7 kilometers	6' high, 50' long	Easily passable all water levels.
3	falls	2.4 miles 3.9 kilometers	5' high, vertical on left, 15' long on right. 80° angle on left. 45° on right.	Holding at low water
4	falls	3.4 miles 5.5 kilometers	5' high, 80° angle run-around on RHS not visible in photo.	Easily passable at all water levels.
5	falls	3.6 miles 5.8 kilometers	60' overall height 90' long, 5 vertical drops	Complete at all water levels.
6	falls	4.8 miles 7.7 kilometers	50' high, 75' long, 3 drops; 2 upper drops 10' high at 80°, lower drop 22' vertical.	Complete all water levels.
7	falls	4.9 miles 7.9 kilometers	5' high chute 12' long at 45°	Holdup only at extreme low water

LITTLE HEARTS EASE BROOK

Location: 48°00'20" N. 53°42'30" W. South West Arm,
Trinity Bay.

Map Reference: Random Island. 2 C/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 7.0 miles², (18.13 km²). Mean width, 1.5 miles,
(2.41 km).

Perimeter, 13.0 miles, (20.91 km). Axial length, 4.5 miles,
(7.24 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

Photographs on file; Nos.

Water Quality Data, Sample Collected

	Total	Total			Conductivity		
pH	Alkalinity	Hardness	Turbidity	Cl	at 25°C	Ca	HCO ₃
	ppm.	ppm.	JTU	ppm.	(μ mhos/cm)	ppm.	ppm.

FISH POPULATIONS

Species Present:

No angling data available on this stream.

DEER HARBOUR BROOK

Location: 47°54'25" N. 53°48'42" W. Deer Harbour, Trinity Bay.
Map Reference: Sunnyside. 1 N/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 25.8 miles², (66.82 km²). Mean width, 3.6 miles, (5.79 km).

Perimeter, 28.8 miles, (46.33 km). Axial length, 6.5 miles, (10.45 km).

Maximum basin relief, 1,133 feet, (345.33 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river:

Bottom type, rubble and boulder. Velocity range, medium to fast.

Barriers to Fish Migration:

Main river, nil. Tributary, impassable falls.

Miscellaneous Information:

It is believed that this river supports only a limited number of salmon (not exceeding 200 fish). The lack of (1) resting pools (2) known spawning areas and (3) accessible tributaries combined with vast fluctuations in water levels indicate that this river has a low potential.

BELLEVUE BROOK (Trout Brook)

Location: 47°36'30" N. 53°46'05" W. Bellevue, Trinity Bay.

Map Reference: Dildo. 1 N/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 19.1 miles², (49.46 km²). Mean width, 1.6 miles, (2.57 km).

Perimeter, 33.5 miles, (53.90 km). Axial length, 11.0 miles, (17.69 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics.

Main river, from mouth to headwaters:

Average width, 25 ft., (7.62 m). Average depth, 18 inches, (0.45 m).

Velocity, fast. Bottom type, gravel and boulder.

Many pools throughout river.

Spawning Areas:

Main river, from mouth to mile 2, (3.21 km). Suitable gravel (no redds observed during 1965 survey).

Barriers to Fish Migration: No serious obstructions.

Miscellaneous Information: Logging activity and beaver dams had an adverse effect on the salmon run in 1965. Scheduled salmon angling brook in 1974.

SPREAD EAGLE BROOK

Location: 47°31'40" N. 53°36'30" W. Spread Eagle Bay,
Trinity Bay.

Map Reference: Dildo. 1 N/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 22.1 miles², (57.23 km²). Mean width, 2.0 miles,
(3.2 km).

Perimeter, 29.7 miles, (47.78 km). Axial length, 11.9 miles,
(19.14 km).

Maximum basin relief, 693 feet, (211.22 m).

Geology:

Almost entirely Precambrian sedimentary with some Cambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river:

Average width, 20 feet, (6.09 m), depth range, 1' to 20', (0.3-6.09 m).

Velocity, slow. Bottom type, predominantly rubble, interspersed with
gravel and boulder.

Barriers to Fish Migration:

Falls on main river. 7.5 miles, (12.06 km), from mouth, 5-1/2 feet
(1.67 m) high, over 15 feet (4.57 m) horizontal, (this falls is up-
stream from the Trans-Canada Highway). May be complete obstruction
at low water. Removed section of falls and drained dead water pool
fish trap by blasting, 1971. Rubble in pool needed to be cleared, 1973.

DILDO BROOK

Location: 47° 31' 07" N. 53° 33' 30" W. Dildo Arm,
Trinity Bay.

Map Reference: Dildo. 1 N/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 20.4 miles², (52.83 kilometers²). Mean width, 2.6 miles,
(4.18 kilometers).

Perimeter, 21.7 miles, (34.91 kilometers). Axial length, 7.9 miles,
(12.71 kilometers).

Maximum basin relief, 500 feet, (152.40 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of stream from the sea to Dildo Pond is 0.8 miles, (1.28 kilometers).
Dildo Pond (morphometric data)

Max. length, 3.6 miles, (5.79 kilometers). Max. width, 0.6 miles,
(0.96 kilometers).

Max. depth, 70 ft., (21.33 meters). Mean depth, 32.7 ft. Area, 1.5 miles²,
(3.88 kilometers²).

Drainage area, 24.3 miles², (62.93 kilometers²). Shoreline development
index, 2.07.

Mean length, 2.5 miles, (4.02 kilometers). Mean width, 0.42 miles,
(0.67 kilometers). Area, 4.21×10^6 ft.²

Barriers to Fish Migration:

Main river:

Falls, near mouth, complete obstruction

Dam, near mouth, complete obstruction. (Dam supplies water for the fish
plant at South Dildo.)

HEARTS DELIGHT BROOK

Location: 47°46'22" N. 53°27'50" W. Hearts Delight, Trinity Bay.

Map Reference: Hearts Content. 1 N/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.2 miles², (44.52 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 21.7 miles, (34.91 km). Axial length, 6.8 miles, (10.94 km).

Maximum basin relief, 650 feet, (198.12 m).

Geology:

Almost entirely Precambrian sedimentary with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river from mouth to mile 3, (4.82 km). Average width, 15 feet, (4.57 m). No. of pools, 3 (small) average depth, 8 in. (.20 m). Water velocity, fast. Bottom type, mostly boulder.

Barriers to Fish Migration:

HEARTS CONTENT RIVER

Location: 47°51'50" N. 53°22'35" W. Hearts Content,
Trinity Bay.

Map Reference: Hearts Content. 1 N/14 West half

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 18.4 miles², (47.65 km²). Mean width, 2.2 miles,
(3.53 km).

Perimeter, 22.9 miles, (36.84 km). Axial length, 7.1 miles,
(11.42 km).

Maximum basin relief, 935 feet, (284.98 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Hydro dam (wooden) at mile 1.25 (2.01 km), on the main river,
6 feet, (1.82 m), high, length (bank to bank) 75 feet, (22.86 m)
complete obstruction.

FISH POPULATIONS

Species Present: Brown trout.

No angling data available on this stream.

NEW PERLICAN RIVER

Location: 47°54'35" N. 53°21'30" W. Trinity Bay.

Map Reference: Hearts Content. 1 N/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 16.2 miles², (41.95 km). Mean width, 2.4 miles, (3.86 km).

Perimeter, 19.3 miles, (31.05 km). Axial length, 6.5 miles, (10.45 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NEW CHELSEA RIVER

Location: 48°01'50" N. 53°12'37" W. New Chelsea, Trinity Bay.

Map Reference: Old Perlican. 2 C/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 18.8 miles², (48.69 km²). Mean width, 2.0 miles, (3.21 km).

Perimeter, 24.1 miles, (38.77 km). Axial length, 8.6 miles, (13.83 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main river:

Falls, 500 feet, (152.40 m), upstream from mouth, 20 feet (6.09 m), high, 40 feet, (12.18 m) wide, angle 90°; complete obstruction.

Falls, 600 feet (182.88 m), upstream from mouth, 20 feet (6.09 m) high, 40 feet, (12.18 m) wide, angle 90°; complete obstruction.

WESTERN BAY BROOK

Location: 47°53'10" N. 53°05'08" W. Conception Bay.
Map Reference: Hearts Content. 1 N/14 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.2 miles², (29.00 km²). Mean width, 1.5 miles,
(2.41 km).

Perimeter, 20.9 miles, (33.62 km). Axial length, 8.3 miles,
(13.35 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BLACKHEAD BROOK

Location: 47°50'50" N. 53°05'33" W. Conception Bay.
Map Reference: Hearts Content. 1 N/14 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.3 miles², (11.13 km²). Mean width, 0.8 miles,
(1.28 km).

Perimeter, 11.1 miles, (17.8 km). Axial length, 4.8 miles,
(7.72 km).

Maximum basin relief, 700 feet, (213.36 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BROAD COVE BROOK

Location: 47°50'23" N. 53°05'52" W. Conception Bay.

Map Reference: Hearts Content. 1 N/14 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.1 miles², (31.31 km²). Mean width, 1.6 miles, (2.57 km).

Perimeter, 18.9 miles, (30.41 km). Axial length, 8.1 miles, (13.03 km).

Maximum basin relief, 950 feet, (289.56 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SPOUT COVE BROOK

Location: 47°49'03" N. 53°07'35" W. Conception Bay.
Map Reference: Hearts Content. 1 N/14 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 6.0 miles², (15.51 km²). Mean width, 1.2 miles,
(1.93 km).

Perimeter, 11.9 miles, (19.14 km). Axial length, 5.1 miles,
(8.20 km).

Maximum basin relief, 900 feet, (274.32 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SALMON COVE RIVER

Location: 47°46'55" N. 53°10'00" W. Conception Bay.

Map Reference: Hearts Content. 1 N/14 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 26.3 miles², (68.12 km²). Mean width, 2.9 miles, (4.66 km).

Perimeter, 26.4 miles, (42.47 km). Axial length, 8.8 miles, (14.15 km).

Maximum basin relief, 950 feet, (289.56 m).

Geology :

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river, from mouth to mile 5, (8.04 km), (Victoria Village):

Average width, 15 feet, (4.57 m). Average depth, 1 foot, (0.30 m).

Velocity, slow. Bottom type, mostly boulder.

Spawning Areas:

Approximately one acre located around head of Beaver Pond and a small area at the head of Salmon Pond.

Barriers to Fish Migration:

Piles of boulder on the main river pose obstructions when water levels are low.

Miscellaneous Information:

Spout Brook, a tributary flowing into Salmon Cover Pond, used for hydro power.

SOUTH RIVER

Location: 47°40'05" N. 53°15'32" W. Conception Bay.

Map Reference: Harbour Grace. 1 N/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 14.6 miles², (37.81 km²). Mean width, 1.8 miles, (2.89 km).

Perimeter, 21.0 miles, (33.78 km). Axial length, 8.2 miles, (13.19 km).

Maximum basin relief, 838 feet, (255.42 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

RYANS BROOK

Location: 47°36'20" N. 53°17'20" W. Conception Bay.
Map Reference: Harbour Grace. 1 N/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 9.1 miles², (23.56 km²). Mean width, 1.6 miles,
(2.57 km).

Perimeter, 15.7 miles, (25.26 km). Axial length, 6.4 miles,
(10.29 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SHEARSTOWN BROOK

Location: 47°35'22" N. 53°18'10" W. Shearstown, Conception Bay.

Map Reference: Harbour Grace. 1 N/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.0 miles², (31.08 km²). Mean width, 1.5 miles, (2.41 km).

Perimeter, 21.3 miles, (34.27 km). Axial length, 8.8 miles, (14.15 km).

Maximum basin relief, 550 feet, (167.64 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Atlantic salmon.

No angling data available on this stream.

NORTH RIVER

Location: $47^{\circ} 33' 00''$ N. $53^{\circ} 16' 00''$ W
Clarke's Beach, Conception Bay.
Map Reference: Harbour Grace. 1N/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.6 miles², (61.12 kilometers²). Mean width, 2.4 miles, (3.84 kilometers).

Perimeter, 28.8 miles, (46.33 kilometers). Axial length, 12.5 miles, (20.11 kilometers).

Maximum basin relief, 600 feet, (182.88 meters).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river, above North River Pond:

Average width, 12', (3.65 meters). Average depth, 8", (0.20 meters).

Velocity, medium. Bottom type, mainly rubble with boulders scattered throughout.

Spawning Areas:

One mile gravel section between Snow's Pond and "the Pond the feeds the brook".

Barriers to Fish Migrations:

Main River: Falls at mile point 3.8 (6.1 kilometers), 7' (2.12 meters) high in two drops, 4' (1.21 meters) and 3' (0.9 meters) with a small pool separating them. In 1971, rock blasted and water channelized to make passage easier for salmon.

Channel was bulldozed at the mouth of river in 1959 through beach gravel to allow salmon and other species of fish to enter river.

SOUTH RIVER

Location: 47°32'30" N. 53°16'25" W.
Clarke's Beach, Conception Bay.
Map Reference: Harbour Grace. 1 N/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 26.0 miles², (67.34 km²). Mean width, 2.4 miles, (3.86 km).

Perimeter, 34.9 miles, (56.15 km). Axial length, 12.5 miles, (20.11 km).

Maximum basin relief, 600 ft., (182.88 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Bottom types:

Bottom composition consists mainly of gravel with small sections of rubble and boulder scattered throughout the system.

Spawning areas:

Main river, between mile points 1.8 and 2.5, (2.89 - 4.02 km).

Barriers to Fish Migration:

Series of three falls at mile 2.5 (4.02 km).

(1) 7' (2.13 m). high, at 70° angle over 20' (6.09 m). length.

(2) 12' (3.65 m). high in two drops 6' (1.82 m). and 6' (1.82m). at 40° and 60° angles.

(3) 8' (2.43 m). high in two drops 5' (1.5 m). vertical and 3' (0.9 m). at 50° angle. Partial obstruction.

COLLIERS RIVER

Location: 47°27'14" N. 53°13'33" W. Conception Bay.

Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 24.7 miles², (63.97 km²). Mean width, 2.8 miles, (4.50 km).

Perimeter, 28.0 miles, (45.05 km). Axial length, 9.5 miles, (15.28 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Almost entirely Precambrian sedimentary with some Precambrian volcanic and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SALMON RIVER

Location: 47°25'12" N. 53°12'05" W. Conception Bay.

Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.9 miles², (61.90 km²). Mean width, 2.0 miles, (3.22 Km).

Perimeter, 34.4 miles, (55.34 km). Axial length, 11.4 miles, (18.34 Km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Almost entirely Precambrian sedimentary with some Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

MALONEYS RIVER

Location: 47°25'58" N. 53°09'40" W. Conception Bay.
Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 9.0 miles², (23.31 kilometers²). Mean width, 1.1 miles, (1.76 kilometers).

Perimeter, 19.0 miles, (30.57 kilometers). Axial length, 8.8 miles, (14.15 kilometers).

Maximum basin relief, 500 feet, (152.40 meters).

Geology:

Almost entirely Precambrian volcanic with some Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Brown trout, brook trout.

No angling data available on this stream.

NORTH ARM RIVER

Location: 47° 23' 37" N. 53° 09' 30" W.
Holyrood, Conception Bay.
Map Reference: Holyrood. 1N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 33.2 miles², (85.98 kilometers²). Mean width, 3.4 miles, (5.47 kilometers).
Perimeter, 29.8 miles, (47.94 kilometers). Axial length, 10.8 miles, (17.37 kilometers).
Maximum basin relief, 1,050 feet, (320.04 meters).

Geology:

Predominantly Precambrian volcanic with some Precambrian sedimentary and acidic intrusive rocks.

Vegetational Cover:

Young forest. Most of the forest area is protected. No cutting is permitted.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river,
Channel width, 30', (9.14 meters). Channel depth, 1', (.30 meters).
Water velocity, 10 m.p.h.
Bottom type, mainly rubble with some large boulder and sections of gravel scattered throughout.

Spawning Areas:

Main river, 123 units; tributaries, 55 units; estimated, 113 units; total, 291 units.

Barriers to Fish Migration:

Falls, 100 yds., (91.44 meters) from mouth, 6' (1.82 meters), high in 2 drops, 30' (9.14 meters) long. Partial obstruction at low water.
In 1972, boulders and ledgerock blasted to make fish passage easier.

Falls, 400 yd. (365.76 m) from mouth, 6' high (1.82 m) at 60° angle. 12' (3.65 m) long. Partial obstruction at low water. In 1972, boulders and ledgerock blasted to make fish passage easier. Falls, 500 yd. (457.20 m) from mouth, 6' (1.82 m) high, at 45° angle, 12' (3.65 m) long. Partial obstruction at low water. In 1972, boulders and ledgerock blasted to make fish passage easier. Rapids 800 yd. (731.52 m), from mouth, 8' to 10' (2.4-3.04 m) high, 40' long, (12.19 m), several small drops. Partial obstruction at low water. Falls, 1,200 yd. (1,097.28 m) from mouth. 6' (1.82 m) high, at 45° angle, 10' (3.04 m) long. Partial obstruction at low water.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout.

SOUTH RIVER

Location: 47°23'35" N. 53°07'33" W. Conception Bay.
Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 14.3 miles², (37.03 km²). Mean width, 2.1 miles, (3.37 km).

Perimeter, 19.2 miles, (30.89 km). Axial length, 6.8 miles, (10.94 km).

Maximum basin relief, 1,050 feet, (320.04 m).

Geology:

Predominantly Precambrian volcanic with some acidic intrusive rocks and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

QUARRY BROOK

Location: 47°27'08" N. 53°05'40" W. Conception Bay.
Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.7 miles² (12.17 km²). Mean width, 1.0 miles,
(1.60 km).

Perimeter, 12.8 miles, (20.59 km). Axial length, 5.2 miles,
(8.36 km).

Maximum basin relief, 1,000 feet, (304.80 m).

Geology:

Almost entirely acidic intrusive rocks with some Cambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

:

:

:

:

:

FISH POPULATIONS

Species Present: Smelt, brook trout, brown trout.

No angling data available on this stream.

SEAL COVE BROOK

Location: 47°28'17" N. 53°05'00" W. Conception Bay.
Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 33.2 miles², (53.41 km²). Mean width, 3.4 miles,
(5.47 km).

Perimeter, 35.8 miles, (57.60 km). Axial length, 8.7 miles,
(13.99 km).

Maximum basin relief, 950 feet, (289.56 m).

Geology:

About half gneiss with the remainder consisting of acidic
intrusive rocks and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Hydro dams throughout basin; complete obstruction.

FISH POPULATIONS

Species Present: Brook trout, ouananiche, brown trout.

No angling data available on this stream.

LOWER GULLIES RIVER

Location: 47°29'45" N. 53°02'06" W. Conception Bay.

Map Reference: Holyrood. 1 N/6 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.0 miles², (20.72 km²). Mean width, 1.5 miles, (2.41 km).

Perimeter, 16.9 miles, (27.19 km). Axial length, 5.7 miles, (9.17 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

Predominantly acidic intrusive rock with some Cambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

MANUELS RIVER

Location: 47°32'05" N. 52°57'26" W. Manuels, Conception Bay.
Map Reference: St. John's. 1 N/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 26.3 miles², (68.11 km²). Mean width, 2.5 miles,
(4.02 km).

Perimeter, 34.9 miles, (56.15 km). Axial length, 10.9 miles,
(17.53 km).

Maximum basin relief, 802 feet, (244.45 m).

Geology:

Predominantly gneissis with some Precambrian volcanic and Cambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 1, (1.60 km), on the main river, complete obstruction.

FISH POPULATIONS

Species Present: Brown trout, brook trout, ouananiche.

No angling data available on this stream.

TOPSAIL RIVER

Location: 47°32'30" N. 52°55'13" W. Conception Bay.
Map Reference: St. John's. 1 N.10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.6 miles², (11.91 km²). Mean width, 1.3 miles,
(2.09 km).

Perimeter, 9.8 miles, (15.76 km). Axial length, 3.0 miles,
(4.82 km).

Maximum basin relief, 750 feet, (231.41 m).

Geology:

Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Brown trout, brook trout, ouananiche.

No angling data available on this stream.

HORSE COVE BROOK

Location: 47°34'22" N. 52°54'23" W. Conception Bay.
Map Reference: St. John's. 1 N/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 1.5 miles², (3.88 km²). Mean width, 1.0 miles
(1.60 km).

Perimeter, 6.1 miles, (9.81 km). Axial length, 2.1 miles,
(3.37 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Predominantly gneiss with some Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BROAD COVE BROOK

Location: 47°35'32" N. 52°53'10" W. Conception Bay.
Map Reference: St. John's. 1 N/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 6.5 miles², (16.83 km²). Mean width, 1.7 miles,
(2.73 km).

Perimeter, 12.5 miles, (20.11 km). Axial length, 3.9 miles,
(6.27 km).

Maximum basin relief, 725 feet, (220.98 m).

Geology:

Almost entirely Precambrian volcanic with some Precambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BEACHY COVE BROOK

Location: 47° 37' 05" N. 52° 52' 22" W. Beachy Cove,
Conception Bay.

Map Reference: St. John's. 1 N/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.7 miles², (30.30 kilometers²). Mean width, 2.1 miles,
(3.37 kilometers).

Perimeter, 18.7 miles, (30.36 kilometers). Axial length, 6.7 miles,
(10.78 kilometers).

Maximum basin relief, 750 feet, (228.60 meters).

Geology:

About half gneiss and about half Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Morphometric Data: Hogan's Pond:

Mean length, 0.27 miles, (0.43 kilometers). Max. length, 1.1 miles,
(1.76 kilometers). Max. width, 0.9 miles, (1.44 kilometers).

Mean width, 0.22 miles, (0.35 kilometers). Max. depth, 35 ft., (10.66
meters). Area, 0.24 miles², (0.62 kilometers²).

Mean depth, 16.3 ft., (4.96 meters).

Bottom Type: Hogan's Pond: Varies from rubble and boulder around the
shore to deep mud in the regions below 10 ft. (3.04 meters), depth.

This mud is interspersed with numerous large rocks.

Barriers to Fish Migrations: The main river has a series of precipitous
water falls which block the passage of anadromous fish.

PICCOS BROOK

Location: 47°42'30" N. 52°42'25" W. Flat Rock.
Map Reference: St. John's. 1 N/10 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.0 miles², (20.72 km²). Mean width, 1.2 miles,
(2.00 km).

Perimeter, 16.0 miles, (25.74 km). Axial length, 7.2 miles,
(11.58 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

About half Precambrian sedimentary and about half Precambrian
volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

QUIDI VIDI RIVER (Rennies River)

Location: 47°34'59" N. 52°40'42" W. Quidi Vidi Harbour.
Map Reference: St. John's. 1 N/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Length: Main River (Quidi Vidi, Rennies River) from mouth to
Juniper Pond is 5-1/4 miles, (8.44 km).

Barriers to Fish Migration:

Main river:

Falls, near mouth, overall height 40-45 feet, (12.19-13.71 m) high,
divided into three sections; lower section consists of rapids, middle
section is a 10 foot (3.04 m) falls made up of several steps, third
section is a 10 foot (3.04 m) falls made up of several steps,
partial obstruction.

Dam at outlet of Quidi Vidi Lake 3 to 3-1/2 feet, (0.91-1.06 m) high;
small fishway constructed in dam by St. John's City Council to permit
sea run brown trout to enter the lake.

WATERFORD RIVER

Location: 47°33'18" N. 52°42'46" W. Bottom St. John's Harbour.

Map Reference: St. John's. 1 N/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 23.5 miles² (60.87 km²). Mean width 2.6 miles, (4.19 km).

Perimeter 25.7 miles, (41.38 km). Axial length 8.4 miles, (13.52 km).

Maximum basin relief 850 feet, (259.08 m).

Geology:

Hadrynian siltstone, arkose, conglomerate, slate and acidic to intermediate volcanic rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Channel length: From mouth of main river to Bremigens Pond (not including standing water) is 8.8 miles, (14.15 km).

Barriers to Fish Migration:

Main River:

Dam at boat pond in Bowring Park; complete obstruction.

Falls in Bowring Park, approx. 12 to 15 feet, (3.65-4.57 m) high; partial obstruction.

Falls at Dunn's Pond near Mount Pearl Park; partial obstruction.

Falls in Mount Pearl Park; complete obstruction.

Tributary, South Brook:

Dam in Bowring Park for swimming pool during summer months; complete obstruction.

Falls, approx. one mile, (1.60 km), above swimming pool area, complete obstruction.

Location: 47°28'25" N. 52°42'09" W. Petty Harbour.

Map Reference: Bay Bulls. 1 N/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Brown trout.

No angling data available on this stream.

PETTY HARBOUR RIVER

Location: 47°27'50' N. 47°42'38" W. Petty Harbour, Motion Bay.

Map Reference: Bay Bulls. 1 N/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 52.5 miles², (135.97 km²). Mean width, 6.2 miles, (9.97 km).

Perimeter, 32.8 miles (52.77 km). Axial length, 9.1 miles, (14.64 km).

Maximum basin relief, 802 feet (244.45 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Hydro dam at mile 1 (1.60 km), on the main river; complete obstruction.

FISH POPULATIONS

Species Present: Brown trout, ouananiche and brook trout.

No angling data available on this stream.

BAY BULLS RIVER

Location: 47°19'00" N. 52°48'55" W. Bay Bulls.
Map Reference: Bay Bulls. 1 N/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 14.6 miles² (37.81 km²). Mean width, 2.4 miles, (3.86 km).

Perimeter, 19.7 miles (31.69 km). Axial length, 6.9 miles (11.10 km).

Maximum basin relief, 887 feet (270.35 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present: Brown trout and brook trout.

No angling data available on this stream.

PIERRES BROOK

Location: 47°17'15" N. 52°49'15" W. Witless Bay.
Map Reference: Bay Bulls. 1 N/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 39.3 miles², (101.78 km²). Mean width, 3.3 miles, (5.30 km).

Perimeter, 33.1 miles, (53.25 km). Axial length, 10.3 miles, (16.57 km).

Maximum basin relief, 950 feet, (289.56 m).

Geology:

About half Precambrian sedimentary with the remainder consisting of Precambrian volcanic and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river, from mouth to mile one, (1.60 km), (highroad bridge):

Bottom types (% of total area): Boulder 37%, bedrock 59%, rubble and gravel 4%.

Width range, 35 - 70 feet, (10.66-21.32 m). Depth range, 1 - 4 feet, (0.9-1.21 m).

Velocities, medium.

Spawning Areas:

Scattered gravel patches in the lower section of the main river.

Barriers to Fish Migrations:

Main river:

Falls at mile 0.5, (0.80 km). complete obstruction.

Hydro dam at outlet of Gull Pond; complete obstruction.

WITLESS BAY BROOK

Location: 47°48'40" N. 52°50'06" W. Witless Bay.

Map Reference: Bay Bulls. 1 N/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 10.3 miles², (26.67 km²). Mean width, 1.7 miles, (2.73 km).

Perimeter, 16.7 miles, (26.87 km). Axial length, 6.9 miles, (11.10 km).

Maximum basin relief, 850 feet, (259.08 m).

Geology:

About equal amounts of Precambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

MOBILE RIVER

Location: 47°14'51" N. 52°50'35" W. Mobile Bay.
Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 47.6 miles², (123.28 km²). Mean width, 3.8 miles,
(6.11 km).

Perimeter, 41.5 miles, (66.77 km). Axial length, 13.5 miles,
(21.72 km).

Maximum basin relief, 1,050 feet, (320.04 m).

Geology:

About half acidic intrusive rocks with the remainder consisting
of Precambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Several hydro dams through system.

FISH POPULATIONS

Species Present: Arctic char, ouananiche, and brook trout.

No angling data available on this stream.

TORS COVE RIVER

Location: 47°12'35" N. 52°51'02" W.
Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.2 miles² (44.54 km²). Mean width, 2.6 miles, (4.18 km).

Perimeter, 22.2 miles (35.71 km). Axial length, 7.4 miles, (11.90 km).

Maximum basin relief, 750 feet, (228.60 m).

Geology:

Predominantly Precambrian sedimentary with some acidic intrusive rocks and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Several hydro dams throughout basin.

FISH POPULATIONS

Species Present: Brook trout.

No angling data available on this stream.

Miscellaneous Information:

River used for power by the Newfoundland Light & Power Company since 1942. Power houses located at Rocky Pond and river mouth.

LA MANCHE RIVER

Location: 47°09'59" N. 52°52'07" W. La Manche (North of Cape Broyle).

Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 60.3 miles², (156.17 km²). Mean width, 3.0 miles, (4.82 km).

Perimeter, 60.1 miles, (96.70 km). Axial length, 19.5 miles, (31.37 km).

Maximum basin relief, 1,000 feet, (304.80 m).

Geology:

About half Precambrian sedimentary with the remainder consisting of acidic intrusive rocks and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls, 17 feet, (5.18 m), high, at mouth of the main river; complete obstruction. During the 1930's a structure of steps, to form small pools was built to aid fish over the falls at mouth. This was unsuccessful.

FISH POPULATIONS

Species Present: Brook trout, ouananiche.

No angling data available on this stream.

HORSE CHOPS RIVER

Location: 47°05'49" N. 52°55'55" W. Cape Broyle Harbour.

Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 3.3 miles² (8.55 km²). Mean width 2.9 miles,
(4.67 km).

Perimeter 36.7 miles, (60.70 km). Axial length 11.9 miles,
(19.16 km).

Maximum basin relief

Geology:

Hadrynian slate, siltstone, greywacke, conglomerate and minor
volcanic rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Hydro dams.

CAPE BROYLE RIVER

Location: 47° 05' 30" N. 52° 57' 26" W. Cape Broyle Harbour.

Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 25.3 miles², (65.52 kilometers²). Mean width, 2.3 miles, (3.70 kilometers).

Perimeter, 33.0 miles, (53.09 kilometers). Axial length 12.3 miles, (19.79 kilometers).

Maximum basin relief, 800 feet, (243.84 meters).

Geology:

About equal amounts of Precambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mouth of river consisting of two drops 6' & 6' (1.82 meters), at 40° and 60°; partial obstruction.

Falls 1500', (457.20 meters) from mouth consisting of two drops 5' & 5', (1.52 meters), 70° and 90°; partial obstruction.

Falls 1.6 miles, (2.57 kilometers) from mouth. Falls 8', (2.43 meters) vertical with small run-around on left bank; complete obstruction at low water.

Falls 1.6 miles, (2.57 kilometers) from mouth. Falls 5' (1.52 meters) high at 40° angle; partial obstruction.

Falls 1.6 miles, (2.57 kilometers) from mouth. Falls 6', (1.82 meters), vertical; partial obstruction.

Falls 1.6 miles, (2.57 kilometers), from mouth. Falls 5', (1.52 meters), high at 65° angle; partial obstruction.

Falls 1.7 miles, (2.73 kilometers) from mouth. Falls 6', (1.82 meters), high at 80° angle; partial obstruction.

Falls 1.7 miles, (2.73 kilometers), from mouth. Falls 8', (2.43 kilometers) vertical; complete obstruction at low water.

Location: 47°00'39" N. 52°55'36" W. Aquaforte Harbour.
Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 47.0 miles², (121.73 km²). Mean width, 3.0 miles,
(4.82 km).

Perimeter, 47.0 miles, (75.72 km). Axial length, 17.8 miles,
(28.64 km).

Maximum basin relief, 870 feet, (265.17 m).

Geology:

About equal amounts of Precambrian sedimentary and Precambrian
volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

AQUAFORTE RIVER

Location: 47°00'39" N. 52°58'35" W. Aquaforte Harbour.
Map Reference: Ferryland. 1 N/2 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 23.3 miles², (60.34 km²). Mean width, 1.4 miles, (2.25 km).

Perimeter, 30.5 miles, (49.07 km). Axial length, 13.0 miles, (20.91 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

About equal amount of Precambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

RENEWS RIVER

Location: 46°56'03" N. 52°57'15" W. Renews
Map Reference: Renews. 1 K/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 29.5 miles², (76.40 km²). Mean width, 3.5 miles,
(5.63 km).
Perimeter, 37.5 miles, (60.33 km). Axial length, 7.3 miles,
(11.74 km).
Maximum basin relief, 804 feet, (245.05 m).

Geology:

About equal amounts of Precambrian sedimentary and Precambrian
volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Two falls on the main river. The lower falls passable at high water
levels. The upper falls easily passable all water levels. In 1970
diversion dams constructed to divert flow from runarounds at falls.
In 1971, boulder at top of falls blasted.

Spawning Areas:

Scattered throughout river.

CHANCE COVE BROOK

Location: 46°45'58" N. 53°00'30" W. (near Trepassey Bay)

Map Reference: Biscay Bay River. 1 K/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 33.9 miles², (87.80 km²). Mean width, 3.2 miles, (5.14 km).

Perimeter, 36.5 miles, (58.72 km). Axial length, 10.2 miles, (16.41 km).

Maximum basin relief, 800 feet, (243.84 m).

Geology:

Predominantly Precambrian sedimentary with some Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: From mouth to falls at mile point 4, (6.43 km).

Average width, 50 feet, (15.24 m). Average depth, 12 inches, (0.91 m).

Number of pools in section 2. Water velocity, fast.

Barriers to Fish Migration:

Falls, 25 feet, (7.62 m), high at mile 4, (6.43 km) on the main river: complete obstruction.

FRESHWATER RIVER

Location: $46^{\circ} 38' 50''$ N. $53^{\circ} 05' 40''$ W.

Map Reference: Trepassey. 1 K/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 6.5 miles² (16.83 kilometers²). Mean width, 1.1 miles, (1.76 kilometers).

Perimeter, 14.0 miles (22.52 kilometers). Axial length, 6.0 miles, (9.65 kilometers).

Maximum basin relief, 500 feet, (152.40 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Location: $46^{\circ} 37' 52''$ N. $53^{\circ} 11' 20''$ W.

Map Reference: Trepassey. 1 K/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.7 miles² (40.66 kilometers²). Mean width, 1.9 miles, (3.05 kilometers).

Perimeter, 21.9 miles, (35.23 kilometers). Axial length 9.4 miles, (15.12 kilometers).

Maximum basin relief, 550 feet, (167.64 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

PORTUGAL COVE BROOK

Location: 46°43'20" N. 53°15'45" W.
Map Reference: Trepassey. 1 K/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.3 miles² (39.62 km²). Mean width, 2.3 miles (3.70 km).

Perimeter, 21.7 miles (34.91 km). Axial length, 8.5 miles (13.67 km).

Maximum basin relief, 611 feet (186.23 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BISCAY BAY RIVER

Location: 46° 46' 20" N. 53° 16' 55" W. Biscay Bay, Trepassey Bay.

Map Reference: Biscay Bay River, 1 K/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 92.1 miles² (238.53 kilometers²). Mean width, 4.2 miles (6.75 kilometers).

Perimeter, 66.9 miles (107.64 kilometers). Axial length, 19.0 miles (30.57 kilometers).

Maximum basin relief, 804 feet (245.05 meters).

Geology:

Almost entirely Precambrian sedimentary with some Precambrian volcanic.

Vegetational Cover:

River bank is slightly wooded; the remainder of watershed is barren.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: Channel Width, 70 ft. (23.81 meters). Channel Depth, shallow. Water velocity, swift. Channel length, 22 miles (35.39 kilometers).

Spawning Areas:

Main River: Many good gravel patches scattered throughout channel.

Black River: 0.25 miles (.40 kilometers), of spawning ground between mile points 0.75 and 1.0 (1.20 - 1.60 kilometers).

Barriers to Fish Migration:

Two small falls at mile 8 (12.87 km). Height: 4 feet (1.21 m). Length: 30 feet (9.15 m). Slope: 45°. These may form a partial obstruction at low flow periods but should not interfere with salmon migration during normal water conditions.

Miscellaneous Information:

Black River enters 10 miles (16.09 km) from the mouth. In a few sections, the bottom consists of large boulders, most sections contain good spawning gravel.

BISCAY BAY RIVER

Location—

At the bottom of Biscay Bay, Trepassey Bay at the south end of the Peninsula of Avalon.

Season—

June and July are the best months.

General Remarks—

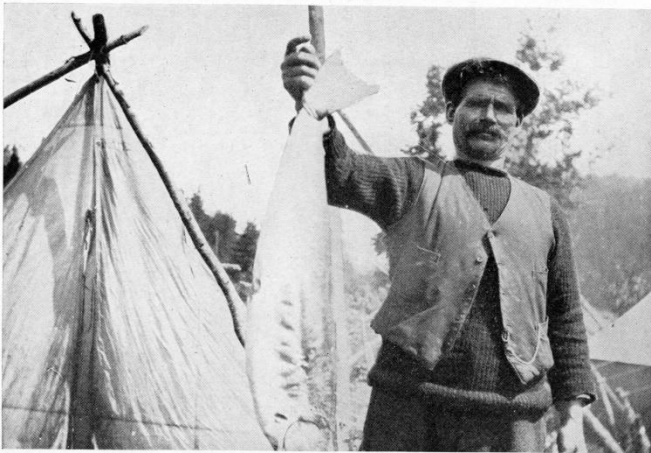
Splendid sea-trout fishing between the sea and Biscay Bay Pond. The river proper, flowing into the pond, runs through flat-lying country, there being only a few small pools, until Watson's Pool is met about 8 miles from the sea. This is a splendid pool, well known for fishing.

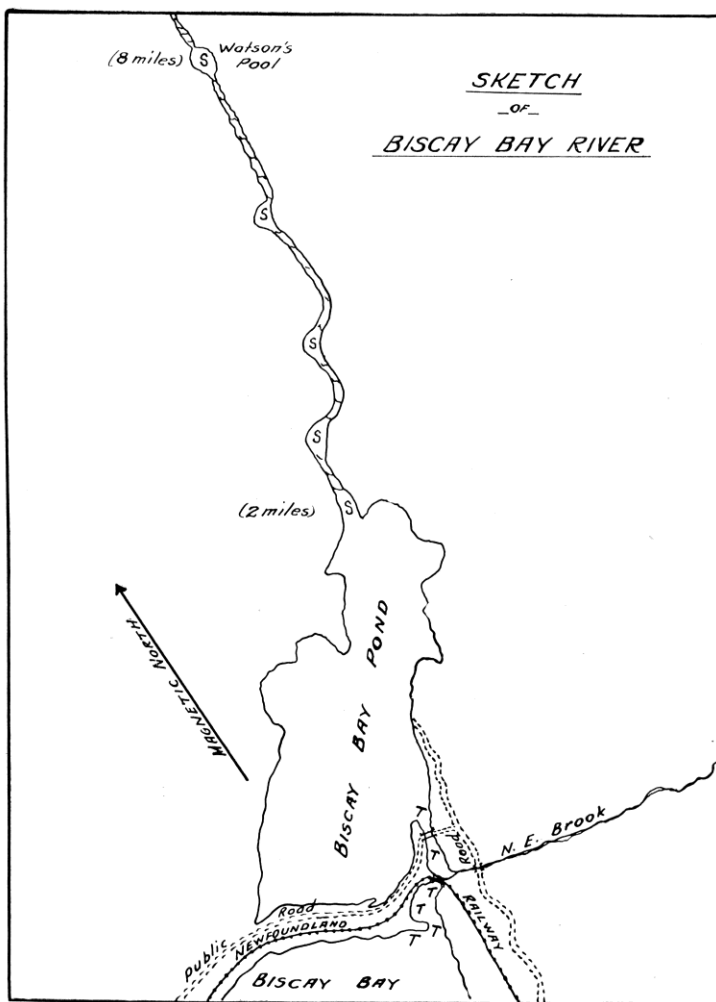
Tributaries:

Black River	1K/14
Chidleys River	1K/14
Back Brook	1K/14

Pools:

Watson's Pool, 4 unnamed pools





NORTH EAST BROOK

Location: $46^{\circ} 46' \text{ N. } 53^{\circ} 21' 10'' \text{ W.}$ Trepassey Bay.

Map Reference: Biscay Bay River, 1 K/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.2 miles² (21.23 kilometers²). Mean width, 1.7 miles (2.73 kilometers).

Perimeter, 14.8 miles (23.81 kilometers). Axial length, 5.5 miles (8.84 kilometers).

Maximum basin relief, 605 feet (184.40 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Section: Main river from mouth to mile point 2 (approx.) (3.21 kilometers).

Average width: 12 feet (3.65 meters). Depth range: 6 to 12 inches (.15 - .30 meters).

Number of pools in section: 4

Spawning Areas: Main River; near pools in section examined.

Barriers to Fish Migration: Falls mile 0. Height: 7 feet (2.13 m).

Length: 25 feet (7.62 m). Slope: 40° .

Partial obstruction to salmon at low water.

NORTH EAST RIVER

Trepassey Bay

Location—

At the bottom of Trepassey Bay at the south end of the Peninsula of Avalon.

Season—

June and July are the best months.

General Remarks—

This is a rough and rapid river, but it contains many fine fishing pools which can be fished daily, staying at Trepassey.

Notes:

Now Northeast River.

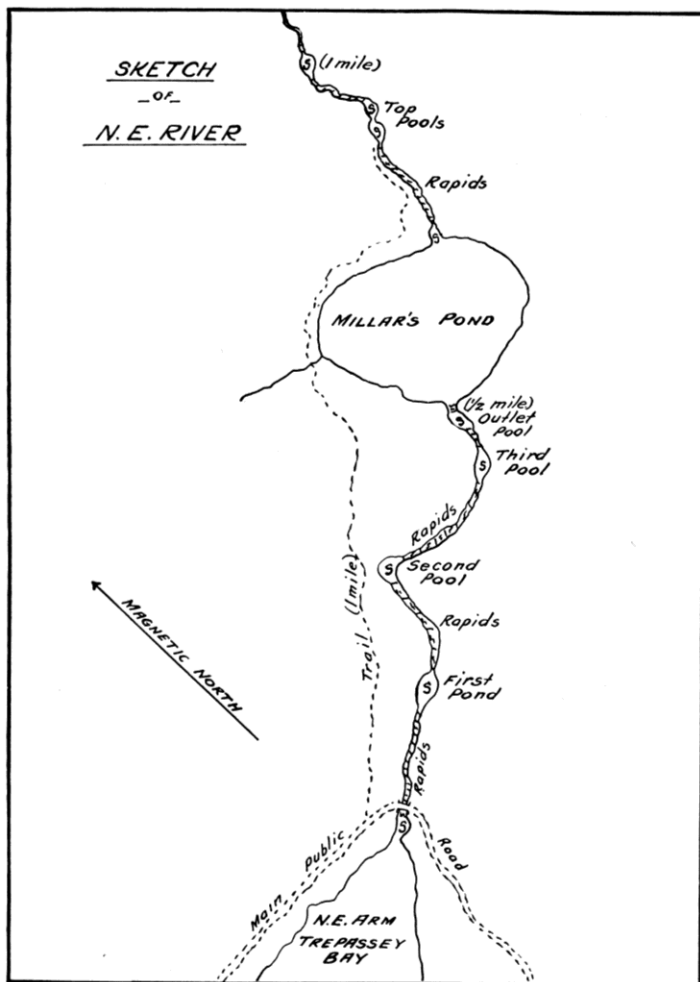
1K/14

Pools:

First Pond, Second Pool, Third Pool, Outlet Pool, Top Pools



SKETCH
- of -
N.E. RIVER



NORTH WEST BROOK

Location: 46°45'40" N. 53°23'30" W. Trepassey Harbour,
Trepassey Bay.

Map Reference: Biscay Bay River, 1 L/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 68.7 miles² (177.93 km²). Mean width, 3.5 miles
(5.63 km).

Perimeter, 57.8 miles (93.00 km). Axial length, 18.7 miles
(30.08 km).

Maximum basin relief, 850 feet (259.08 m).

Geology: Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Mean width 90 feet (27.43 m), mean depth 13 inches (0.33 m).

Velocity - fast.

Bottom type:

Bottom composition consists mainly of rubble with a fair amount of
boulder interspersed throughout the main stem. Not great amount of
good spawning area on main stream.

Barriers to Fish Migration on the Main Stream:

Rapids-falls at mile 1 (1.61 km). Height: 4 feet (1.21 m). Slope: 65°.
Partial obstruction at low water.

Falls at mile 1.1 (1.76 km). Height: 2 drops, 4 feet (1.21 m) each.
Length: 30 feet (9.14 m). Slope: 45°. Partial obstruction.

Falls at mile 1.3 (2.09 km). Height: 12 feet (3.65 m). Slope: 90° on
one side, 45° on other side. Partial obstruction.

Falls at mile 1.5 (2.40 km). Height: 10 feet (3.04 m). Length: 20 feet (6.05 m). Slope: 45°. Partial obstruction.

Falls at mile 1.6 (2.57 km). Height: 5 feet (1.52 m). Length: 15 feet (4.56 m). Slope: 45°. Partial obstruction.

Falls at mile 1.8 (2.89 km). Height: 20 feet (6.09 m). Length: 40 feet (12.18 m). Slope: 45°. Partial obstruction.

Falls at mile 9 (14.48 km). Consisting of 4 drops and rapids.

Height: 2 to 6 feet (0.6 - 1.82 m). Slope: 45,. Partial obstruction.

Dam at mile 17 (27.35 km); rock-clay fill; complete obstruction.

Stream improvements for Fisheries purposes:

In 1963 Rock cutting - a waterfall by-pass "run around" with a series of resting pools was blasted from one side of the falls at mile 2 on the main river.

NORTH WEST RIVER

Trepassey Bay

Location—

At the bottom of Trepassey Bay at the south end of the Peninsula of Avalon.

Season—

June and July are the best months.

General Remarks—

A road runs on the west side of the river and from this road the various pools are of easy access. The river can be fished daily, staying at Trepassey.

Tributaries:

Ambies Brook	1K/14
Beaton Brook	1K/14
Mars Brook	1K/14
Tochers Brook	1K/14
Mount Misery River	1K/14

Notes:

Now Northwest River.	1K/14
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Pools:

Rennies Pool, Winter's Pool, Walsh's Pool, Sandy Pool, Ladder Pool, Allardyce Falls Pool, Lady Allardyce Falls Pool, Governor Allardyce's Pool

OF

Father Bourne's Well

Falls (1 1/2 miles)

Governor Allordyce's Pool

Lady Allardyce's
Falls.
Pool

Allardyce
Falls
Pool (1 mile)

Ladder
Pool

Sandy Pool

(1/2 mile)
Walsh's
S Pool

Winter's Pool

*Rennies
Pool*

To St Mary's Bay.

To Trepassey

TREPASSEY BAY

MAGNETIC NORTH →

BROOM RIVER

Location: 46°42'10" N. 53°25'00" W. Trepassey Harbour.

Map Reference: Trepassey, 1 K/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 7.02 miles² (18.3 km²). Mean width, 1.8 miles (2.89 km).

Perimeter, 12.0 miles (19.30 km). Axial length, 4.1 miles (6.59 km).

Maximum basin relief, 648 feet (197.51 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

ST. SHOTT'S RIVER

Location: 46°37'55" N. 53°35'40" W. St. Shott's, St. Mary's Bay.
Map Reference: St. Shott's, 1 K/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 37.5 miles² (97.12 km²). Mean width, 3.1 miles (4.98 km).

Perimeter, 36.1 miles (58.08 km). Axial length, 12.6 miles (20.27 km).

Maximum basin relief, 650 feet (190.12 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Section: Main River mile 0 to mile 3 (4.82 km). Mean width: 45 feet (13.71 m). Mean Depth: 1.0 feet (0.31 m). Velocity: Slow.

Spawning Area:

Section: Main River from mile 0 to mile 3 (4.82 km). Frequent gravel patches ideal for spawning throughout this section.

Barriers to Fish Migration:

Falls at mile 2.5 (4.02 km). Height: 8 feet (2.43 m). Length: 10 feet (3.04 m). Slope: 80°. Partial obstruction.

Falls at mile 3.5 (5.63 km). Height: 5 feet (1.52 m). Slope: 90°. Partial obstruction.

Falls at mile 3.5 (5.63 km). Height: 6 feet (1.82 m). Length: 10 feet (3.04 m). Slope: 80°. Partial obstruction.

Falls at mile 4 (6.43 km). Two drops with small pool between. First drop height 9 feet (2.74 m). Length: 12 feet (3.65 m). Slope: 70°.

Second drop height 8 feet (2.43 m). Slope 90°. Complete obstruction at low water.

Falls at mile 7 (11.26 km). Two drops with small pool between. Height 8 feet (2.43 m) and 7 feet (2.13 m). Slope: 90°; complete obstruction at low water.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout.

No angling data available on this stream.

ST. SHORES RIVER

Location: 46°39'47" N. 53°37'40" W. St. Mary's Bay.

Map Reference: St. Shott's, 1 K/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.3 miles² (21.49 km²). Mean width, 1.4 miles (2.25 km).

Perimeter, 16.1 miles (25.90 km). Axial length 7.0 miles (11.26 km).

Maximum basin relief, 620 feet (188.97 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

PETER'S RIVER

Location: 46°45'28" N. 53°36'40" W. St. Mary's Bay.
Map Reference: St. Mary's. 1 K/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 55.5 miles² (143.74 km²). Mean width, 3.4 miles (5.47 km).
Perimeter, 51.8 miles (83.34 km). Axial length, 20.7 miles (33.26 km).
Maximum basin relief, 850 feet (259.08 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Above Peter's Pond, mean width 45 feet (13.71 m), mean depth 0.9 feet (0.27 m).

Barriers to Fish Migration:

Shifting gravel beach frequently blocks mouth of river. Extensive shallow areas appear during periods of low flow.

Falls at mile 0.25 (6.4 km), above Laden field tributary. Height: 10 feet (3.04 m); falls sloping; partial obstruction.

2.5 miles (4.02 km) of suitable rearing area available for salmon above the obstruction. A number of salmon redds were observed above the falls in 1969.

DEER RIVER

Location: $46^{\circ} 48' 55''$ N. $53^{\circ} 35' 58''$ W. Holyrood Pond, St. Mary's Bay.

Map Reference: St. Mary's. 1 K/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 8.5 miles² (22.01 kilometers²). Mean width, 1.4 miles (2.25 kilometers).

Perimeter, 14.6 miles (23.49 kilometers). Axial length, 5.7 miles (9.17 kilometers).

Maximum basin relief, 500 feet (152.40 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

CROSSING PLACE RIVER

S-28-0105

Location: 46° 55' 45" N. 53° 27' 50" W. Holyrood Pond, St. Mary's Bay.

Map Reference: Biscay Bay River. 1 K/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 83.4 miles² (216.00 kilometers²). Mean width, 4.5 miles, (7.24 kilometers).

Perimeter, 57.2 miles (92.03 kilometers). Axial length, 15.8 miles, (25.42 kilometers).

Maximum basin relief, 850 feet (259.08 meters).

Geology:

Almost entirely Precambrian sedimentary with some Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls, 3 miles (4.82 kilometers) upstream from Holyrood Pond; partial obstruction.

FISH POPULATIONS

Species Present: brook trout.

No angling data available on this stream.

MALL BAY BROOK

Location: $46^{\circ} 59' 35''$ N. $53^{\circ} 34' 10''$ W.

Map Reference: St. Mary's. 1 K/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 9.1 miles² (23.56 kilometers²). Mean width, 1.8 miles (2.89 kilometers).

Perimeter, 16.3 miles (26.22 kilometers). Axial length, 5.5 miles (8.84 kilometers).

Maximum basin relief, 627 feet (191.10 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LITTLE HARBOUR RIVER

Location: 47°08'00" N. 53°28'40" W. Salmonier Arm, St. Mary's Bay.

Map Reference: St. Catherine's. 1 N/3W.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 71.2 miles² (184.40 km²). Mean width, 4.8 miles (7.72 km).
Perimeter, 54.7 miles (88.01 km). Axial length 16.9 miles (27.19 km),
7 miles of which are standing water.
Maximum basin relief, 800 feet (243.84 m).

Geology:

Predominantly Precambrian sedimentary with some Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 0.5 (.80 km). Height: 15 feet (4.57 m). Slope 90°. Complete obstruction.

Falls at mile 1.5 (2.40 km). Height: 40 to 50 feet (12.19-15.24 m). Slope 90°. Complete obstruction.

Several other smaller falls from 2 to 4 feet (0.60-1.20 m) are located along the main stream. However, these are not considered serious obstructions.

SALMONIER RIVER

Location: 47°10'40" N. 53°24'15" W. Salmonier, St. Mary's Bay.
Map Reference: St. Catherine's. 1 N/3W.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 99.2 miles² (256.92 km²). Mean width, 6.3 miles (10.13 km).

Perimeter, 61.6 miles (99.11 km). Axial length, 16.8 miles (27.03 km).

Maximum basin relief, 1,050 feet (320.04 m).

Geology:

Predominantly Precambrian sedimentary with some Precambrian volcanic and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Governor's Falls at mile 4 (6.4 km). First drop height: 4 feet (1.21 m).

Second drop height: 5 feet (1.52 m). Partial obstruction.

Pinsent's Falls at mile 5 (8.04 km). First drop height 4.5 feet (1.37 m).

Second drop height: 5 feet (1.52 m). Partial obstruction.

Butler's Falls at mile 8 (12.9 km). Height: 8.5 feet (2.59 m). Partial obstruction.

Murphy's Falls at mile 9 (14.5 km). Height: 5 feet (1.52 m). Partial obstruction.

Metcalf's Falls, location unavailable: 1971, increased water flow by blasting at centre run at top of falls. Removed two large boulders from pool below falls and a boulder at hangup below falls.

SALMONIER RIVER

Location—

At the bottom of St. Mary's Bay, Avalon Peninsula.

Season—

Good fishing can be had on this river from end of June till close of season.

General Remarks—

The motor road from Holyrood follows the course of this river from its mouth for approximately 10 miles, making the various pools of easy access. Motor cars can be hired at either St. John's or Holyrood. This river being in close proximity to St. John's by motor car, many local anglers visit its various pools during the season. Salmon ranging in weight from 5 to 15 lbs. are caught in abundance.

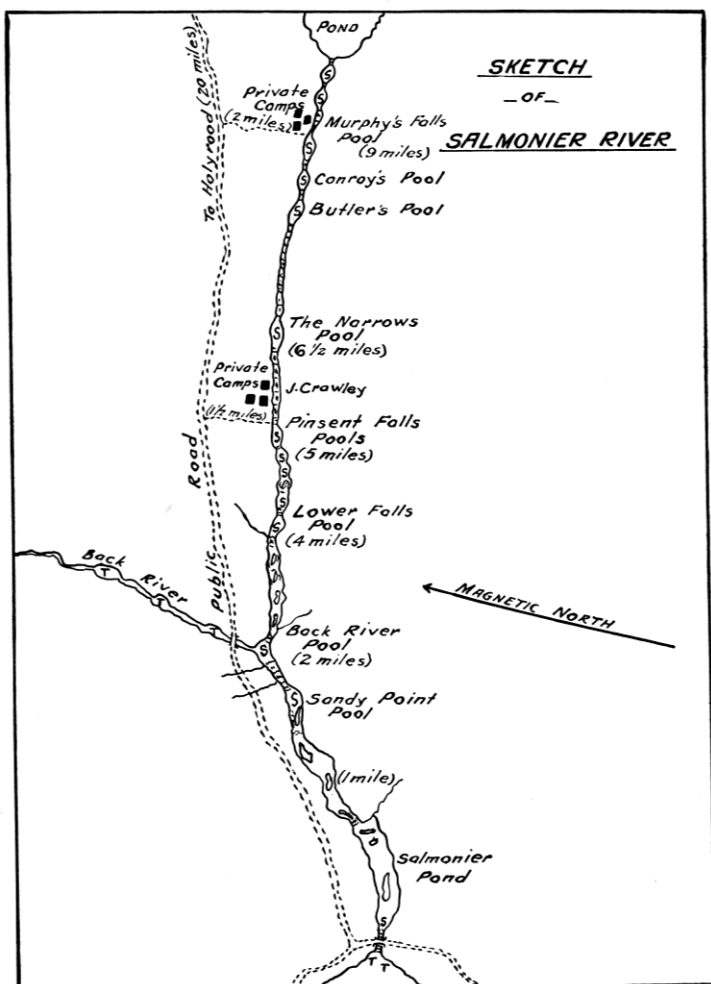
Tributaries:

Back River 1N/3

Pools:

Sandy Point Pool, Back River Pool, Lower Falls Pool, Pinsent's Falls Pools, The Narrows Pool, Butler's Pool, Conroy's Pool, Murphy's Pool





HARICOT RIVER

Location: 47°10'37" N. 53°31'30" W. Haricot Bay, St. Mary's Bay.
Map Reference: Placentia. 1 N/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 10.7 miles² (27.71 km²). Mean width, 1.9 miles (3.05 km).

Perimeter, 17.8 miles (28.64 km). Axial length, 6.2 miles (9.97 km).

Maximum basin relief, 650 feet (198.12 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

COLINET RIVER

Location: 47°13'10" N. 53°33'08" W. Colinet Harbour, St. Mary's Bay.

Map Reference: Placentia. 1 N/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 61.1 miles² (158.24 km²). Mean width, 3.7 miles (5.95 km).

Perimeter, 42.2 miles (67.89 km). Axial length, 15.2 miles (24.45 km).

Maximum basin relief, 550 feet (167.64 m).

Geology:

Precambrian sedimentary.

Vegetational Cover:

Abundant spruce and fir alternating with bog.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River:

Mean channel width, 70 feet (21.33 m). Mean channel depth, 1.2 feet (0.37 m).

Velocity, moderately swift.

Bottom type:

Mixture of coarse and fine gravel with some large stones.

Spawning Areas: Various sections throughout the river.

Barriers to Fish Migration: None observed.

COLINET RIVER

Location—

At the bottom of St. Mary's Bay at the south end of the Peninsula of Avalon.

Season—

From 15th June till the end of August.

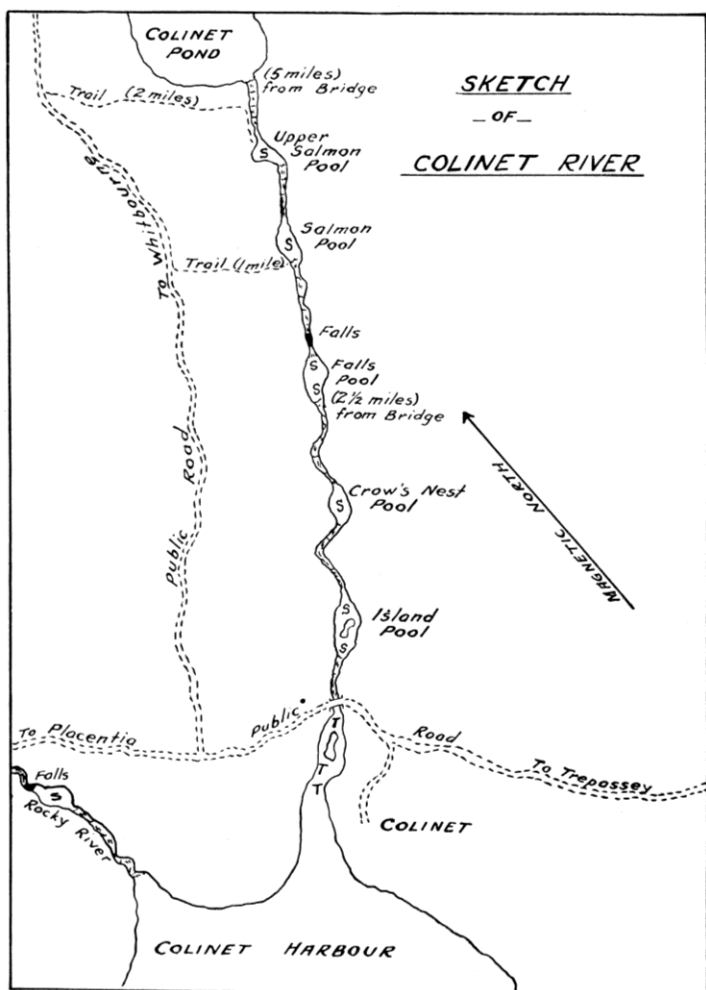
General Remarks—

This river is readily accessible from the main road to Whitbourne, which parallels the river on its north side. A fine run of salmon, up to 15 lbs. in weight, and sea trout frequent this river. The town of Colinet is at the river's mouth, and from here the river can be fished daily. The river is 14 mile from Whitbourne.

Pools:

Island Pool, Crow's Nest Pool, Falls Pool, Salmon Pool, Upper Salmon Pool





ROCKY RIVER

Location: $47^{\circ} 13' 05''$ N. $53^{\circ} 33' 50''$ W. Colinet Harbour, St. Mary's Bay.

Map Reference: 1 N/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 114.3 miles² (296.03 kilometers²), Mean width, 4.7 miles (7.56 kilometers).

Perimeter, 105.7 miles (170.07 kilometers). Axial length, 23.0 miles (37.00 kilometers).

Maximum basin relief, 1,000 feet (304.80 meters).

Geology:

Almost entirely Precambrian sedimentary with some Cambrian Sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Section: Upstream from mouth to Whitbourne area.

Average width 100 ft. (30.48 meters). Average depth, 0.8 feet (.30 meters).

Velocity, moderately swift.

Section: Ocean Pond at headwaters of Rocky River.

Max. length, 4.0 miles (6.43 kilometers). Mean length, 3.2 miles (5.14 kilometers).

Max. width, 0.4 miles (.6 kilometers). Mean width, 0.32 miles (.5 kilometers).

Max. depth, 32 feet (9.75 meters). Mean depth, 14.9 feet (4.54 meters).

Area, 1.6 sq. miles (4.14 sq. kilometers).

Bottom Type:

The river has a predominantly rubble bottom with all other types well represented and well interspersed.

Spawning Areas:

Along entire main river many areas appear suitable for salmonid spawning.

Barriers to Fish Migration:

Falls at mouth of main river; complete obstruction.

Concrete fishway built in 1940 by F.R.B.C. Fishway apparently did not work. No salmon have been observed using fishway or above the falls. Fishway is partially fallen down. There are no plans to repair it.

Falls a few hundred feet from mouth of river; partial obstruction at normal water levels.

FISH POPULATIONS

Species Present: Brook trout, and ouananiche. No run of anadromous fish.

No angling data available.

NORTH HARBOUR RIVER

Location: 47°11'20" N. 53°37'30" W. North Harbour, St. Mary's Bay.
Map Reference: Placentia. 1 N/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 28.0 miles² (72.52 km²). Mean width, 3.8 miles (6.11 km).

Perimeter, 27.1 miles (43.60 km). Axial length, 8.0 miles (12.87 km).

Maximum basin relief, 842 feet (256.64 m).

Geology:

Almost entirely Precambrian sedimentary with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Gull Pond Brook, Tributary of North Harbour River.

Falls approximately 0.5 miles (0.80 km) below Burin Peninsula Highway Bridge. In 1972, rock blasted at top of falls and water confined at rapids above falls.

NORTH HARBOUR RIVER

St. Mary's Bay

Location—

At the bottom of St. Mary's Bay at south end of the Peninsula of Avalon.

Season—

15th July to the end of season.

General Remarks—

This river contains many fine salmon and trout pools, all of which are accessible. The run of salmon up to 15 lbs. in weight is abundant. The river can also be reached from Colinet, by the use of a motor boat, the run being about 18 miles.

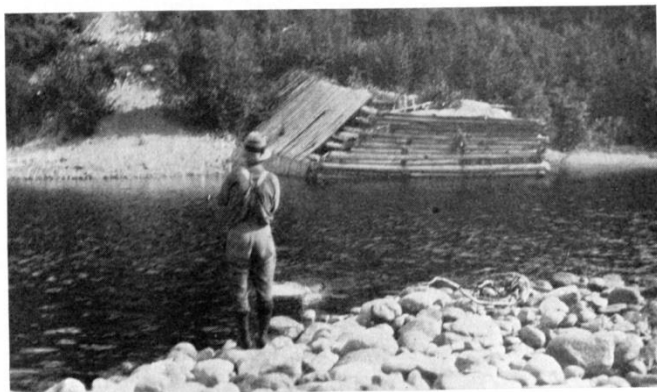
Tributaries:

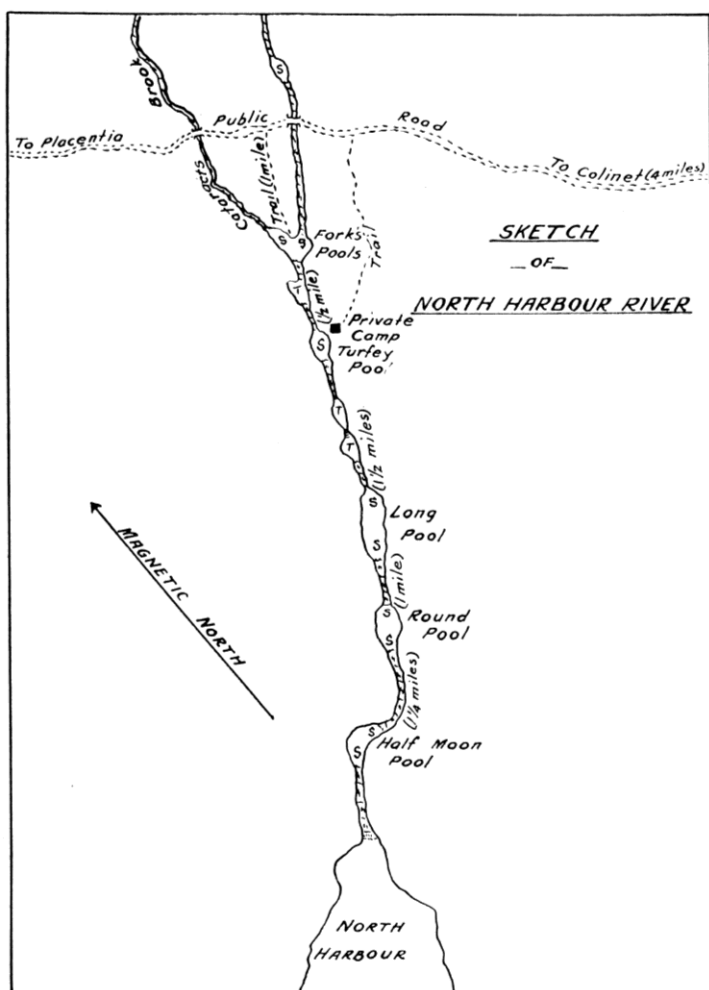
Cataract Brook

1N/4

Pools:

Half Moon Pool, Round Pool, Long Pool, Turfey Pool, Forks Pools





FLINN RIVER

Location: 47° 09' 40" N. 53° 39' 15" W. North Harbour, St. Mary's Bay..

Map Reference: Placentia. 1 N/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.9 miles² (12.69 kilometers²). Mean width, 1.3 miles (2.09 kilometers).

Perimeter, 13.3 miles (21.39 kilometers). Axial length, 4.3 miles (6.91 kilometers).

Maximum basin relief, 842 feet (256.64 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration.

LITTLE SALMONIER RIVER

Location: 47°02'20" N. 53°45'00" W. St. Mary's Bay.
Map Reference: Placentia. 1 N/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 47.4 miles² (122.76 km²). Mean width, 2.3 miles (3.70 km).

Perimeter, 53.3 miles (85.75 km). Axial length, 20.7 miles (33.30 km).

Maximum basin relief, 950 feet (289.56 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: Mean channel width, 60 feet (3.93 m). Mean channel depth, 18 inches (.45 m).

Spawning Areas: Abundant throughout.

Barriers to Fish Migration:

Falls at mile 0 of river. Three vertical drops. 2, 3 and 2 feet (0.6, 0.9, 0.6 m) high. Total length 20 feet (6.09 m). Partial obstruction at low water.

Falls, 50 feet (15.24 m) from mouth. Height: 12 feet (3.65 m). Length: 40 feet (12.19 m). Slope: 45°. Partial obstruction at low water.

Three falls, at mile 2.5 (4.02 km). Height: 15, 8 and 4 feet (4.57, 2.43 1.21 m). Total length: 100 feet (30.48 m). Slope: 45°-60°.

Blasting carried out in 1956. Reports indicate channel working well.

Falls at mile 5.5 (8.88 km). Height in three drops: 7, 3 and 4 feet (2.13, 0.9, 1.21 m). Total length 100 feet (30.48 m). Slope: 45°. Partial obstruction, no work required.

Falls at mile 6 (9.65 km). Height: 4 feet (1.21 m). Length: 70 feet (21.33 m). Slope 30°. Partial obstruction.

LITTLE SALMONIER RIVER

Location—

This river is on the west side of St. Mary's Bay, at the south end of the Avalon Peninsula, and is about 15 miles from Salmonier.

Season—

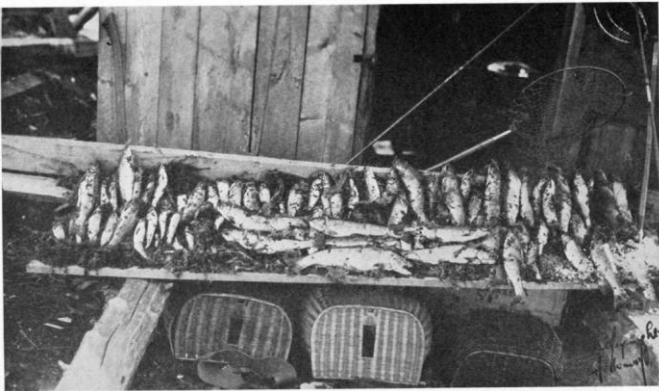
15th July till 15th August is the best time.

General Remarks—

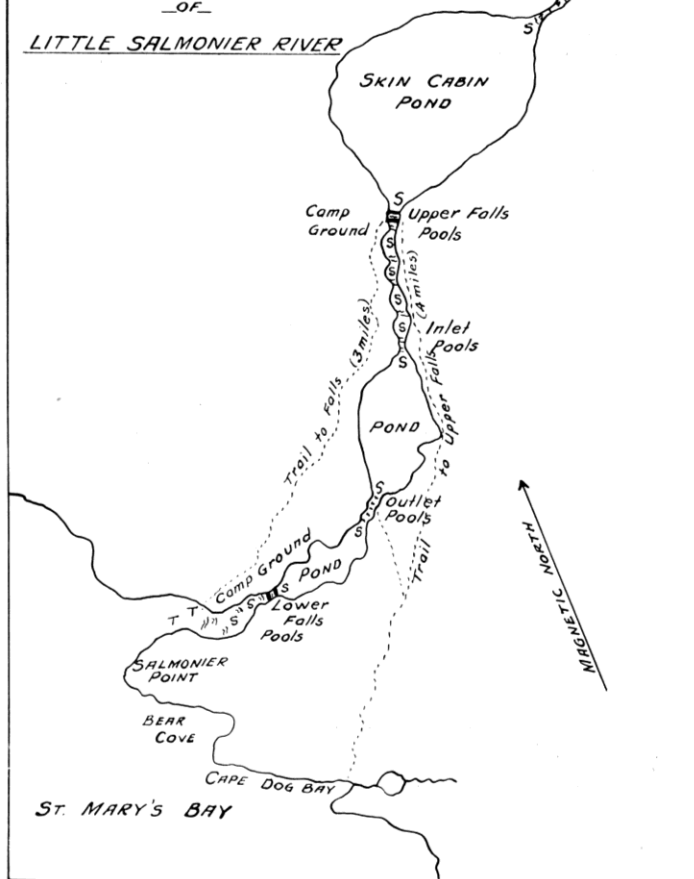
This river offers good fishing within a short distance of its mouth. Splendid sea trout fishing can be had in the ponds. Good trails run from the sea to the upper falls. Camping sites are present alongside the various pools and ponds.

Pools:

Lower Falls Pools, Outlet Pools, Inlet Pool, Upper Falls Pools



SKETCH
OF
LITTLE SALMONIER RIVER



BIG BARACHOIS RIVER

Location: 47°03'03" N. 53°46'35" W. St. Mary's Bay.
Map Reference: Placentia. 1 N/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 31.9 miles² (82.62 km²). Mean width, 4.3 miles
(6.91 km).

Perimeter, 24.7 miles (39.74 km). Axial length, 7.2 miles
(11.58 km).

Maximum basin relief, 850 feet (259.08 m).

Geology:

Precambrian sedimentary.

Vegetational Cover:

Some large timber among small scrub spruce.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

West Branch: Mean width: 25 feet (7.62 m). Mean depth: 0.8 feet
(0.24 m). Velocity: Fast.

East Branch: Mean width: 30 feet (9.14 m). Mean depth: 0.8 feet
(0.24 m). Velocity: fast.

Upper section: Mean width 14 feet (4.3 m). Mean depth: 1.1 feet
(0.34 m).

Spawning Areas: East Branch: Good sections of spawning gravel for salmon
and trout above Barachois Pond and in upper sections of the river.

Barriers to Fish Migration:

LITTLE BARACHOIS RIVER

Location: 47°00'55" N. 53°47'50" W. Little Barachois,
St. Mary's Bay.
Map Reference: Placentia, 1 N/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 19.3 miles² (49.98 km²). Mean width, 3.2 miles
(5.14 km).
Perimeter, 22.4 miles (36.04 km). Axial length, 6.1 miles
(9.81 km).
Maximum basin relief, 950 feet (289.56 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 1.5 (2.41 km). Height: 25 feet (7.62 m). Length: 200
feet (60.96 m). Considered a complete obstruction.
Two falls at mile 3.5 (5.63 km). Height: 2 feet and 3 feet (0.6 and
0.9 m). Slope: 60° and 45°. Partial obstruction.

FISH POPULATIONS

Species Present: Atlantic salmon, sea trout.

No angling data available on this stream.

RED HEAD RIVER

Location: 46°45'45" N. 53°51'50" W. St. Mary's Bay.
Map Reference: St. Mary's. 1 K/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 27.3 miles² (70.70 km²). Mean width, 3.8 miles (6.11 km).

Perimeter, 22.4 miles (36.04 km). Axial length, 6.6 miles (10.61 km).

Maximum basin relief, 850 feet (259.08 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 1.25 (2.01 km). Height: 60 feet (18.28 m). Slope: 80°. Complete obstruction.

Falls at mile 3.5 (4.57 km). Height: 15 feet. Slope: 80°. Complete obstruction.

Looney's River, tributary of Red Head River, has 17 falls, 3 are complete obstructions.

BECKFORD RIVER

Location: 46°53'10" N. 53°55'15" W. Near Branch, St. Mary's Bay.

Map Reference: St. Mary's. 1 K/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 16.6 miles² (42.99 km²). Mean width, 2.1 miles (3.37 km).

Perimeter, 20.5 miles (32.98 km). Axial length, 7.2 miles (11.58 km).

Maximum basin relief, 750 feet (228.60 m).

Geology:

Almost entirely Cambrian sedimentary with some Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: None.

BRANCH RIVER

Location: 46°53'15" N. 53°58'05" W. Branch, St. Mary's Bay.
Map Reference: St. Mary's. 1 K/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 45.6 miles² (118.10 km²). Mean width, 3.1 miles (4.98 km).

Perimeter, 44.6 miles (71.76 km). Axial length, 14.0 miles (22.52 km).

Maximum basin relief, 850 feet (259.08 m).

Channel Characteristics:

Mile 0-10 (16.09 km). Mean width: 70 feet (21.33 m). Mean depth: 1.5 feet (0.45 m). Velocity: fast.

Mile 10 - headwaters. Mean width: 25 feet (7.62 m). Mean depth: 1.2 feet (0.35 m). Velocity: fast.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 5.5 (8.84 km). Height: 8 feet (2.43 m). Width: 3 feet (0.91 m) gorge. Slope: 45°. Partial obstruction. Gorge may be a prime poaching area.

Several small falls and rapids at various points along river. Not considered serious obstructions.

LANCE RIVER

Location: 46°48'25" N. 53°04'15" W. Lance Cove.

Map Reference: St. Bride's. 1 L/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 20.4 miles² (52.83 km²). Mean width, 2.7 miles (4.34 km).

Perimeter, 25.8 miles (41.51 km). Axial length, 8.0 miles (12.87 km).

Maximum basin relief, 500 feet (152.40 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

CUSLETT BROOK

Location: 46°57'25" N. 54°10'10" W. Placentia Bay.
Map Reference: St. Bride's. 1 L/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 13.9 miles² (36.00 km²). Mean width, 2.9 miles
(4.66 km).

Perimeter, 17.4 miles (27.99 km). Axial length, 5.0 miles
(8.04 km).

Maximum basin relief, 800 feet (243.84 m).

Geology:

About equal amounts of Cambrian sedimentary and Precambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GREAT BARASWAY BROOK

Location: 47°07'40" N. 54°04'00" W. Great Barasway,
Placentia Bay.

Map Reference: Ship Cove. 1 M/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 26.2 miles² (67.85 km²). Mean width, 3.4 miles
(5.47 km).

Perimeter, 25.4 miles (40.86 km). Axial length, 8.9 miles
(14.32 km).

Maximum basin relief, 950 feet (289.56 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LT. BARACHOIS RIVER

Location: 47°10'55" N. 54°02'40" W. Placentia Bay.

Map Reference: Ship Cove. 1 M/1 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.1 miles² (39.10 km²). Mean width, 2.4 miles (3.86 km).

Perimeter, 17.9 miles (28.80 km). Axial length, 7.1 miles (11.42 km).

Maximum basin relief, 700 feet (213.36 m).

Geology:

About equal amounts of Precambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SOUTH EAST RIVER

Location: 47°13'15" N. 53°54'35" W. South East Arm,
Placentia Bay.

Map Reference: Placentia. 1 N/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 54.1 miles² (140.11 km²). Mean width, 3.5 miles
(5.63 km).

Perimeter, 51.7 miles (83.18 km). Axial length, 13.5 miles
(21.72 km).

Maximum basin relief, 1,000 feet (304.80 m).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 6 (9.66 km) on the main river. Fish by-pass, "run around",
blasting to ensure easy passage at low water levels.

Beaver Falls River, tributary of South East River in 1953 series of
pools blasted in Beaver Falls, works well but more blasting required.

SOUTH EAST RIVER, PLACENTIA

Location—

At the bottom of South East Arm of Placentia, in Placentia Bay.

Season—

From 20th June till 15th August.

General Remarks—

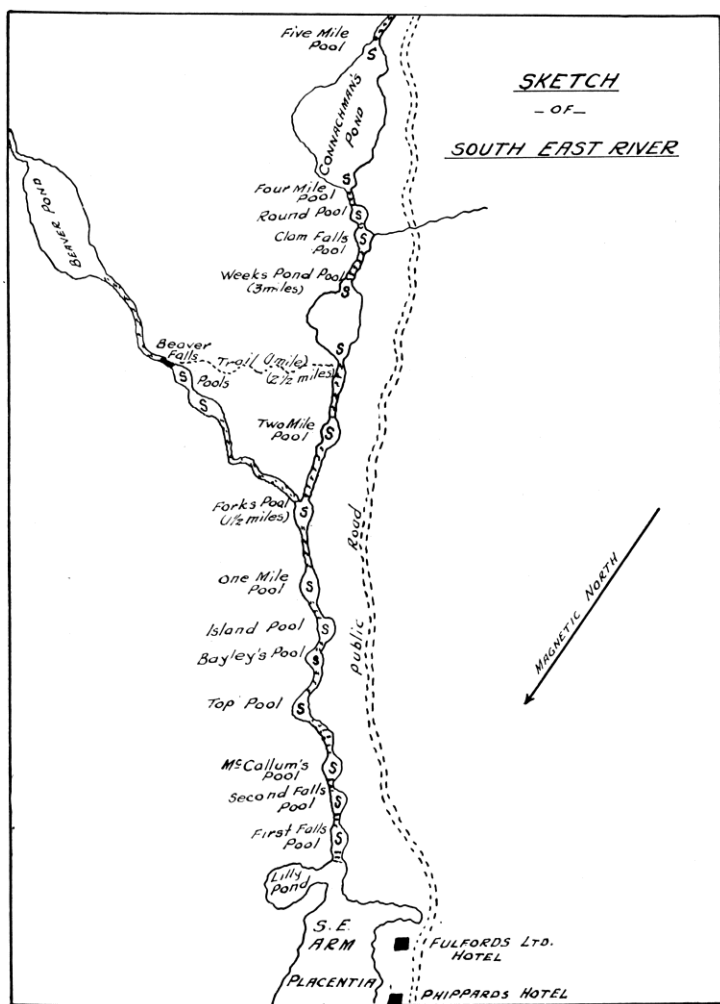
The motor road parallels the river for 10 or 12 miles and as the fish move upstream they can be followed with ease. There are many splendid pools, and in the beginning of the season the lower pools are within 5 minutes' walk of the hotels at South East Arm. Good sea trout fishing can be obtained.

Tributaries

Clam River	1N/4
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Pools:

First Falls Pool, Second Falls Pool, McCallum's Pool, Top Pool, Bayley's Pool, Forks Pool, Two Mile Pool, Weeks Pond Pool, Clam Falls Pool, Round Pool, Four Mile Pool, Five Mile Pool



NORTH EAST RIVER

Location: 47°16'15" N. 53°50'52" W. Placentia, Placentia Bay.
Map Reference: Argentina. 1 N/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 36.2 miles² (93.75 km²). Mean width, 2.2 miles (3.53 km).

Perimeter, 40.2 miles (64.68 km). Axial length, 14.6 miles (23.50 km).

Maximum basin relief, 1,000 feet (304.80 m).

Geology:

Almost entirely Precambrian sedimentary with some Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Sections: from mouth of river to headwaters.

Average width; 40 feet (12.19 m). Average depth; one foot (0.30 m).

Number of pools; 2. Bottom type: Rock and gravel.

Barriers to Fish Migration:

On main river, falls at mile 6 (9.65 km). Height: 21 feet (6.40 m).

In 1955, three pools were blasted in falls. In 1965 six concrete baffles were placed in the falls. These baffles with the aid of the natural rock sides formed pools. A counting fence was operated in 1968 above the fishway for two weeks and 68 fish were counted through the trap. Indications are that this fishway is working quite well. 1972, ledgerrock was blasted above falls to confine more water over baffles.

NORTH EAST RIVER, PLACENTIA

Location—

At the bottom of North East Arm of Placentia, in Placentia Bay.

Season—

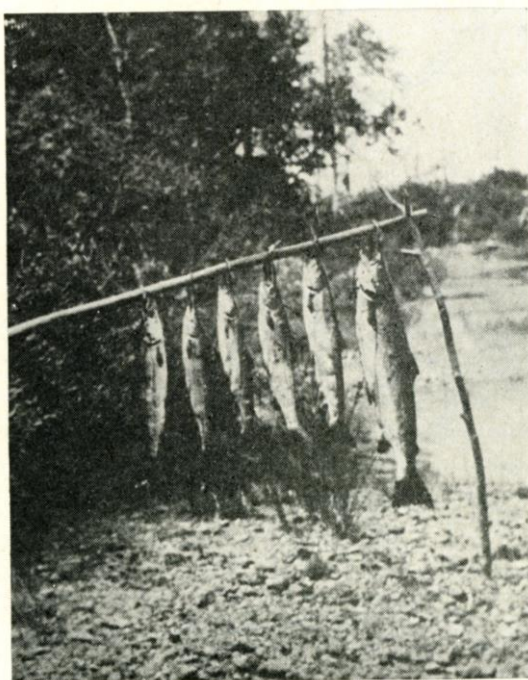
From 10th July till the end of the season.

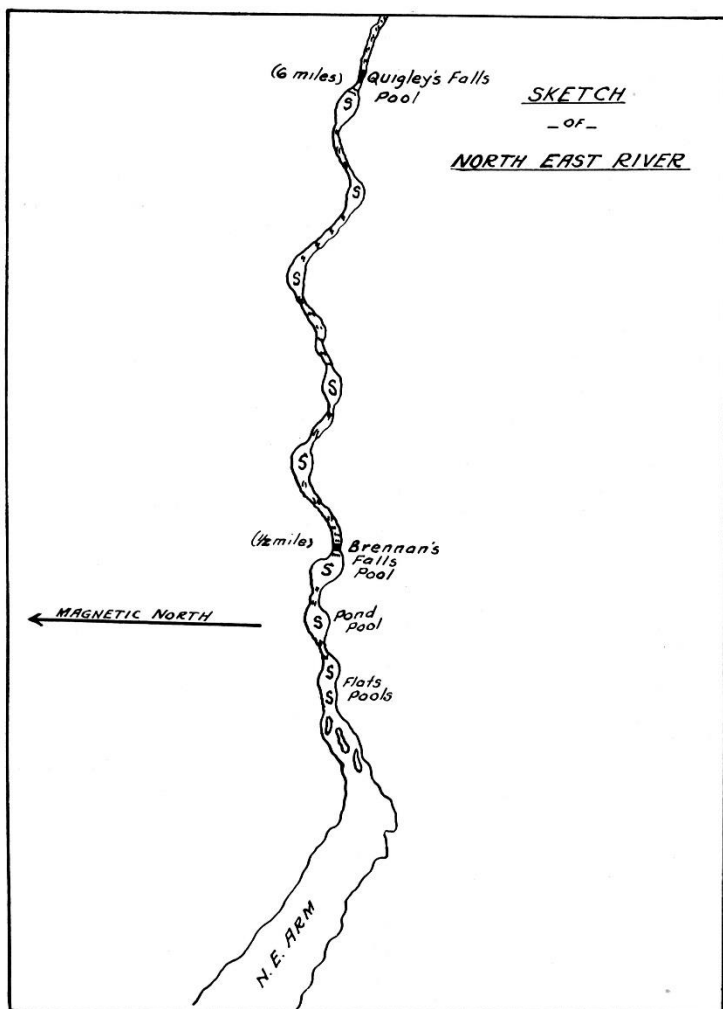
General Remarks—

The river flows through flat country. Brennan's and Quigley's Falls are noted pools. The headwaters run back to the railway near Placentia Junction. Salmon up to 10 lbs. in weight are abundant. There is also good sea trout fishing.

Pools:

Flats Pools, Pond Pool, Brennan's Falls Pool, 4 unnamed pools, Quigley's Falls Pool





SHALLOWAY POND BROOK

Location: 47° 17' 43"N 53° 54' 20W. Shalloway Cove, Placentia Sound.

Map Reference: Argentia. 1 N/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Geology:

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls between first and second ponds; complete obstruction.

FISH POPULATIONS

Species Present: Arctic char, rainbow trout.

No angling data available on this stream.

PLACENTIA SOUND RIVER

Location: $47^{\circ} 18' 25''$ N. $53^{\circ} 52' 05''$ W. Placentia Sound,
Placentia Bay.

Map Reference: Argentia. 1 N/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 13.0 miles², (33.67 kilometers²). Mean width, 1.8 miles,
(2.89 kilometers).

Perimeter, 18.5 miles, (29.76 kilometers). Axial length, 6.7 miles,
(10.78 kilometers).

Maximum basin relief, 850 feet, (259.08 meters).

Geology:

About equal amounts of Cambrian sedimentary and Precambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls 15 feet (4.57 meters), high at mile point 1 (1.60 kilometers),
on the main river; complete obstruction.

Miscellaneous Information:

A small number of salmon run in this river.

SHIP HARBOUR BROOK

Location: 47° 21' 03" N. 53° 52' 30" W. Placentia Bay

Map Reference: Argentina. 1 N/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 13.1 miles² (33.92 kilometers²). Mean width, 1.7 miles (2.73 kilometers).

Perimeter, 22.4 miles (36.04 kilometers). Axial length, 8.2 miles (13.19 kilometers). Maximum basin relief, 800 feet (243.84 meters).

Geology:

About half Precambrian sedimentary with the remainder consisting of Precambrian volcanic and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migrations:

Section: Main river from mouth to mile point 2, (3.21 kilometers). Several rapids and small falls, partial obstruction.

LITTLE RATTLING BROOK

Location: 47° 22' 40" N. 53° 52' 40" W. Ship Harbour,
Placentia Bay.

Map Reference: Argentia. 1 N/5 West half.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Dimensions:

Length of main river: 1 mile, (1.60 kilometers).

Average channel width: 30 feet, (9.14 meters).

Barriers to Fish Migrations:

Falls at mile point 0.5 (0.8 meters), on the main river;
complete obstruction.

FISH POPULATIONS

Species Present:

No angling data available on this stream.

MATURIN BROOK

Location: $47^{\circ} 25' 42''$ N. $53^{\circ} 49' 50''$ W. Placentia Bay.

Map Reference: Argentia. 1 N/5 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 9.5 miles² (24.60 kilometers²). Mean width, 1.5 miles, (2.41 kilometers).

Perimeter, 17.5 miles (28.15 kilometers). Axial length, 7.0 miles, (11.26 kilometers).

Maximum basin relief, 800 feet (243.84 meters).

Geology:

Almost entirely Precambrian sedimentary with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FISH POPULATIONS

Species Present:

No angling data available on this stream.

COME-BY-CHANCE

Location: 47°50'40" N. 53°59'25" W.
Map Reference: Sunnyside. 1 N/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors

Basin area, 24.7 miles² (63.97 km²). Mean width, 2.3 miles (3.70 km).

Perimeter, 32.0 miles (51.48 km). Axial length, 10.7 miles (17.21 km).

Maximum basin relief, 900 feet (274.32 m).

Geology:

Predominantly Precambrian sedimentary with some Cambrian sedimentary, acidic intrusive rocks and intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: Range of channel width; 30-200 feet (9.14-60.96 m).

Range of channel depth; 3-4 feet (0.9-1.21 m). Water velocity range; sluggish - rapid. Bottom types: (% of total length).

Rubble 25%; boulders 20%; gravel 40%, sand 10%; mud 5%.

Barriers to Fish Migration:

No serious obstructions.

Miscellaneous Information:

The absence of suitable tributaries for rearing areas; wide fluctuations in water levels and limited spawning areas, indicate limited salmon producing potential. Most of the daily flow from the basin will be used by a proposed pulp and paper industry. Not utilized yet (1974).

COME-BY-CHANCE RIVER

Location—

At the bottom of Placentia Bay.

Season—

July and August are the best months.

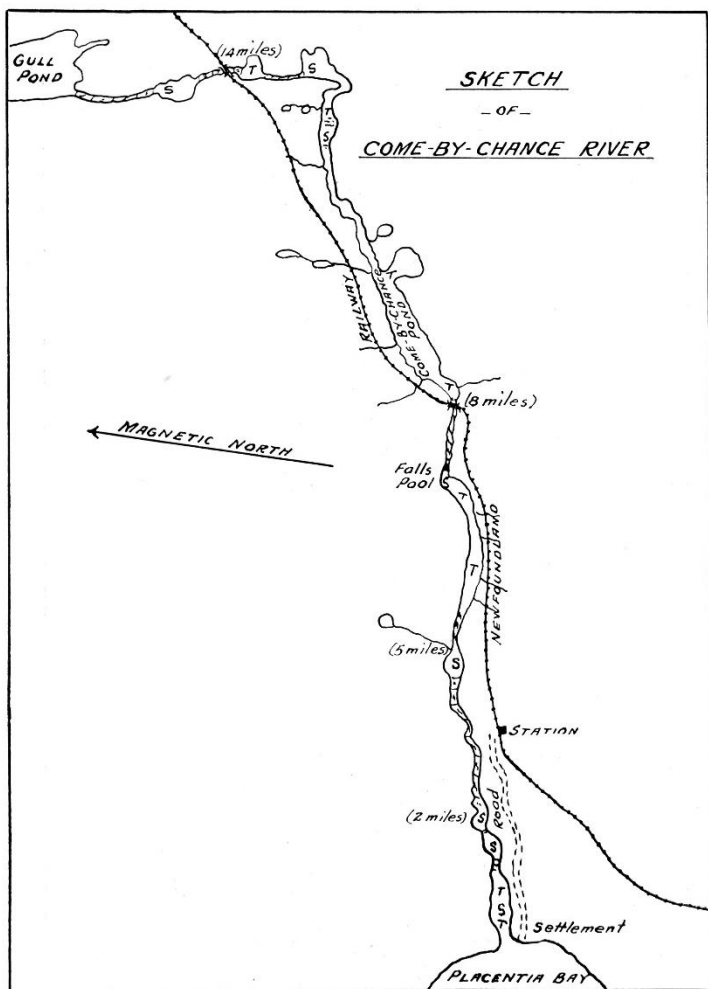
General Remarks—

A fine river for sea trout and medium salmon is easily accessible from the railway which follows the valley for 10 miles.

Pools:

4 unnamed pools, Falls Pool, 6 unnamed pools





NORTH HARBOUR RIVER

Location: 47°52'52" N. 54°04'45" W. North Harbour,
Placentia Bay.

Map Reference: Sound Island. 1 M/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 37.1 miles² (96.08 km²). Mean width, 3.9 miles
(6.27 km).

Perimeter, 28.8 miles (46.33 km). Axial length, 9.0 miles
(14.48 km).

Maximum basin relief, 950 feet (289.56 m).

Geology:

Predominantly Precambrian sedimentary with some Cambrian sedimentary, acidic intrusive rocks and intermediate intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Section: from mouth to headwaters.

Width range: 25 to 150 feet (7.62 - 45.72 m). Depth range: 1 to
2 feet, (0.3-0.6 m).

Water velocity range: sluggish to medium.

Bottom types: by per cent; Bedrock: 10%, boulder 45%, rubble 40%,
sand 1%, mud 1%, gravel, 3%.

Spawning areas:

In area surveyed, an estimated 24,795 yd² (20,753 m²).

Barriers to Fish Migration:

No serious obstructions, 2 low falls at mile 0.5 (0.80 km), may
delay fish at extremely low water.

NORTH HARBOUR RIVER

Location—

At the bottom of North Harbour, Placentia Bay.

Season—

July and August are the best months.

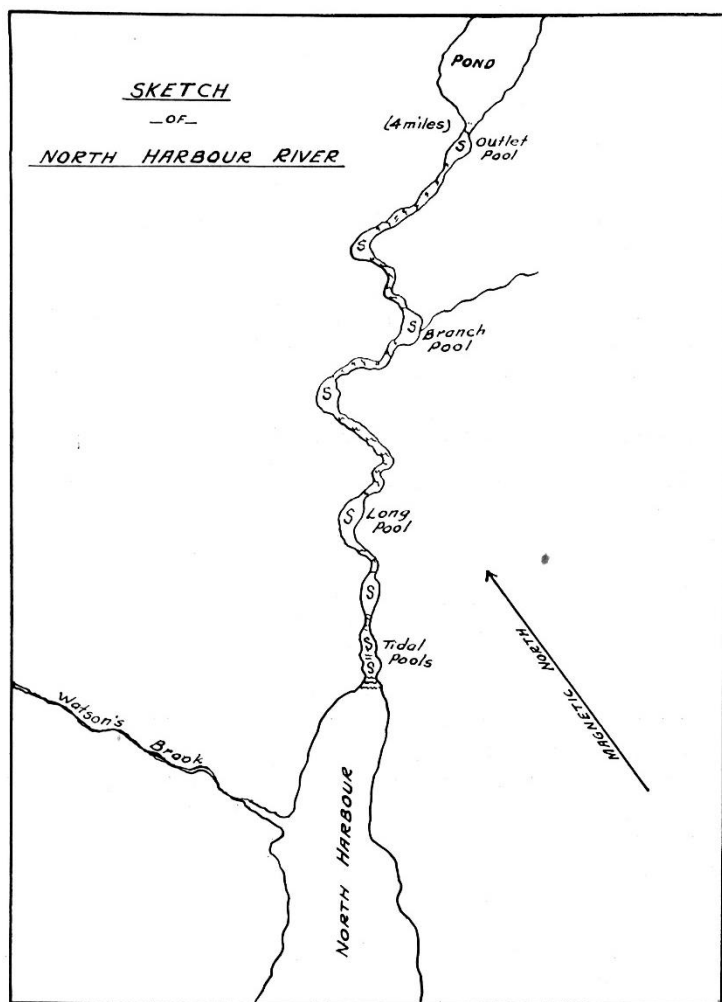
General Remarks—

The upper reaches of the river are near the main line of the Newfoundland Railway, Goobie's being the nearest station. It contains a number of fine pools, which offer excellent fishing. Watson's Brook near the river's mouth offers excellent sea trout fishing.

Pools:

Tidal Pools, 1 unnamed pool, Long Pool, 1 unnamed pool, Branch Pool, 1 unnamed pool, Outlet Pool





WATSONS BROOK

Location: $47^{\circ} 52' 55''$ N $54^{\circ} 05' 00''$ W. North Harbour,
Placentia Bay.

Map Reference: Sound Island. 1 M/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 3.6 miles², (9.32 kilometers²). Mean width, 1.0 miles,
(1.60 kilometers).

Perimeter, 9.1 miles, (14.64 kilometers). Axial length, 3.2 miles,
(5.14 kilometers).

Maximum basin relief, 650 feet, (198.12 meters).

Geology:

Predominantly Cambrian sedimentary with some Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BLACK RIVER

Location: 47°52'50" N. 54°10'08" W. Swift Current,
Placentia Bay.

Map Reference: Sound Island. 1 M/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 77.2 miles² (199.94 km²). Mean width, 5.6 miles
(9.01 km).

Perimeter, 44.6 miles (71.76 km). Axial length 13.9 miles
(22.36 km).

Maximum basin relief, 1,150 feet (350.52 m).

Geology:

Almost entirely acidic intrusive rocks with some Precambrian
sedimentary.

Vegetational Cover:

Alders, birch, fir and spruce; also some muskeg.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: Range of channel width: above mile 2.8 (4.50 km), 75 to
300 feet (22.86-91.44 m). Below mile 2.8 (4.50 km) 40 to 150 feet
(12.19-45.72 m). Range of channel dept: 1-3 feet (0.3-0.9 m).

Velocity range: slow - medium.

Bottom Types:

Main river (% of total area)

Mud; 5%, sand 10%, gravel 40%, rubble 25%, boulder 20%,
bedrock trace.

Spawning areas:

At the mouth of a tributary which joins the main river at mile 2.5
(4.02 km).

Barriers to Fish Migration:

Falls at mile 2.8 (4.50 km). Height: 4 feet (1.21 m). Partial
obstruction.

Falls at mile 3 (4.82 km). Height: 40 feet (12.19 m). Complete
obstruction.

PIPERS HOLE RIVER.

Location: 47°55'00" W. 54°16'15" W. Swift Current,
Placentia Bay.

Map Reference: Sound Island. 1 M/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 301.7 miles² (781.40 km²). Mean width, 10.7 miles
(17.21 km).

Perimeter, 99.9 miles (160.73 km). Axial length, 25.0 miles
(40.22 km).

Maximum basin relief, 1,250 feet (381.00 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of
Precambrian volcanic and Precambrian sedimentary.

Vegetational Cover:

Area recovering from forest fire.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams in system, 160 miles (257.44 km).

Total length of all tributaries to the main river, 140 miles
(225.26 km).

Bottom Types:

Main River: (% of total area).

Mud and sand; 20%, Gravel; 10%, Rubble; 40%, Boulders; 20%,
Bedrock; 10%.

Barriers to Fish Migration:

Main River.

Falls at mile 5.0 (8.04 km). Complete obstruction.

Falls at mile 11.2 (18.02 km). Height: 30 feet (9.14 m). Slope: 90°.
Complete obstruction at all water levels.

Falls #3 is located several hundred feet (100 feet = 30.48 m) above
#2. The height left hand side is 15 feet (4.57 m). Slope: 75°.

This section is not passable. The centre has two steps. The
lower has a height of 10 feet (3.05 m). Slope: 90°. The upper
step has a height of 5 feet (1.52 m) and length of 20 feet (6.09 m).

This part may be passable. The right hand side has a height of 15 feet (4.57 m) and is a complete obstruction at all water levels.

Flow of water in runaround at second falls increased in 1971.

PIPER'S HOLE RIVER

Location—

At the bottom of Placentia Bay.

Season—

July and August.

General Remarks—

This is a fine large river and contains some splendid pools that offer excellent fishing. River boats or canoes can be used to advantage on this river, especially above the falls where the river is flat and contains numerous ponds. A fine run of fish frequent the river and fish ranging in weight from 5 to 20 lbs. can be caught.

Tributaries:

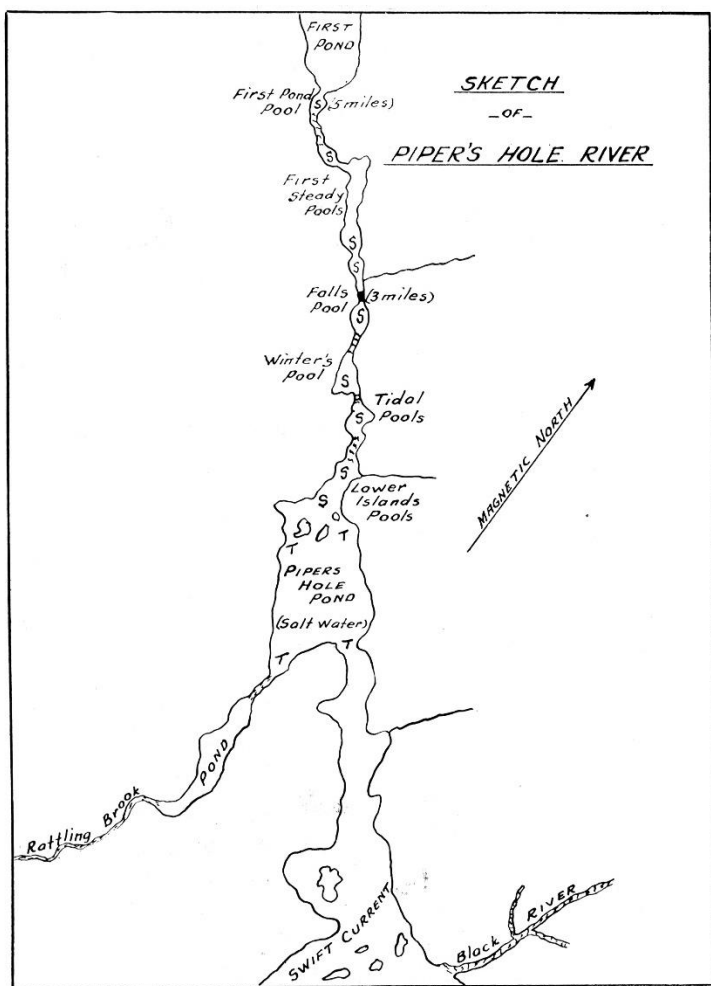
Mothers Brook

1M/16

Pools:

Lower Island Pools, Tidal Pools, Winter's Pool, Falls Pool, First Steady Pools, First Pond Pool





SANDY HARBOUR RIVER

Location: 47°42'17" N. 54°21'05" W. Great Sandy Harbour,
Placentia Bay.

Map Reference: Harbour Buffett. 1 M/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 178.3 miles² (461.79 km²). Mean width, 6.4 miles
(10.29 km).

Perimeter, 83.6 miles (134.51 km). Axial length, 27.0 miles
(43.44 km).

Maximum basin relief, 1,076 feet (327.96 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of
Precambrian volcanic and Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas:

On main river, one small area below Wigwam Brook at mile 12.5 (20.11 km).

Barriers to Fish Migration:

Main River:

Falls at mile 0. Height: 5 feet (1.52 m). Sloping falls is a temporary
holdup during low tide. In 1972, ledgerrock blasted at top of falls
to allow more water to flow at more favourable migration route.

Falls at mile 2.5 (4.02 km). Height: 18 feet (5.48 m). Slope: 90°. Width:
5 feet (1.52 m) across the top. Complete obstruction.

Falls at mile 5 (8.04 km). The right hand side has a 10 foot (3.05 m)
vertical drop with an overhanging lip and a 15 foot (4.57 m) chute
at 60° slope. This side is a complete obstruction at all water levels.
The left hand side has 3 drops; drop #1 height: 5 feet (1.52 m) and
slope 50°; drop #2, height: 6 feet (1.82 m) and slope 55°; drop #3
height: 2 feet (0.60 m). There is a pool between each drop.

Above this there is a pool that leads to a 20 foot (6.09 m) long, 2 feet
(0.60 m), wide chute at a slope of 15°-20°. There is a 7 foot (2.1 m)
vertical falls at the top of this chute. This side is estimated to
be passable with difficulty at low and medium water levels.

SANDY HARBOUR RIVER

Location—

On the west side of Placentia Bay, approximately 15 miles from the bottom of the bay.

Accessibility—

Bar Haven, on Barren Island, seven miles from the river's mouth, is a port of call for the Placentia Bay steamer. Motor boats can readily be hired at Bar Haven for the run to the river.

Season—

July and August are the best months.

General Remarks—

The first two or three pools on this river are of easy access. The remainder of the river is characterized by steep cliffs on both sides. Sea trout fishing is good at the mouth of the river. A large run of salmon frequent this river, which can be fished up to its headwaters about 18 miles inland.

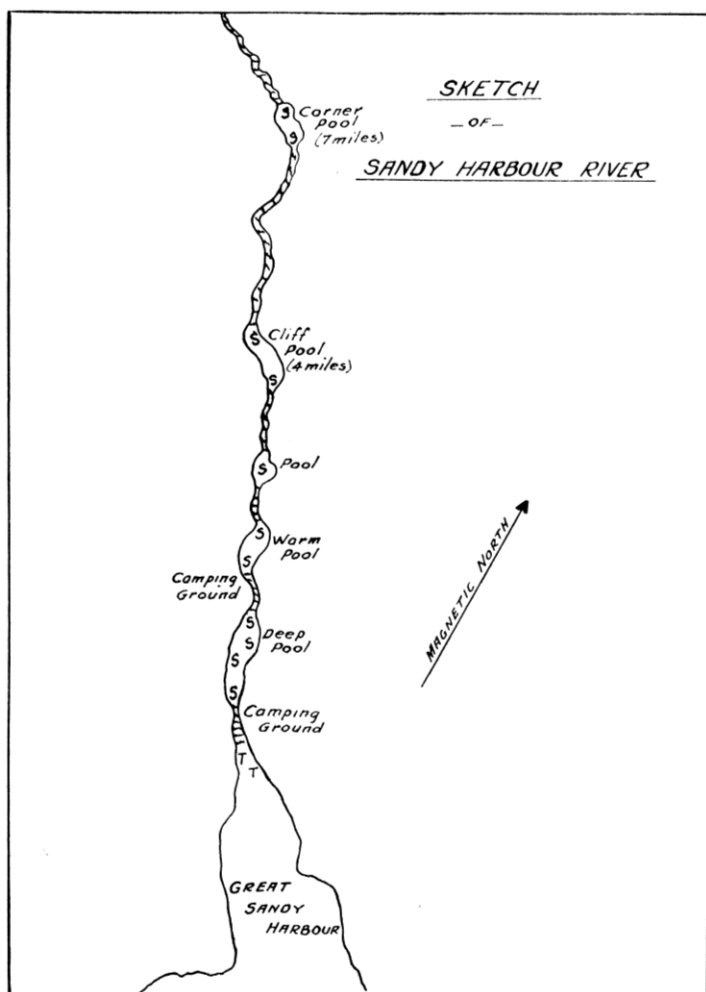
Tributaries:

Wigman Brook

1M/15

Pools:

Deep Pool, Warm Pool, Pool, Cliff Pool, Corner Pool





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Catalogue of Rivers in Insular Newfoundland

Volume B

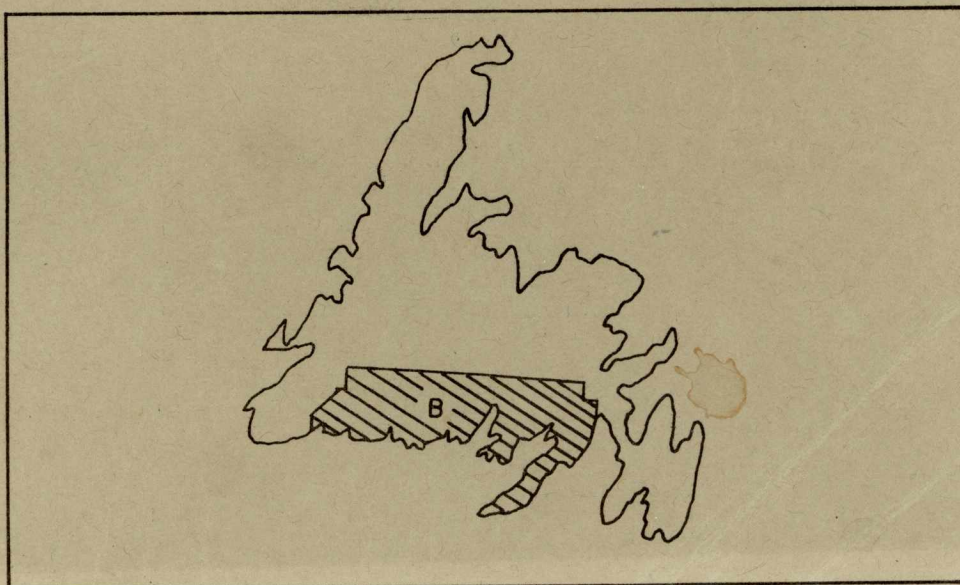
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INSULAR NEWFOUNDLAND

by

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RESOURCE DEVELOPMENT BRANCH
FISHERIES & MARINE SERVICE
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OCTOBER, 1974

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SANDY HARBOUR RIVER

Location: 47°42'17" N. 54°21'05" W. Great Sandy Harbour,
Placentia Bay.

Map Reference: Harbour Buffett. 1 M/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 178.3 miles² (461.79 km²). Mean width, 6.4 miles
(10.29 km).

Perimeter, 83.6 miles (134.51 km). Axial length, 27.0 miles
(43.44 km).

Maximum basin relief, 1,076 feet (327.96 m).

Geology:

About half acidic intrusive rocks with the remainder consisting of
Precambrian volcanic and Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas:

On main river, one small area below Wigwam Brook at mile 12.5 (20.11 km).

Barriers to Fish Migration:

Main River:

Falls at mile 0. Height: 5 feet (1.52 m). Sloping falls is a temporary
holdup during low tide. In 1972, ledgerrock blasted at top of falls
to allow more water to flow at more favourable migration route.

Falls at mile 2.5 (4.02 km). Height: 18 feet (5.48 m). Slope: 90°. Width:
5 feet (1.52 m) across the top. Complete obstruction.

Falls at mile 5 (8.04 km). The right hand side has a 10 foot (3.05 m)
vertical drop with an overhanging lip and a 15 foot (4.57 m) chute
at 60° slope. This side is a complete obstruction at all water levels.
The left hand side has 3 drops; drop #1 height: 5 feet (1.52 m) and
slope 50°; drop #2, height: 6 feet (1.82 m) and slope 55°; drop #3
height: 2 feet (0.60 m). There is a pool between each drop.

Above this there is a pool that leads to a 20 foot (6.09 m) long, 2 feet
(0.60 m), wide chute at a slope of 15°-20°. There is a 7 foot (2.1 m)
vertical falls at the top of this chute. This side is estimated to
be passable with difficulty at low and medium water levels.

PARADISE RIVER

Location: 47° 37' 05" N 54° 26' 00" W. Paradise Sound,
Placentia Bay.

Map Reference: Harbour Buffett. 1 M/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 189.3 miles², (490.28 kilometers²). Mean width, 5.8 miles,
(9.33 kilometers).

Perimeter, 93.2 miles, (149.95 kilometers). Axial length, 31.4 miles,
(50.52 kilometers).

Maximum basin relief, 1,147 feet, (349.60 meters).

Geology:

About half acidic intrusive rocks with the remainder
consisting of Precambrian volcanic and Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

River fairly wide except for a few rapid areas above the falls.

Spawning Area: Approximately 80% as viewed from Helicopter.

Miscellaneous Information: River has good flow of water even in extremely
dry weather.

BLACK RIVER

Location: 47° 35' 17" N 54° 26' 40" W. Paradise Sound,
Placentia Bay.

Map Reference: Harbour Buffett. 1 M/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 79.3 miles², (205.38 kilometers²). Mean width, 7.4 miles,
(11.90 kilometers).

Perimeter, 61.9 miles, (99.59 kilometers). Axial length, 9.5 miles,
(15.28 kilometers).

Maximum basin relief, 1,050 feet, (320.04 meters).

Geology:

Predominantly Precambrian volcanic with some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning Areas: Two small areas between second and third lake on the
main river.

NONSUCH BROOK

Location: $47^{\circ} 26' 35''$ N. $53^{\circ} 39' 00''$ W. Nonsuch Arm, Placentia Bay.

Map Reference: Baine Harbour. 1 M/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.6 miles² (30.04 kilometers²). Mean width, 1.4 miles (2.25 kilometers).

Perimeter, 23.3 miles (37.48 kilometers). Axial length, 7.3 miles (11.74 kilometers).

Maximum basin relief, 900 feet (274.32 meters).

Geology:

Precambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Bottom types: On main river, consists mainly of boulder, with some rubble and gravel.

Barriers to Fish Migration:

Falls; partial obstruction during low water, a short distance upstream from mouth; 5 ft. (1.52 meters) vertical with an overhanging lip.

In 1972 notch at top of falls blasted.

CAPE ROGER BROOK

Location: 47°25'35" N. 54°42'15" W. Bottom of Cape Roger Bay, Placentia Bay.

Map Reference: Baine Harbour, 1 M/7 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 35.8 miles² (92.72 km²). Mean width, 2.7 miles (4.34 km).

Perimeter, 37.6 miles (60.49 km). Axial length, 12.6 miles (4.18 km).

Maximum basin relief, 1,050 feet (320.04 m).

Geology:

Predominantly Precambrian volcanic with some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Spawning areas:

Lacking on main river.

Barriers to Fish Migration:

Main River:

Falls at mile 1.5 (2.41 km). Height: 20 feet (6.09 m). Slope: vertical.

Passable at all water levels.

Tributaries:

— Tributary #1; Falls at mile 0.5 (0.8 km). Height: 12 feet (3.65 m).

Slope: 90°. Complete obstruction.

Tributary #3; Falls at mile 0.5 (0.80 km). Height: 25 feet (7.62 m).

Complete obstruction.

June, 1965. Wooden dam diversion constructed, falls on main river consisting of four benches was lowered by rock cutting. This now presents no problem to migrating fish.

CAPE RODGER RIVER

Location—

On the west side of Placentia Bay on the South Coast.

Season—

June till early August is the best time.

General Remarks—

This river has a fine run of medium salmon (10 lbs.) and sea trout. Pools are excellent and are easily reached, as trails follow the river as far as the falls where excellent fishing can be had. The falls are high but when the water is low the salmon get over them. The river banks are free from trees and bush, and offer excellent walking and little or no obstruction on the back cast.

Notes:

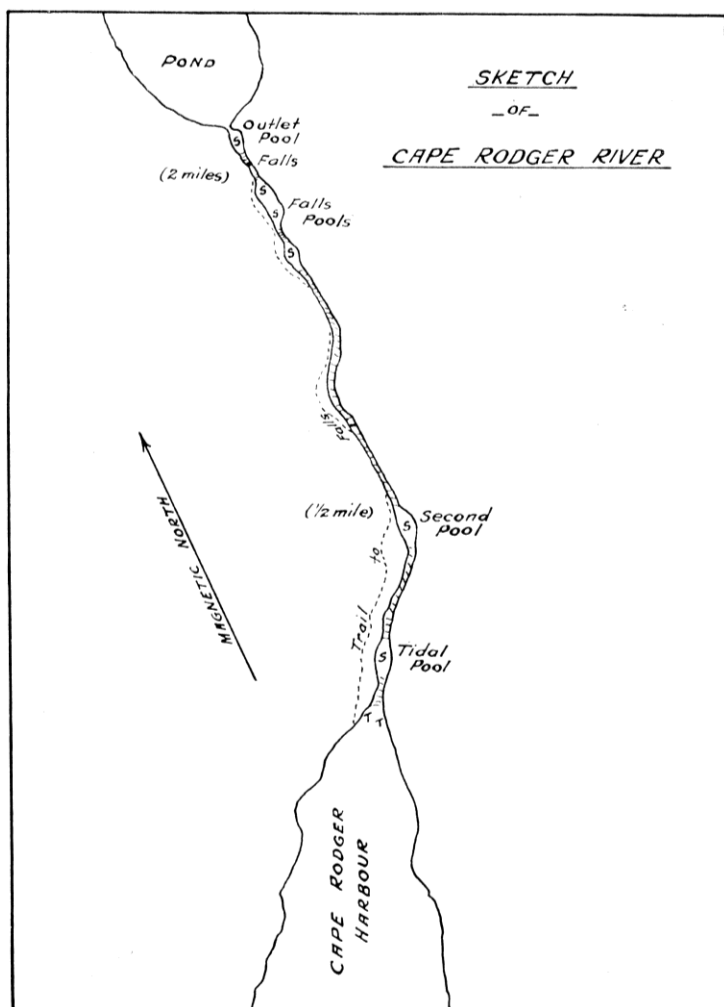
Now Cape Roger Brook.

1M/7

Pools:

Tidal Pool, Second Pool, Falls Pool, Outlet Pool





BAY DE L'EAU RIVER

Location: 47°26'20" N. 54°47'00" W. Bay De L'Eau, Placentia Bay.

Map Reference: Baine Harbour. 1 M/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 58.5 miles² (151.51 km²). Mean width, 3.7 miles (5.95 km).

Perimeter, 50.9 miles (81.89 km). Axial length, 17.0 miles (27.35 km).

Maximum basin relief, 1,233 feet (375.81 m).

Geology:

About half Precambrian volcanic with the remainder consisting of acidic intrusive rocks and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Bottom types:

Main river from mouth to mile 4.5; (7.24 km), mostly gravel and sand.

Main river from mile 4.5 to 7.0 (7.24-11.26 km), mainly gravel.

Note: Many ponds on river between mile 7 and 15 (11.26-24.13 km).

Barriers to Fish Migration:

Main river: no obstructions.

Tributary #1: 4.5 miles (7.24 km) from mouth of main river. Two falls at mile 4 (6.43 km). Height: both 10-12 feet (3.04-3.65 m) Slope: 90°. Complete obstruction.

Tributary #2: Seven miles (11.27 km) from mouth of main river. Falls at mile 1 (1.61 km). Height: 20 feet (6.09 m). Complete obstruction.

Tributary #3: Twelve miles, (16.09 km) from mouth of main river. Falls at mile 2; (3.21 km). Partial obstruction. In 1956, falls on tributary #3, consisting of two benches, eight and four feet, (2.44 and 1.22 m), respectively, were lowered and pools blasted in them.

BAY DE LEAU RIVER

Location—

On the west side of Placentia Bay.

Season—

15th June to middle of August.

General Remarks—

The river flows through flat-lying country and is consequently a slow-running river with no falls or rapids. Salmon ranging from 5 to 20 lbs. frequent the river. Sea trout can also be caught.

Tributaries:

Eastern Feeder	1M/10
Middle Feeder	1M/10
Western Feeder	1M/7

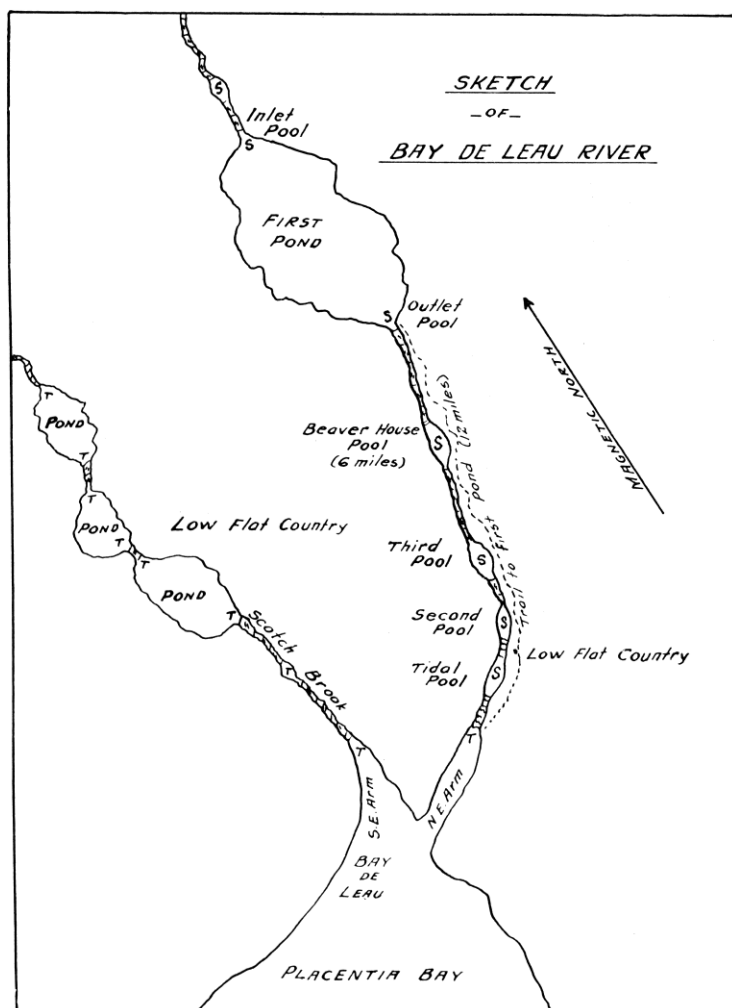
Note:

Bay de Leau River flows into N.E. Arm; Scotch Brook flows into S.E. Arm and Palmer notes it a having 8 trout pools

Pools:

Tidal Pool, Second Pool, Third Pool, Beaver House Pool, Outlet Pool, Inlet Pool





RUSHOON RIVER

Location: 47°21'15" N. 54°55'03" W. Placentia Bay.
Map Reference: Baine Harbour. 1 M/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 22.7 miles² (58.79 km²). Mean width, 2.4 miles (3.86 km).

Perimeter, 27.9 miles (44.89 km). Axial length, 9.2 miles (14.80 km).

Maximum basin relief, 700 feet (213.36 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Nil.

RED HARBOUR RIVER

Location: 47° 17' 35" N 55° 00' 01" W. Red Harbour, Placentia Bay.

Map Reference: Baine Harbour. 1 M/7 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 28.3 miles² (73.29 kilometers²). Mean width, 5.1 miles, (8.20 kilometers).

Perimeter, 32.4 miles, (52.13 kilometers). Axial length, 4.3 miles, (6.91 kilometers).

Maximum basin relief, 1,250 feet, (381.00 meters).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Obstructions, Red Harbour River

Obst. No.	Obst. Type	Location fr. mouth	Description	Degree of obstruction	Recommended improvements
1	falls	0.5 miles .80 kilo- meters)	11' (3.34 meters) vertical over-hanging lip	complete low water, passable with difficulty other levels	In 1971, channel blasted at top of falls in order to lower height of falls and confine water.
2	falls	4.5 miles (7.24 kilo- meters)	6' (1.82 meters) high, 90° LHS, 50° RHS	passable at high water	blasting to confine water to RHS
3	falls	4.5 miles (7.24 kilo- meters)	7' (2.13 meters) high overall, 2 vertical drops lower 5' (1.54 meters) upper 2' (.60 meters)	passable at high water	improve lower drop by blasting.
4	falls	4.7 miles (7.56 kilo- meters)	6'-7' (1.82-2.13 meters); 10' (3.04 meters) long 50°.	passable with difficulty high water, complete low water	removal of huge boulder at top of falls.
5	falls	4.7 miles (7.56 kilo- meters)	10' (3.04 meters) vertical over-hanging lip.	complete except at high water	blast off over-hanging lip.

WEST BROOK

Location: $47^{\circ} 10' 10''$ N $55^{\circ} 14' 55''$ W. South West Arm,
Mortier Bay.

Map Reference: Marystown. 1 M/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 32.7 miles², (84.69 kilometers²), Mean width, 3.3 miles,
(5.30 kilometers).

Perimeter, 33.1 miles, (53.25 kilometers), Axial length, 11.2 miles,
(18.02 kilometers).

Maximum basin relief, 800 feet, (243.84 meters).

Geology:

About equal amounts of Precambrian volcanic and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

TIDES BROOK

Location: 47°08'21" N. 55°14'00" W. South West Arm,
Mortier Bay.

Map Reference: Marystown. 1 M/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 69.1 miles² (178.96 km²). Mean width, 4.3 miles
(6.91 km).

Perimeter, 46.2 miles (74.33 km). Axial length, 12.6 miles
(20.27 km).

Maximum basin relief, 900 feet (274.32 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BIG SALMONIER BROOK

Location: 47°03'35" N. 55°13'10" W. Burin Inlet, Placentia Bay.
Map Reference: Marystown. 1 M/3 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.9 miles² (33.41 km²). Mean width, 1.6 miles (2.57 km).
Perimeter, 20.9 miles (33.62 km). Axial length, 7.6 miles (12.22 km).
Maximum basin relief, 800 feet (243.84 m).

Geology:

About half Ordovician volcanic with the remainder consisting of Cambrian sedimentary, Ordovician sedimentary and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

On main river:

Falls at mile 1.5 (2.41 km). Height: 2.5 feet (0.76 m). Partial obstruction.

Falls at mile 4 (6.43 km). Height: 4 feet (1.21 m). Partial obstruction.

On tributary #1 (T-1) a 12 foot (3.64 m) vertical falls completely blocks access at mouth of tributary.

SALMONIER RIVER, BURIN

Location—

At the bottom of Burin Inlet on the west side of Placentia Bay.

Season—

July and August are the best months.

General Remarks—

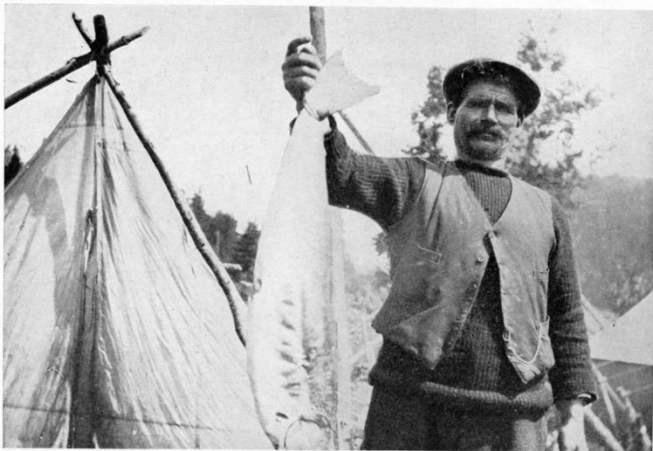
This river offers good fishing from its mouth to the pond. Salmon up to 15 lbs. in weight can be caught.

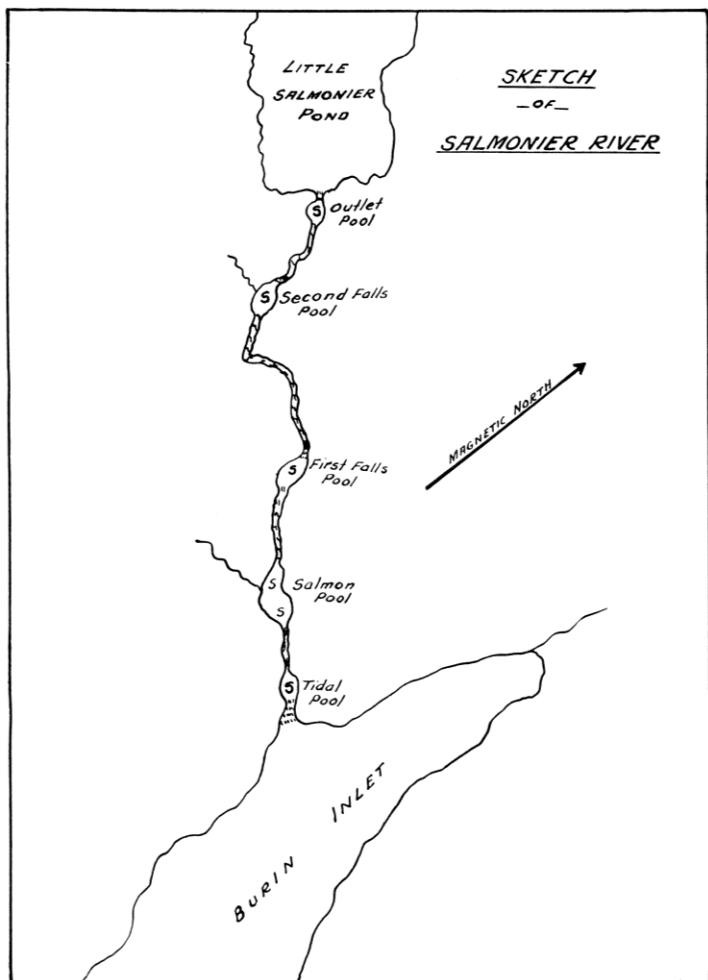
Notes:

Now Little Salmonier Brook. 1M/3

Pools:

Tidal Pool, Salmon Pool, First Falls Pool, Second Falls Pool, Outlet Pool





WATERFALL BROOK

Location: 46°55'40" N. 55°21'38" W. Little St. Lawrence Hr.
Map Reference: St. Lawrence. 1 L/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 14.3 miles² (37.03 km²). Mean width, 1.9 miles
(3.05 km).

Perimeter, 21.3 miles (34.27 km). Axial length, 7.5 miles
(12.06 km).

Maximum basin relief, 700 feet (213.36 m).

Geology:

About equal amounts of Precambrian volcanic, Cambrian sedimentary,
Ordovician sedimentary, Ordovician volcanic and a small amount of
Silurian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Power house and dam at mouth.

SALT COVE BROOK

Location: $46^{\circ} 52' 45''$ N $55^{\circ} 25' 20''$ W. Salt Cove, near
Great St. Lawrence Harbour

Map Reference: St. Lawrence. 1 L/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factor:

Basin area, 8.9 miles², (23.05 kilometers²), Mean width, 2.4 miles,
(3.86 kilometers).

Perimeter, 14.6 miles, (23.49 kilometers), Axial length, 5.8 miles,
(9.33 kilometers).

Maximum basin relief, 600 feet, (182.88 meters).

Geology:

Predominantly acidic intrusive rocks with some Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Miscellaneous Information:

Fluorspar mine in the drainage basin area has introduced sand and
clay into the brook. (No chemical analysis carried out).

LAWN RIVER

Location: 46°55'55" N. 55°28'20" W. Little Lawn Harbour.
Map Reference: St. Lawrence. 1 L/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 14.7 miles² (38.07 km²). Mean width, 2.0 miles
(3.21 km).
Perimeter, 21.8 miles (35.07 km). Axial length, 7.3 miles
(11.74 km).
Maximum basin relief, 800 feet (243.84).

Geology:

Predominantly Precambrian volcanic with about equal amounts of
acidic intrusive rocks and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LITTLE LAWN BROOK

Location: $46^{\circ} 56' 50''$ N $55^{\circ} 32' 20''$ W. Great Lawn Harbour
Map Reference: Lamaline. 1 L/13 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 31.0 miles², (80.29 kilometers²), Mean width, 3.2 miles, (5.14 kilometers).

Perimeter, 29.4 miles, (47.30 kilometers), Axial length, 9.7 miles, (15.60 kilometers).

Maximum basin relief, 800 feet, (243.84 meters).

Geology:

Predominantly Precambrian volcanic with about equal amounts of acidic intrusive rocks and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Miscellaneous Information:

River is used for hydroelectric power for the town of Lawn.

TAYLOR BAY BROOK

Location: 46°52'40" N. 55°43'05" W. Taylor Bay.
Map Reference: Lamaline 1 L/13 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 27.1 miles² (70.18 km²). Mean width, 2.7 miles (4.34 km).

Perimeter, 28.0 miles (45.05 km). Axial length, 9.6 miles (15.45 km).

Maximum basin relief, 550 feet (167.64 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile one (1.61 km). Ledge rock at top of falls blasted in 1972 to confine low water flows. Presents no problem to migrating fish.

SALMONIER RIVER

Location: 46°52'25" N. 55°46'32" W. Lamaline Bay.

Map Reference: Lamaline. 1 L/13 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 44.5 miles² (115.25 km²). Mean width, 3.8 miles (6.11 km).

Perimeter, 34.7 miles (55.83 km). Axial length, 11.9 miles (19.14 km).

Maximum basin relief, 500 feet (152.40 m).

Geology:

Almost entirely Precambrian volcanic with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 10 (16.09 km). Height: maximum 7 feet (2.13 m); right side has 2 drops; lower one is 4 feet (1.22 m) high, at a 60° angle and the upper is 3 feet (0.91 m) at a 60° angle with a small overhanging lip. The centre has a 7 foot (2.13 m) drop. Temporary holdup at low water levels.

FORTUNE BROOK

Location: 47°03'55" N. 55°50'05" W. Fortune, Fortune Bay.
Map Reference: Grand Bank. 1 M/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 18.7 miles² (48.4 km²). Mean width, 2.4 miles (3.86 km).

Perimeter, 20.1 miles (32.34 km). Axial length, 7.6 miles (12.24 km).

Maximum basin relief, 800 feet (243.84 m).

Geology:

About half Cambrian sedimentary with the remainder consisting of Precambrian sedimentary and Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

None

GRAND BANK BROOK

Location: 47°05'55" N. 55°45'09" W. Grand Bank, Fortune Bay.
Map Reference: Grand Bank. 1 M/4 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 25.8 miles² (66.82 km²). Mean width, 3.0 miles (4.82 km).
Perimeter, 26.8 miles (43.12 km). Axial length, 8.1 miles (13.03 km).
Maximum basin relief, 800 feet (243.84 m).

Geology:

Almost entirely Precambrian volcanic with some acidic intrusive rocks and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

No obstructions.

LANSE AU LOUP BROOK

Location: 47°05'08" N. 55°40'57" W. Fortune Bay.
Map Reference: Grand Bank. 1 M/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 7.2 miles² (18.64 km²). Mean width, 1.2 miles (1.93 km).

Perimeter, 15.0 miles (24.13 km). Axial length, 5.7 miles (9.17 km).

Maximum basin relief, 450 feet (121.93 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

LITTLE BARASWAY BROOK

Location: 47°06'15" N. 55°37'25" W. Fortune Bay.
Map Reference: Grand Bank. 1 M/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.0 miles² (31.06 km²). Mean width, 1.7 miles
(2.73 km).
Perimeter, 17.8 miles (28.64 km). Axial length, 6.2 miles
(9.98 km).
Maximum basin relief, 450 feet (121.93 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FAMINE BROOK

Location: 47°07'08" N. 55°36'50" W. Fortune Bay.
Map Reference: 1 M/4 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 11.2 miles² (29.00 km²). Mean width, 1.5 miles (2.41 km).

Perimeter, 22.5 miles (36.20 km). Axial length, 7.4 miles (11.90 km).

Maximum basin relief, 450 feet (121.93 m).

Geology:

Almost entirely Precambrian volcanic with some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GARNISH RIVER

Location: 47°13'40" N. 55°20'50" W. Little Garnish Barasway,
Fortune Bay.

Map Reference: Marystown. 1 M/3 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 82.0 miles² (212.38 km²). Mean width, 3.0 miles
(4.82 km).

Perimeter, 73.9 miles (118.90 km). Axial length, 24.0 miles
(38.61 km).

Maximum basin relief, 1,500 feet (457.20 m).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

A series of 4 small falls located in a gorge section at mile 14.5
(23.33 km). Height: 3-4 feet (0.91-1.21 m). Length: 200 feet
(60.96 m). In 1971 boulders and ledgerrock blasted at the four
falls to make fish passage easier.

Falls at mile 17 (27.35 km). Height: 12 feet (3.64m) on right hand
side and centre. Slope 90°. Run around on left hand side that
can be utilized only at high water levels but is a complete
obstruction at low and medium water levels.

Tributaries:

Falls at mile 1 (1.61 km), complete obstruction at all water levels.

GARNISH RIVER

Location—

On the east side of Fortune Bay, on the South Coast.

Season—

15th July to end of August is the best time.

General Remarks—

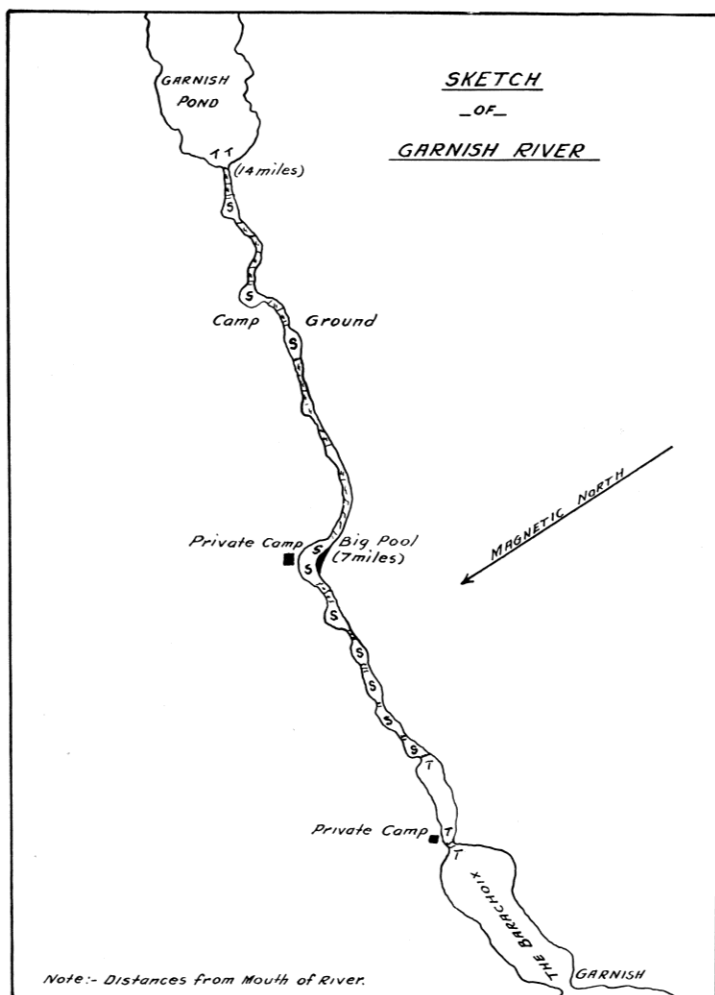
This river empties into an inland bay of the sea known as The Barachois.

Garnish is located at the entrance of The Barachois, 7 miles from the river's mouth. Good salmon pools are located on the river from its mouth to the pond, a total distance of 14 miles. Salmon up to 15 lbs. in weight frequent this river. Good sea-trout fishing can also be obtained

Pools:

Big Pool





DEVIL BROOK

Location: 47° 16' 35" N 55° 18' 35" W. Fortune Bay
Map Reference: Point Enragee. 1 M/6 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 26.1 miles², (67.60 kilometers²), Mean width, 2.2 miles, (3.53 kilometers).

Perimeter, 35.4 miles, (56.95 kilometers), Axial length, 11.8 miles, (18.98 kilometers).

Maximum basin relief, 1,250 feet, (381.00 meters).

Geology:

Precambrian volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

TERRENCEVILLE BROOK

Location: 47° 40' 37" N 54° 42' 00" W. Terrenceville, Fortune Bay.
 Map Reference: Terrenceville, 1 M/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 44.3 miles², (114.73 kilometers). Mean width, 4.5 miles, (7.24 kilometers).

Perimeter, 39.7 miles, (63.87 kilometers). Axial length, 10.2 miles, (16.41 kilometers).

Maximum basin relief, 1,147 feet, (349.60 meters).

Geology:

About half gneissis with the remainder consisting of Precambrian volcanic, Ordovician sedimentary and Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Approximately 3.5 miles (5.63 kilometers) from the mouth, there is a series of seven falls in a 100 yard (91.44 meters) long gorge. Total overall height is one hundred feet (30.48 meters).

Obstructions, gorge section of Terrenceville Brook

Falls number (from downstream end)	Description	Degree of obstruction
1	15' (4.56 meters) high, 50° slope	Passable with difficulty
2	20' (6.09 meters) vertical	Complete
3	15' (4.56 meters) high, 75° slope	Complete
4	10' (3.04 meters) vertical	Passable with difficulty
5	20' (6.09 meters) vertical	Complete
6	10' (3.04 meters) 45° slope	Passable
7	10' (3.04 meters) 45° slope	Passable

GRAND LA PIERRE RIVER (BROOK)

Location: 47°41'29" N. 54°46'55" W. Grand La Pierre, Fortune Bay.

Map Reference: Terrenceville, 1 M/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 17.9 miles² (46.36 km²). Mean width, 3.2 miles (5.14 km).

Perimeter: 20.4 miles (32.82 km). Axial length, 5.6 miles (9.01 km).

Maximum basin relief: 900 feet (274.32 m).

Geology:

Almost entirely acidic intrusive rocks with some Cambrian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River from mouth to mile 1.25 (2.01 km).

Width range; 20 to 25 feet (6.09 m to 7.62 m). Average depth; 2 feet (0.6 m).

Bottom types: Sand 5%; gravel 10%; rubble 45%; Boulder 20%; Bedrock 20%.

Barriers to Fish Migration:

Falls on main river at mile 1.25 (2.01 km). Height: 25-30 feet (7.62-9.14 m). Width: 20 feet (6.09 m). Slope: 80°.

Complete obstruction.

FEMME HARBOUR BROOK

Location: 47° 37' 12" N 55° 58' 40" W. Femme Harbour,
Fortune Bay.

Map Reference: Terrenceville. 1 M/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 7.7 miles², (19.94 kilometers²). Mean width, 2.0 miles,
(3.21 kilometers).

Perimeter, 15.0 miles, (24.13 kilometers). Axial length, 5.0 miles,
(8.04 kilometers).

Maximum basin relief, 1,200 feet, (365.76 meters).

Geology:

Predominantly Silurian sedimentary with some Ordovician volcanic.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration: Falls on main river, near mouth, 8 feet,
(2.43 meters), high; passable.

YOUNG'S BROOK

Location: 47° 46' 10" N 54° 56' 50" W. Long Harbour,
Fortune Bay.

Map Reference: Gisbourne Lake. 1 M/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 10.6 miles², (27.45 kilometers²). Mean width, 1.7 miles,
(2.73 kilometers).

Perimeter, 16.5 miles, (26.54 kilometers). Axial length, 5.9 miles,
(9.49 kilometers).

Maximum basin relief, 1,100 feet, (335.28 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Bottom type: Main river from mouth to mile point 1.8, (2.89 kilometers);
bedrock, boulder and gravel.

Barriers to Fish Migrations:

Falls at mile point 0.3, (0.48 kilometers), on main river, 6 feet,
(1.82 meters) high, angle 45°; partial obstruction.

Falls at mile point 1.8, (2.89 kilometers), on main river, 110 feet,
(33.52 meters), high, angle 75°; total obstruction.

SOUTH WEST BROOK

Location: 47°46'55" N. 54°56'10" W. Long Harbour, Fortune Bay.

Map Reference: Gisbourne Lake. 1 M/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin are: 62.6 miles² (162.13 km²). Mean width: 5.0 miles (8.04 km).

Perimeter: 42.0 miles (67.57 km). Axial length: 11.6 miles (18.66 km).

Maximum basin relief, 1,147 feet (349.60 m).

Geology:

Predominantly acidic intrusive rocks with the remainder consisting of Precambrian volcanic and a small amount of Ordovician volcanic.

Vegetational Cover:

Upper drainage basin is covered by muskeg; lower basin is forested.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: From mouth to Gisbourne Lake;

Range of channel width: 60-80 feet (18.28-24.38 m).

Range of channel depth: 12-30 inches (0.3-0.76 m).

Velocity: From mouth to mile 3.3 (5.31 km), swift to moderate,

Headwaters from mile 3.3 (5.31 km), to Gisbourne Lake, sluggish.

Bottom types: Gravel and mud 2.5%; sand 5%; sand and gravel 4.2%; coarse gravel 0.8%; fine gravel 6.7%; boulders 63.3%; bedrock 17.5%.

Barriers to Fish Migration:

Main River:

Falls at mile 3.3 (5.31 km). Height: 100 feet (30.48m). Complete obstruction.

LONG HARBOUR RIVER

Location: 47°49'25" N. 54°56'30" W.
Map Reference: Gisbourne Lake. 1 M/15 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 387.0 miles² (1,002.33 km²). Mean width: 9.9 miles (15.92 km).

Perimeter: 117.6 miles (189.21 km). Axial length: 32.5 miles (52.29 km).

Maximum basin relief: 1,076 feet (327.96 m).

Geology:

Almost entirely acidic intrusive rocks with some Cambrian sedimentary. Glacial drumlins, moraines and eskers are numerous.

Soils:

Deep alluvial soils are found along main river bed, on islands in river and on flood plain. Podzals are found at the bases of eroding upland hills. Glei soils underlie bogland. Glaciation has produced shallow, intermittent soils.

Vegetational Cover:

Bog and hummocks of stunted spruce and tamarack cover headwaters and upland areas. Medium to large size spruce, balsam, fir, tamarack, yellow birch, white birch, alder and white pine grow on valley slopes and bottom land.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total area of main river is 1,219.5 acres. Total length of main river is 25 miles (40.25 km).

Main River:

Mile 0 to Mile 5 (8.04 km). Width, 400 to 1,300 feet (121.92-396.24 m).

Depth, 6 to 24 inches (0.15-0.6 m) in riffles; 3 to 5 feet (4.82-8.04 m) in pools.

Mile 5 to mile 10 (8.05-16.09 km). Width, 300 to 500 feet (91.44-

152.40 m). Depth, 6 to 35 inches (0.15-1.12 m) in riffles; 3 to 6

feet (0.91-1.82 m) in pools. Channel narrows into a vertical wall granite canyon between mile 7 and 8.5, (11.26-13.67 km).

Mile 10 to mile 15 (16.09 and 24.13 km). Width, 350 to 800 feet (106.68-243.84 m). Depth, 6 to 30 inches (0.15-0.76 m) in riffles; 3 to 5 feet (0.91-1.52 m) in pools. Channel widens into large, shallow pools; banks slope gently to river.

Mile 15 to mile 20 (24.15-32.20 km). Width, 150 to 600 feet (45.72-182.88 m). Depth, 1 to 2 feet (0.3-0.6 m), in riffles; 3 to 5 feet (0.91-1.5 m) in pools.

Mile 20 to mile 25 (32.18-40.22 km). Width, 50 to 1,100 feet (15.24-335.28 m). Depth 1 to 5 feet (0.3-1.52 m). Channel incorporates ponds, large pools and narrow runs.

Mile 25 (40.22 km) to headwaters at Lake Maelpaeg - Meta Pond complex: Anastmasing drainage; water from Terra Nova drainage intermingles with Long Harbour river water at Lake Maelpaeg. Many lakes in system are large in area, but all appear shallow.

Tributary No. 1:

Enters main river 1.75 miles (2.81 km) from mouth. Total length of main stream is 8.6 miles (13.83 km). Length of interpond tributaries is 15 miles (24.13 km). Width, 30 to 200 feet (9.14-60.96 m). Depth, shallow.

Tributary No. 2:

Enters main river at mile 7 (11.26 km). Total length of main stream is 11.3 miles (18.18 km). Length of interpond tributaries is 10 miles (16.09 km). Width, 20 to 300 feet (6.09-91.44 m).

Tributary No. 3:

Enters main river at mile 15 (24.13 km). Total length of main stream is 8.6 miles (13.83 km). Width, up to 300 feet (91.44 m). Slope of basin is slight.

Tributary No. 4: Tolt Brook:

Enters main river at mile 17 (27.35 km). Total length of main stream is 9.3 miles (14.97 km). Length of interpond tributaries is 7 miles (11.26 km). Slope of basin is slight.

Bottom Types:

Main River, from mouth to mile 25 (40.22 km). Bedrock 539,367 yd² (451,450.2 m²); boulder 1,603,394 yd² (1,342,040.8 m²); rubble

1,399,695 yd² (1,171,544.7 m²); gravel, 591,763 yd² (495,305.6 m²); sand 515,623 yd² (431,576.5 m²); muck 252,749 yd² (211,550.9 m²).

Note: Figures represent non-rapids area only.

Tributary No. 1: Upper section, rubble and bedrock, some muck; lower section, almost entirely bedrock.

Tributary No. 2: Upper section, predominantly boulders mixed with gravel and sand; a few areas of bedrock outcropping. Middle section, predominantly gravel and rubble. Lower section, 90% gravel and 10% rubble. Mouth frequent bedrock outcropping.

Tributary No. 4: Tolt Brook: Entire length, predominantly sand, fine gravel and boulders.

Velocities:

Main river, from mouth to mile 5. Velocity measured at 0.36 to 3.5 feet per second (0.10 - 1.06 m/sec), June 20, 1966. 99% glide, 1% rapids.

Mile 5 to 10 (8.04-16.09 km) 49% glide, 51% rapids.

Mile 10 to 15 (16.09-24.13 km) 84% glide, 14% rapids.

Mile 15 to 20 (24.13-32.18 km) 74% glide, 26% rapids.

Mile 20 to 25 (32.18-40.22 km) 70% glide, 30% rapids.

Tributary No. 1: Headwaters, predominantly glide. Middle and lower sections, 50% glide, 50% rapids.

Tributary No. 2: Upper section, predominately glide. Middle and lower sections, 90% glide, 10% rapids.

Tributary No. 4, Tolt Brook: Entire stream, 100% glide

Aquatic Vegetation:

Following is summary of findings of survey, July, 1966.

Main river:

Main 0 to 13 (20.91 km); Potamogeton on mud bottoms along margins of pools and steadies. Nastoc frequent over gravel, rubble bottom. Juncus along river margins.

Note: Species and numbers of plants are few in lower sections.

From mile 13 (20.91 km) to headwaters, mile 25 (40.22 km); Filamentous algae and Nastor abundant in all interlake areas. Potamogeton and Nuphar occur over all muck bottoms in shallow, still areas.

Nasturtium (water cress) and Juncus(sedges) grow on sandy areas.

Sparganium and Vallisneria common on gravel and sand bottoms in glide areas.

Headwater Lakes Region:

Sparganium and Nuphar common in shallow areas.

Tributary No. 2:

Upper section: Extensive beds of sparganium and/or Vallisneria.

Lower section: Juncus along margin of river and Sparganium and/or Vallisneria over gravel bottoms.

Spawning Areas:

Main river:

Mile 11 and 12 (17.69 km and 19.30 km) 2,000 yd² (1,674 m²).

Mile 13 and 14 (20.91-22.52 km), 58,500 yd² (48,964 m²).

Mile 17 to 18 (27.37-28.96 km), 6,500 yd² (5,440 m²).

Mile 19 to 20 (30.57-32.18 km), 77,000 yd² (64,449 m²).

Tributary No. 2:

Lower section above mile 1 (1.61 km); 90% of bottom area has suitable spawning gravel.

Barriers to Fish Migration:

Main river:

Rapids at mile 5.2 (8.36 km); may cause delay in upstream migration during low water periods.

Falls and rapids at mile 9 (14.48 km). Height: 10 feet (3.04 m).

Width: 80 feet (24.38 m). Length: 100 feet (30.48 m). May delay upstream migration during periods of low water.

Note: Salmon were observed leaping over this obstruction on July 14, 1966.

Falls and rapids at mile 10 (16.09 km). Height: 30 feet (9.14 m).

Length: 150 feet (45.72 m). May cause delay in upstream migration during low water periods.

Falls at mile 11 (17.69 km). Height: 6 feet (1.82 m). Length: 100 feet (30.48 m). No interference with fish migration.

Falls at mile 15 (24.13 km). Height: 6 feet (1.82 m). Length: 100 feet (30.48 m). No interference with fish migration.

Tributary No. 1:

Falls at mile 5 (8.04 km). Height: 35 feet (3.04 m). Angle 90°, Complete obstruction.

Tributary No. 2:

Falls at mile 0.25 (0.40 km). Height: 12 feet (3.64 m).

Angle 90°. Extremely difficult for fish passage.

Three falls in section above mile 0.25 (0.40 km). May delay fish passage during periods of low run-off.

Tributary No. 4, Tolt Brook:

Free of obstructions to fish passage.

Outlet of Lake Mealpaeg:

Series of three rapids. May delay fish passage during low water periods.

LONG HARBOUR RIVER

Location—

At the bottom of Long Harbour, Fortune Bay, on the South Coast.

Season—

June and July are the best months.

General Remarks—

This river has six large branches the junctions of which, with the main river, make admirable fishing pools. Camping sites are numerous, and a splendid run of fish frequent the river; the early run (June) of fish are large, up to 40 lbs. in weight. Best fishing is from the mouth to second falls 14 miles up the river. A trail follows along the right bank of the river.

Tributaries:

Mitchells' Brook

Harehill Brook

Beaver Brook 1M/15

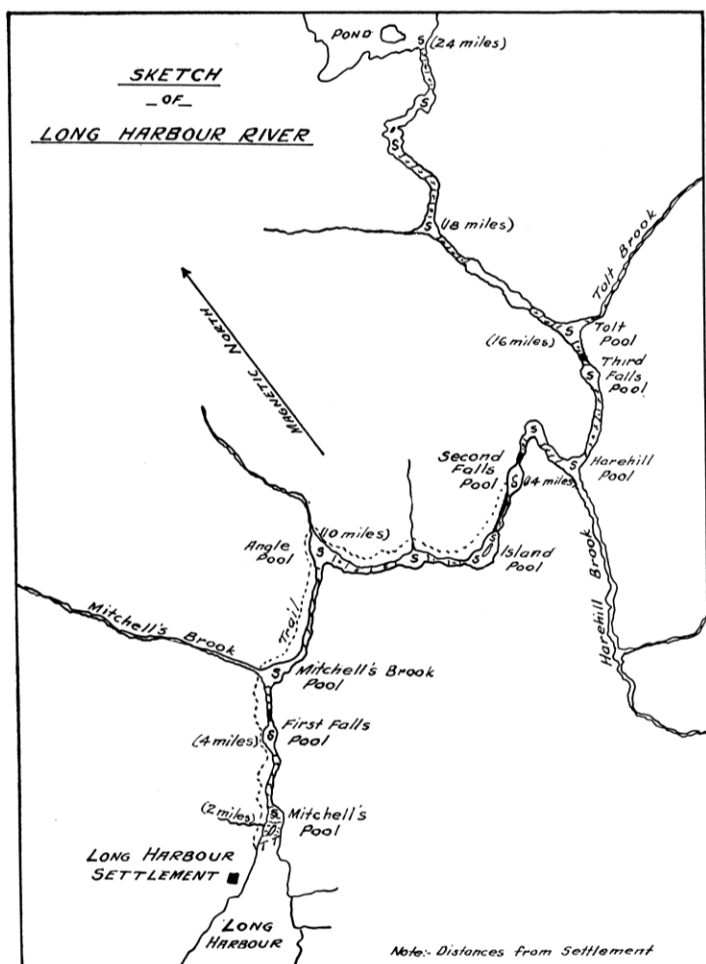
Kane Brook 1M/15

Tolt Brook 2D/2

Pools:

Mitchell's Pool, First Falls Pool, Mitchell's Brook Pool, Angle Pool, 1 unnamed pool, Island Pool, Second Falls Pool, 1 unnamed pool, Harehill Pool, Third Falls Pool, Tolt Pool, 2 unnamed pools





SCHOONER BROOK

Location: 47°44'30" N. 55°59'45" W. Long Harbour, Fortune Bay.

Map Reference: Terrenceville. 1 M/10 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 15.3 miles² (39.62 km²). Mean width: 2.8 miles (4.50 km).

Perimeter, 18.8 miles (30.24 km). Axial length: 6.0 miles (9.65 km).

Maximum basin relief, 1,100 feet (335.28 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls 50 feet (15.24 m) from mouth. Height: 13 feet (3.96 m).

Length: 30 feet (9.14 m). Slope: 30°. (natural steps in falls).

Partial obstruction.

Falls 120 feet (36.57 m), from mouth. Height: 40 feet (12.19 m).

Length: 15 feet (4.57 m). Slope: 80°. Complete obstruction.

MAL BAY BROOK

Location: 47°41'57" N. 55°07'07" W. Mal Bay, Fortune Bay.

Map Reference: Belleoram. 1 M/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 18.0 miles² (46.62 km²). Mean width, 2.2 miles (3.53 km).

Perimeter: 24.1 miles (38.77 km). Axial length, 8.8 miles (14.15 km.)

Maximum basin relief 1,100 feet (335.28 m).

Geology:

Almost entirely Ordovician volcanic with some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: From mouth to mile 1.5 (2.41 km). Width range: 40 to 50 feet (12.19-15.24 m). Average depth: 1 foot (0.30 m).

Bottom Types: From mouth to mile 1 (1.60 km). Bedrock: 25%; boulder 40%; rubble 20%; gravel 15%.

Mile 1 to mile 1.5 (1.60-2.41 km), bedrock 20%; boulder 20%; rubble 40%; gravel 20%.

Barriers to Fish Migration:

Main River: Four falls in section from mile 1.5 (2.41 km) to mile 1.75 (2.81 km); forms a complete obstruction.

First falls: Height: 5 feet (1.52 m); Slope: 45°.

Second falls: Height: 8 feet (2.43 m); Slope: 30°.

Third falls: Height: 8 feet (2.43 m); Length: 8 feet (2.43 m). Width: 6 feet (1.82 m); slope: 90°

Fourth falls: Height: 20 feet (6.09 m); Length: 20 feet (6.09 m). Width: 15 feet (4.57 m); slope 90°.

RENCONTRE BROOK

Location: 47°38'15" N. 55°12'30" W. Rencontre East, Fortune Bay.

Map Reference: Belleoram. 1 M/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 75.3 miles² (195.02 km²). Mean width, 3.6 miles (5.79 km).

Perimeter: 57.2 miles (92.03 km). Axial length, 18.7 miles (30.08 km).

Maximum basin relief, 1,065 feet (324.61 m).

Geology:

Predominantly acidic intrusive rocks with some Ordovician volcanic.

Vegetational Cover:

Forest in valley.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: from mouth to pond at mile 1 (1.60 km).

Bottom types: Gravel 10%; rubble 50%; boulders 30%; bedrock 10%.

Spawning area:

Very little in this section.

Barriers to Fish Migrations:

Falls at mouth of main river, 6 feet (1.82 m) high at low tide; partial obstruction. At high tide the water rises to the crest of the falls eliminating the obstruction.

BELLE HARBOUR RIVER

Location: 47°42'05" N. 55°18'25" W. Bell Bay, Fortune Bay.
Map Reference: Belleoram. 1 M/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 17.8 miles² (46.10 km²). Mean width, 2.8 miles (4.50 km).

Perimeter: 20.3 miles (32.66 km). Axial length, 7.0 miles (11.26 km).

Maximum basin relief, 850 feet (259.08 m).

Geology:

Acidic intrusive rocks.

Vegetational Cover:

Spruce, fir and birch; growth heavier in upper regions.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: from mile 0 to mile 3 (4.82 km). Width range: 30 to 75 feet (9.14-22.86 m). Depth range: 1 to 2 feet (0.3-0.6 m).

Bottom types: bedrock 60%; boulder 55%; rubble 25%; gravel 4%.

Velocity: medium to fast.

Spawning areas:

Main river: from mile 0 to mile 1 (1.60 km); 2,000 yd² (1,674 m²), condition poor. From mile 2 to mile 3 (3.21-4.82 km); 1,760 yd² (1,473.12 m²), condition poor.

Barriers to Fish Migration:

Main river: series of three falls, each 2-3 feet (0.6-0.91 m), high at mile 2 (3.21 km); partial obstruction.

Falls 10 feet (3.04 m) at mile 2.3 (3.70 km); partial obstruction.

NORTH EAST BROOK

Location: 47°43'45" N. 55°21'35" W. East Bay, Belle Bay,
Fortune Bay.
Map Reference: Belleoram. 1 M/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 54.8 miles² (141.93 km²). Mean width: 3.2 miles
(5.14 km).

Perimeter: 45.4 miles (73.04 km). Axial length: 16.0 miles
(25.74 km).

Maximum basin relief, 1,065 feet (324.61 m).

Geology:

Almost entirely acidic intrusive rocks with some Cambrian
sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel characteristics:

Main River:

From mouth to mile 1.5 (2.41 km). Width range: 100 to 200 feet
(30.48-60.96 m). Average depth: 2 feet (0.6 m).

Bottom types: from mouth to mile 1 (1.60 km). Bedrock 5%; boulder 20%;
rubble 50%; gravel 25%.

From mile 1 to mile 1.5 (1.60-2.41 km). Bedrock 40%; boulder 20%;
rubble 30%; gravel 10%.

Barriers to Fish Migration:

Falls at mouth on main river. Height: 5 feet (1.52 m). Width: 50 feet
(15.24 m). Slope: 30.45°; partial obstruction.

NORTH WEST BROOK

Location: $47^{\circ} 44' 18''$ N $55^{\circ} 23' 45''$ W. East Bay, Fortune Bay.
Map Reference: Belleoram. 1 M/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 32.4 miles², (85.91 kilometers²). Mean width, 3.1 miles, (4.98 kilometers).

Perimeter, 32.7 miles, (52.61 kilometers). Axial length, 11.2 miles, (18.02 kilometers).

Maximum basin relief, 800 feet, (243.84 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: From mouth to mile point 0.25, (0.40 kilometers).

Average width: 100 ft. (30.48 meters). Average depth: 1 to 2 ft., (0.3-0.6 meters).

Velocity: Medium.

Number of pools in section: 1, 100 yds., (93.28 meters) long by 25 yds. (22.86 meters) wide.

Bottom types: Bedrock: 10%, Boulder: 20%, Rubble: 50%, Gravel: 20%.

From mile point 0.25, (.40 kilometers), 300 yards (274.32 meters), upstream to 2nd falls.

Width range: 50 to 100 ft., (15.24-30.48 meters). Depth range: 1 to 2 ft., (.3-.6 meters).

Velocity: Medium.

Number of pools in section: 1 just below second falls.

Bottom types: Bedrock: 5%, Boulder: 40%, Rubble: 40%, Gravel: 15%.

From 2nd falls, mile point 0.5, (.8 kilometers) to 3rd falls, mile point 0.75, (1.20 kilometers).

Average width: 75 ft., (22.86 meters). Average depth: 1 ft. (0.3 meters).

Velocity: Medium.

Bottom types: Bedrock: 10%, Boulder: 50%, Rubble: 20%, Gravel: 20%.

Section: From 3rd falls, mile point 0.75, (1.20 kilometers) to 4th falls, mile point 1, (1.60 kilometers).

Width range: 50 to 100 ft., (15.24-30.48 meters). Average Depth: 1', (.3 meters).

Velocity: Medium to slow.

Number of pools: A few small ones in section.

Bottom types: Bedrock 10%, Boulder: 40%, Rubble: 30%, Gravel: 20%.

Spawning Areas:

Main River: 15% of area in 300 yd., (254.4 meters), section between 1st and 2nd falls, medium condition. 20% of $\frac{1}{4}$ mile (.4 kilometers), section between 2nd and 3rd falls, medium condition. 20% of $\frac{1}{4}$ mile, (.4 kilometers), section between 3rd. and 4th falls, good condition.

Barriers to Fish Migration:

Main river: Falls at mile point 0.25, (0.4 kilometers), 15 ft. (4.57 meters) high, 2 ft., (0.6 meters), wide, 45° angle; believed to be impassable.

Falls #2: At mile point 0.5, (0.8 kilometers), a series of four falls.

Falls (a) 4 ft. (1.21 meters) high, 3 ft. (.91 meters), wide, 90° angle.

Falls (b) 10 ft. (3.04 meters) high, 8 ft. (2.43 meters), wide, 45° angle.

Falls (c) 10 ft. (3.04 meters) high, 5 to 6 ft. (1.51-1.82 meters), wide, 70° angle.

Falls (d) 3 ft. (.91 meters) high, 10 ft. (3.04 meters) wide, 90° angle.

Falls #3: At mile point 0.75 (1.21 kilometers), 8 ft. (2.43 meters) high, 2 to 6 ft., (1.82 meters) wide, 30° angle; partial obstruction.

Falls #4: At mile point 1, (1.61 kilometers), 4 ft. (1.22 meters) high, 75 ft. (22.86 meters) wide, 45° angle; partial obstruction.

BAY DU NORD RIVER

Location: 47° 43' 50" N 55° 26' 15" W. North Bay, Fortune Bay.

Map Reference: Belleoram. 1 M/11 West half

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 452.0 miles², (1170.68 kilometers²). Mean width, 8.3 miles, (13.35 kilometers).

Perimeter, 159.2 miles, (256.15 kilometers). Axial length, 42.0 miles, (67.57 kilometers).

Maximum basin relief, 1,254 feet, (382.21 meters).

Geology:

About half acidic intrusive rocks with the remainder consisting of Ordovician sedimentary, Ordovician volcanic and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: From mouth to mile point 2.5, (4.02 kilometers); located in tidal zone.

Between mile points 2.5 and 4.6, (4.02-7.40 kilometers); deep steady water, sand and mud bottom, straight banks and poor shade.

Between mile points 4.6 and 6.8, (7.4-10.94 kilometers). Depth range: 1½ - 5 ft., (.45-1.52 meters).

Velocity: swift. Fair to excellent shade, rubble and gravel bottom.

Spawning area: Approximately 5,334 yds., (4523.23 meters), excellent condition.

Between mile points 6.8 and 9.0, (10.48-14.48 kilometers), (Smoky Falls).

Bedrock bottom, deep pools, rapids and four high falls.

Between mile points 9.0 and 11.3, (14.48-18.18 kilometers); Pool ("Big Still").

Entire length of this section: 2¼ miles, (3.62 kilometers) long and 1/3 mile, (.53 kilometers), wide. Depth 3 ft. (.91 meters). Bottom type: mud, sand and gravel.

North West Brook: (This tributary flows into the "Big Still").

From mouth to 400 yds., (339.2 meters), upstream - excellent spawning grounds. Above this there is a series of rapids and falls.

Barriers to Fish Migrations:

Main River: Falls and rapids at mile points 8 - 9, (12.87-14.48 kilometers); partial obstructions.

Smoky Falls, 56' (17.06 meters) high at mile point 9, (14.48 kilometers); complete obstruction.

Fishway built along side of Smoky Falls in 1947-1948.

Reports indicate that this fishway is ineffective.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout, gaspereau, smelt

BAY DU NORD RIVER

Fortune Bay

Location—

At the bottom of North Bay, Belle Bay, Fortune Bay, on the South Coast.

Season—

June and July are the best months.

General Remarks—

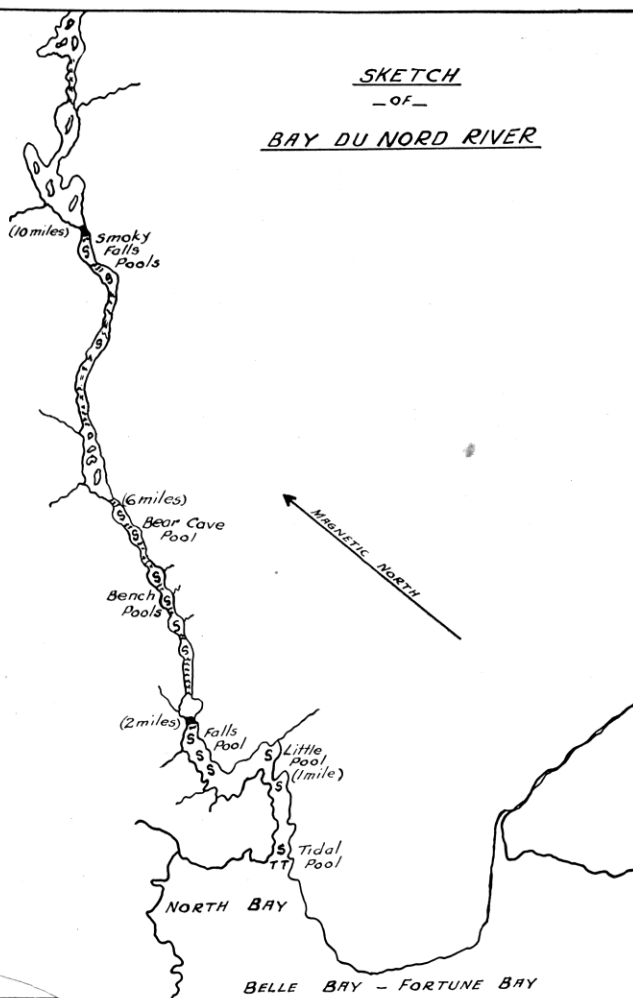
This is an excellent river for salmon and can be fished by dory from mouth to falls, over which distance (10 miles) there are many pools. Large salmon up to 40 lbs. in weight frequent this river.

Pools:

Tidal Pool, 1 unnamed pool, Little Pool, Falls Pool, Bench Pools, Bear Cave Pool, Smoky Falls Pools



SKETCH
-OF-
BAY DU NORD RIVER



SALMON RIVER

Location: 47°39'53" N. 55°28'35" W. Cinq Island Bay,
Fortune Bay.

Map Reference: Belleoram. 1 M/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 75.8 miles² (196.32 km²). Mean width, 4.0 miles
(6.43 km).

Perimeter: 59.2 miles (95.25 km). Axial length, 15.7 miles
(25.26 km).

Maximum basin relief, 1,250 feet (381.00 m).

Geology:

Predominantly acidic intrusive rocks with some Ordovician volcanic
and Ordovician sedimentary.

Vegetational Cover:

Forest covered valley with muskeg in the higher regions.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: mile 0 to mile 5 (8.04 km).

Bottom types: Silt 0.6%; sand 7.5%; gravel 19.4%; rubble 17.5%;
boulders 33.1%; bedrock 21.9%

Spawning Areas:

Many good areas throughout main river mile 0 to mile 5 (8.04 km).

Barriers to Fish Migration:

Main River:

- (1) Falls at mile 0.5 (0.80 km). Height: 8 feet (2.43 m). Partial obstruction.
- (2) Gorge at mile 1.8 (2.89 km); partial obstruction.
- (3) Falls at mile 3.0 (4.82 km). Height: 10 feet (3.04 m). Complete obstruction at low water levels.
- (4) Rapids at mile 4.0 (6.43 km). Height: 8 feet (2.43 m). Partial obstruction.

- (5) Rapids and falls between mile 4.5 and 5.0 (7.24-8.04 km); partial obstruction.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout.

SIMMONS BROOK
(Rattling Brook)

Location: 47° 39' 05" N 55° 28' 35" W. Cinq Island Bay, Fortune Bay.
Map Reference: Belleoram. 1 M/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.0 miles², (38.85 kilometers²). Mean width, 3.1 miles, (4.98 kilometers).

Perimeter, 19.7 miles, (31.69 kilometers). Axial length, 4.5 miles, (7.24 kilometers).

Maximum basin relief, 1,150 feet, (350.52 meters).

Geology:

Predominantly acidic intrusive rocks with some Ordovician sedimentary and Ordovician volcanic.

Vegetational Cover:

River valley steep, covered with forest.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: From mouth to mile point 1.5: (2.41 kilometers).

Range of channel width: 10 - 30 ft., (3.04-9.12 meters).

Range of channel depth: 6 inches - 22 ft., (0.15-6.70 meters).

Velocity: Rapid.

Bottom type: Percentage of total area:

Sand: 8.8%, Gravel: 20%, Rubble: 16.3%, Boulders: 16.3%, Bedrock: 38.8%.

Barriers to Fish Migration:

Main River:

Series of 8 to 10 falls, from mouth to mile point 0.25; (.40 kilometers); complete obstruction: Falls, 10 ft. (3.04 kilometers) high, at mile point 0.5; (0.8 kilometers); partial obstruction. Two falls, 6 and 15 ft., (1.82-4.57 meters) high at mile point 1.5; (2.41 kilometers); complete obstruction.

SOUTH WEST BROOK
(Cinq Islands Brook)

Location: 47°36'35" N. 55°27'55" W. Cinq Island Bay, Fortune Bay.

Map Reference: Belleoram. 1 M/11 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 2.2 miles² (5.7 km²). Mean width, 0.8 miles (1.28 km).

Perimeter: 7.5 miles (12.06 km). Axial length, 3.0 miles (4.82 km).

Maximum basin relief, 550 feet (167.64 m).

Geology:

About equal amounts of acidic intrusive rocks, Cambrian sedimentary and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: From mile 0 to mile 0.5 (0.8 km). Average width: 20 feet (6.09 m). Depth range: 6 to 12 inches (0.15-0.30 m).

Velocity: Medium.

Bottom types: Sand 12.5%; gravel 12.5%; rubble 20%; boulder 35% ; bedrock 20%.

Barriers to Fish Migration:

Main river.

Falls 50 yd (45.72 m) from mouth. Three sections looking upstream.

Right hand side: Height; 10 feet (3.04 m). Width; 1 foot (0.30 m). Slope; 50°. Centre: Height; 8 feet (2.43 m). Width; 5 feet (1.52 m). Slope; 90°. Left hand side: Height; 10 feet (3.04 m). Width; 3 feet (0.91 m). Slope; 80°. Complete obstruction at low water.

Falls mile 0.5 (0.80 km). Three sections looking upstream. Right hand side: Height; 4 feet (1.22 km). Slope; 90°. Centre: Height; 10 feet (3.04 m). Slope; 80°. Left hand side: Height; 10 feet (3.04 m). Slope; 45°. Partial obstruction.

OLD BROOK (Old Bay Brook)

Location: $47^{\circ} 34' 40''$ N. $55^{\circ} 35' 25''$ W. Great Bay de l'Eau, Fortune Bay.

Map Reference: Gaultois. 1 M/12 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.3 miles² (39.62 kilometers²). Mean width, 2.8 miles (4.50 kilometers).

Perimeter, 18.9 miles (30.41 kilometers). Axial length, 5.0 miles (8.04 kilometers)

Maximum basin relief, 1,100 feet (335.28 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

No obstructions.

TAYLORS BAY RIVER (Taylors Brook)

Location: $47^{\circ} 33' 28''$ N. $55^{\circ} 38' 35''$ W. Taylor Bay, Great Bay de
L'Eau, Fortune Bay.

MapReference: Gaultois. 1 M/12 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 12.0 miles² (31.08 kilometers²). Mean width, 2.1 miles
(3.37 kilometers).

Perimeter, 18.2 miles (29.28 kilometers). Axial length, 5.2 miles
(8.36 kilometers).

Maximum basin relief, 1,050 feet (320.04 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

On the main river, falls at mile point 0.5 (.8 kilometer), 10 ft.
high (3.04 meters), sloping; passable.

SALMONIER BROOK

Location: 47° 41' 05" N. 55° 40' 45" W. Salmonier Cove,
Hermitage Bay.

Map Reference: Gaultois. 1 M/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 30.9 miles², (80.03 kilometers²). Mean width, 3.0 miles,
(4.82 kilometers).

Perimeter, 30.8 miles, (49.55 kilometers).

Maximum basin relief, 1,235 feet, (376.42 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Nil

LITTLE RIVER

Location: 47° 50' 50" N 55° 42' 07" W. Bay D'Espoir.
Map Reference: St. Alban's. 1 M/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 70.8 miles², (183.4 kilometers²). Mean width, 2.9 miles, (4.66 kilometers).

Perimeter, 59.2 miles, (95.25 kilometers). Axial length, 22.6 miles, (36.36 kilometers).

Maximum basin relief, 900 feet, (274.32 meters).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls 80 ft., (24.38 meters) high, angle 90°, at mile point 3.0, (4.82 kilometers); complete obstruction.

CONNE RIVER

Location: 47° 54' 45" N 55° 41' 40" W. Bay D'Espoir

Map Reference: St. Alban's. 1 M/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 232.6 miles² (602.43 kilometers²). Mean width, 7.9 miles, (12.71 kilometers).

Perimeter, 87.7 miles, (141.10 kilometers). Axial length, 28.1 miles, (45.21 kilometers).

Maximum basin relief, 1,050 feet, (320.04 meters).

Geology:

About equal amounts of Ordovician sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Length of all streams in system, not including standing water, 120 miles, (193.08 kilometers).

Spawning areas:

21 miles (33.78 kilometers), of the main river has areas of suitable gravel.

Barriers to Fish Migration:

Eight rapids and four falls on the main river and Conne Branch from 2.3 miles, (3.70 kilometers), from mouth to 10.0 miles, (3.04 kilometers) upstream; partial obstructions.

Dam, 17.8 miles, (28.64 kilometers) from mouth of main river. Passable, but difficult at low waters.

Dam, 5 miles, (8.04 kilometers), upstream from Conne Pond; partial obstruction, impassable at low water.

Dam, 5.5 miles, (8.84 kilometers), from Conne Pond; partial obstruction, impassable at low water.

Partial obstruction known as Martins Hole is located approximately 3 miles, (4.83 kilometers) from mouth of main river.

Blasted in 1971.

Partial obstruction known as Brin Bag Hole is located 3-4 hundred yards (254.4-339.2 meters) upstream from the junction of Conne and Twillick Brook at Camp #3.

Water **diverted** to concentrate flow at various places to make easier passage for salmon - 1971.

1972, a wider passage at entrance to Brin Bag Hole was blasted so that salmon would not enter the hole at higher water levels.

Bernards Falls - 1971, boulder removed from entrance of fishway baffle.

Twillick Brook, 1972 - four ledges were blasted at Camp #4 falls to confine water in a more direct route.

Twillick Brook, 1972 - channel blasted through Pikes Pool Falls to confine water especially at low levels.

Bernards Brook; series of concrete baffles were placed across river at Bernards Falls in 1963 - fish utilizing without difficulty

CONNE RIVER

Location—

At the bottom of the North East Arm of Bay d'Espoir, Hermitage Bay, on the South Coast.

Season—

July and August are the best months.

General Remarks—

This river contains numerous rapids and waterfalls which form splendid fishing pools in which the salmon naturally rest on their way up the river. The falls, being in the nature of ledges, make natural ladders for the salmon which are found over its entire length. They also go up Bernard's Brook for 2½ miles to the falls. Salmon ranging in weight from 5 to 20 lbs. are abundant.

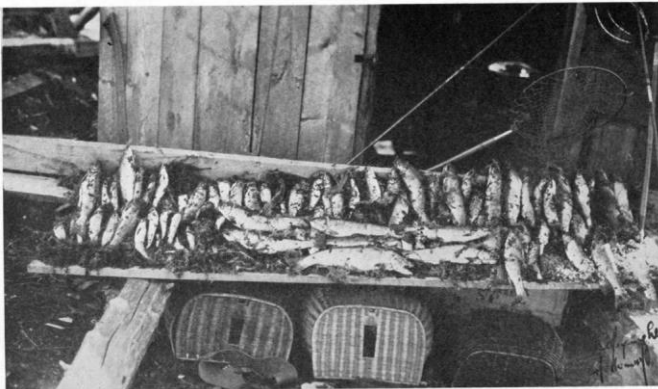
At Conne River is located the only Indian Reservation on the Island. These Indians from the settlement make excellent guides for the river.

Tributaries:

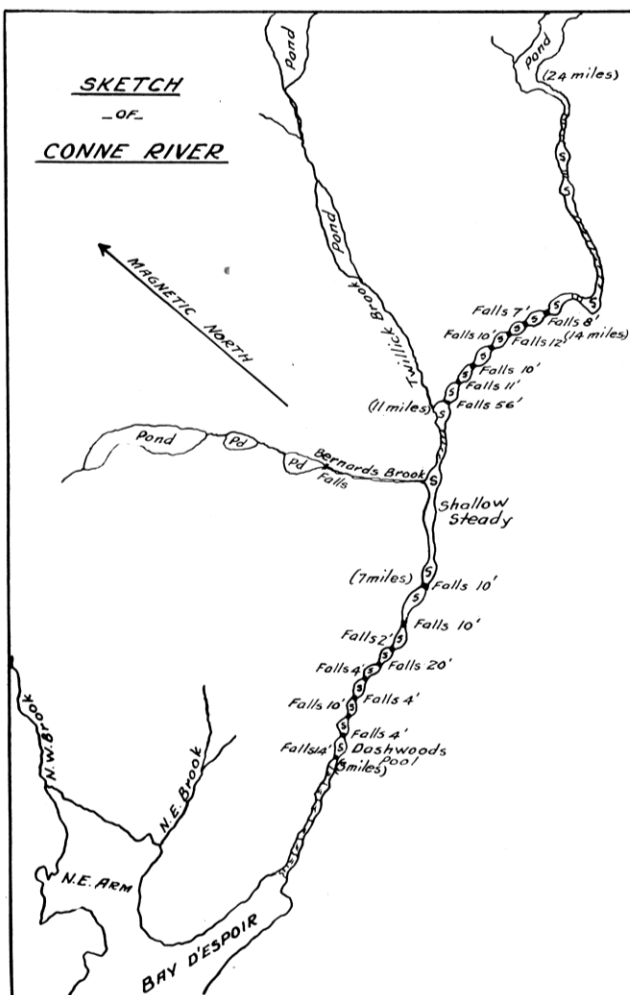
Bernard Brook	2D/4
Twillick Brook	2D/4

Pools:

Dashwoods Pool, 7 unnamed pools, Shallow Steady, 17 unnamed pools



SKETCH
-OF-
CONNE RIVER



SOUTHEAST BROOK

Location: 47°55'15" N. 55°44'45" W. Bay d'Espoir.
Map Reference: St. Alban's. 1 M/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 32.6 miles² (84.43 km²). Mean width, 2.7 miles (4.34 km).

Perimeter: 30.8 miles (49.55 km). Axial length, 10.9 miles (17.53 km).

Maximum basin relief, 900 feet (274.32 m).

Geology:

Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTH WEST BROOK

Location: 47° 57' 50" N. 55° 47' 25" W. Bay D'Espoir.

Map Reference: St. Alban's. 1 M/13 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 42.9 miles², (111.11 kilometers²). Mean width, 3.3 miles, (5.30 kilometers).

Perimeter, 36.7 miles, (59.05 kilometers). Axial length, 11.4 miles, (18.34 kilometers).

Maximum basin relief, 900 feet, (274.32 meters).

Geology:

Predominantly gneiss with some acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams, including standing water, 18 miles, (28.96 kilometers).

Main river: average width: 80 ft., (24.38 meters), (reduced to 25 ft. (7.62 meters), during low water levels). Range of channel depth: 3 - 6 inches, (.07-.15 meters)

Bottom Types:

From mouth to mile point 2.5, (4.02 meters); Gravel and sand; velocity: slow.

From mile point 2.5 to 6.0, (4.02-9.65 kilometers); Bedrock and boulders; velocity: fast.

Above mile point 6, (9.65 kilometers). The river is slow moving as it drains small ponds, lakes and marshland.

Barriers to Fish Migration:

Main River:

Falls, 25 ft., (7.62 meters), high, at mile point 2.5, (4.02 kilometers) partial obstruction. Cut off dam and powerhouse for the Bay D'Espoir power development constructed at mile point 4.0, (6.43 kilometers). This poses a complete obstruction to salmon.

LONG REACH BROOK

Location: $47^{\circ} 44' 40''$ N. $56^{\circ} 05' 10''$ W. Northern Arm, Bay d'Espoir.

Map Reference: Facheux Bay. 11 F/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 1.6 miles² (4.14 kilometers²). Mean width, .7 miles (1.12 kilometers).

Perimeter, 4.6 miles (7.40 kilometers). Axial length, 1.7 miles (2.73 kilometers).

Maximum basin relief, 1,000 ft. (304.80 meters).

Geology:

About equal amounts of Ordovician sedimentary and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

SALMON RIVER

Location: 47° 48' 45" N. 56° 00' 20" W. Bay Est.,
Bay D'Espoir.

Map Reference: D'Espoir Brook. 11 P 16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 1045.7 miles², (2708.36 kilometers²). Mean width, 14.7 miles, (23.65 kilometers).

Perimeter, 225.1 miles, (362.18 kilometers). Axial length, 51.7 miles, (83.18 kilometers).

Maximum basin relief, 1,250 feet, (381.00 meters).

Geology:

About equal amounts of acidic intrusive rocks, Ordovician sedimentary and gneissis with small amounts of Ordovician volcanic and ultrabasic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all streams not including standing water equals 300 miles, (482.70 kilometers).

Main river: From mouth to Long Pond, mile point 12.0 (19.3 kilometers);

Deep valley bordered by high, almost vertical, mountains.

Velocity: Swift and turbulent. Bottom type: Boulder and bedrock.

Above Long Pond:

Velocity: Slow - medium. Bottom type: Rubble, gravel and mud.

Barriers to Fish Migration:

Main River:

Falls at mile point 1.4 (2.25 kilometers); complete obstruction. Fishway constructed along side of falls in 1947. Effectiveness: poor, due to lack of flow control.

Falls and rapids between mile points 2.0 and 3.3 (3.21-5.30 kilometers); partial obstruction.

Rapids at mile point 3.5-3.6 (5.63-5.79 kilometers); complete obstruction.

Falls and rapids between mile points 3.8-4.1 (6.11-6.59 kilometers); partial obstruction.

Falls and rapids at mile points 5.5 and 5.8 (8.84-9.33 kilometers); complete obstruction.

Rapids between mile points 6.5 and 11.8 (10.45-18.98 kilometers); partial obstruction.

Dam constructed at mile point 8.8 (14.16 kilometers), a short distance down river from Long Pond. This dam is a part of the Bay D'Espoir power development and cuts off most of the water flowing down Salmon River from Long Pond. Consequently, this section of the river supports a very small fish population.

The Bay D'Espoir power development will use Long Pond as the main reservoir increasing its size from _____sq. miles (_____sq. kilometers) to _____sq. miles (_____sq. kilometers). Water will be diverted from Long Pond to the power house at North West Brook, S-1349.

Falls at mile point 40 (64.36 kilometers); partial obstruction.

BAIE D'EST RIVER

Location—

At the bottom of Baie d'Est, Hermitage Bay, on the South Coast.

Season—

July and August are the best months.

General Remarks—

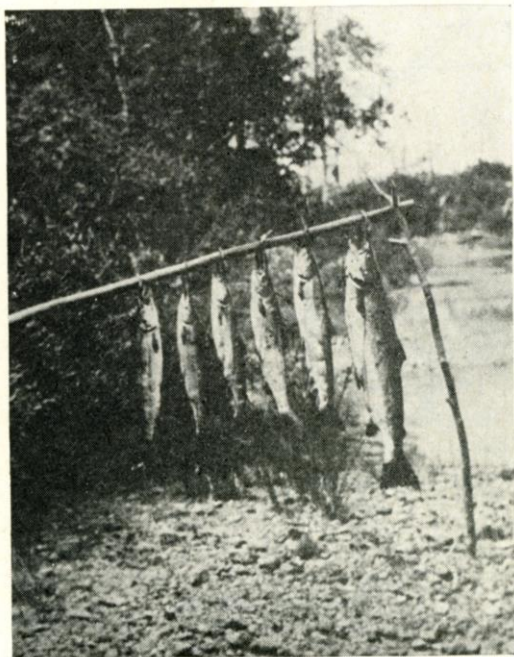
This river contains numerous small falls and rapids at the foot of which salmon naturally lie. Salmon from 5 to 20 lbs. in weight can be caught.

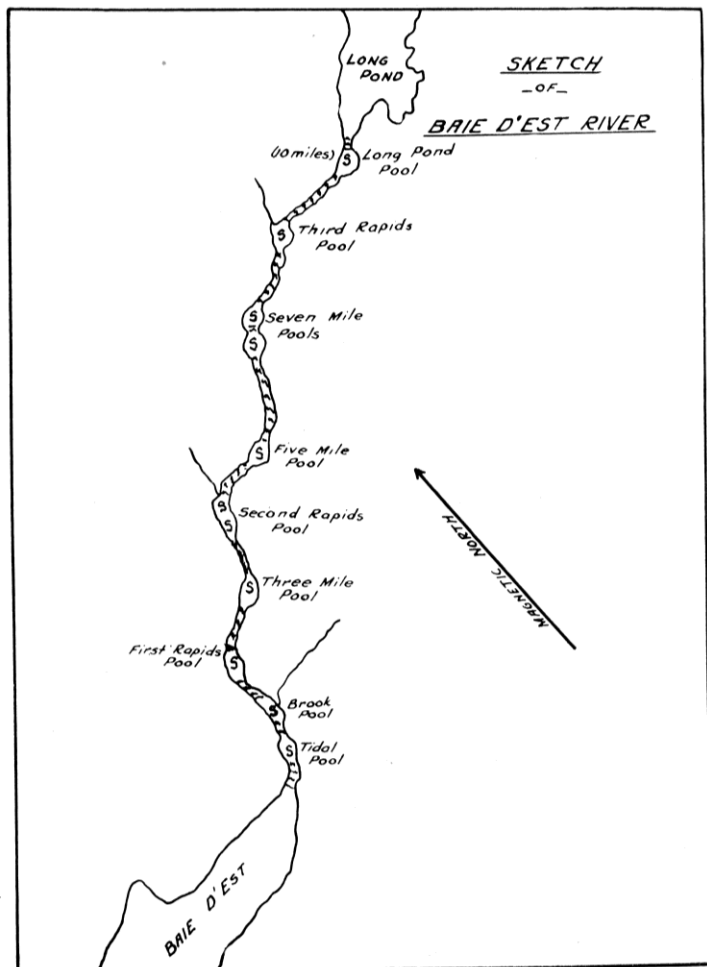
Notes:

Now Salmon River of East Bay. 11P/16.

Pools:

Tidal Pool, Brook Pool, First Rapids Pool, Three Mile Pool, Second Rapids Pool, one unnamed pool, Five Mile Pool, Seven Mile Pool, Third Rapids Pool, Long Pond Pool





FIRST BROOK

Location: $47^{\circ} 46' 25''$ N. $56^{\circ} 07' 30''$ W. North Bay,
 Bay D'Espoir

Map Reference: D'Espoir Brook. 11 P/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 14.0 miles², (36.26 kilometers²). Mean width, 1.6 miles,
(2.57 kilometers).

Perimeter, 24.2 miles, (38.93 kilometers). Axial length, 9.2 miles,
(14.80 kilometers).

Maximum basin relief, 1,025 feet, (312.42 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

HUGHES BROOK

Location: 47° 50' 40" N. 56° 09' 20" W. North Bay,
Bay D'Espoir.

Map Reference: D'Espoir Brook. 11 P/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 9.3 miles², (24.08 kilometers²). Mean width, 1.6 miles,
(2.57 kilometers).

Perimeter, 14.0 miles, (22.52 kilometers). Axial length, 4.6 miles,
(7.40 kilometers).

Maximum basin relief, 1,025 feet, (312.42 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Location: $47^{\circ} 52' 20''$ N. $56^{\circ} 09' 50''$ W. North Bay,
Bay D'Espoir.

Map Reference: D'Espoir Brook. 11 P/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 110.1 miles², (285.16 kilometers²), Mean width, 5.9 miles,
(9.49 kilometers).

Perimeter, 59.0 miles, (94.93 kilometers). Axial length, 13.5 miles,
(21.72 kilometers).

Maximum basin relief, 1,150 feet, (350.52 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

D'ESPOIR BROOK (Bay du Nord Brook)

Location: 47°53'22" N. 56°10'50" W. North Bay, Bay d'Espoir.
Map Reference: D'Espoir Brook. 11 P/16 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 110.1 miles² (285.16 km²). Mean width, 5.9 miles (9.49 km).
Perimeter: 59.0 miles (94.93 km). Axial length, 13.5 miles (21.72 km).
Maximum basin relief, 1,150 feet (350.52 m).

Geology:

Almost entirely acidic intrusive rocks with some gneiss.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 1.5 (2.41 km). Height; 70 feet (21.33 m). Complete obstruction.
Falls, 80 feet (24.40 m) high; complete obstruction.

BAY DU NORD RIVER

Location—

At the bottom of Bay du Nord, Bay d'Espoir, Hermitage Bay, on the South Coast.

Season—

July and August are good months.

General Remarks—

This rough river has numerous shutes and rapids, the foot of which make splendid salmon pools in which the salmon lie. A splendid run of salmon, up to 25 lbs. in weight, frequent this river.

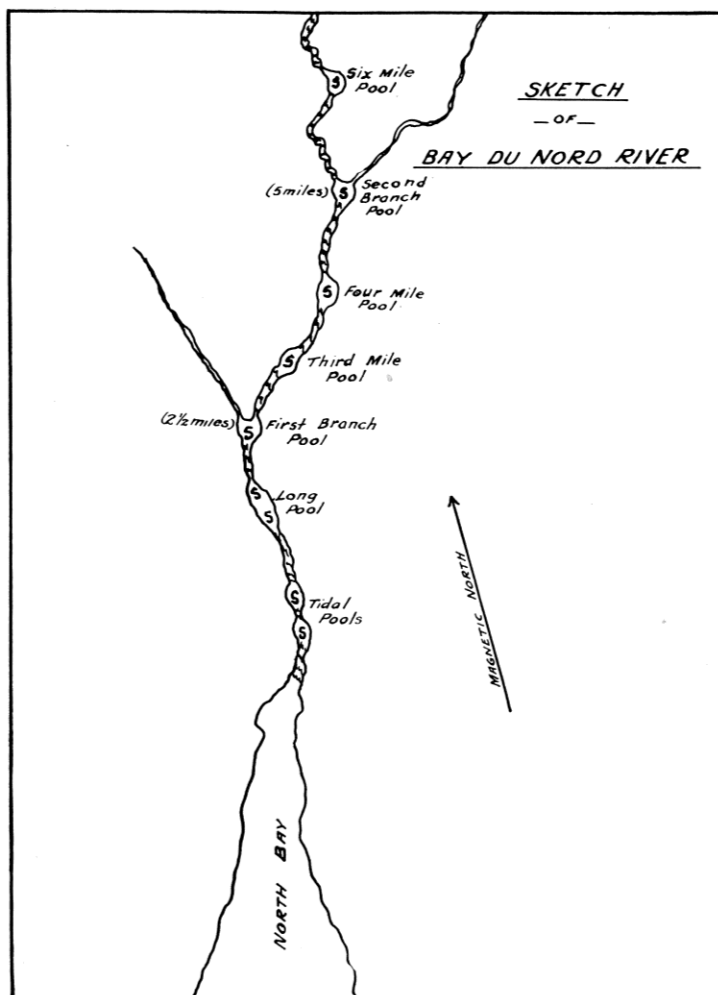
Notes:

Now D'Espoir Brook of North Bay. 11P/16

Pools:

Tidal Pools, Long Pool, First Branch Pool, Third Mile Pool, Four Mile Pool, Second Branch Pool, Six Mile Pool





ALLAN COVE BROOK

Location: 47°42'08" N. 56°16'40" W. Facheux Bay.
Map Reference: Facheux Bay. 11 P/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 15.7 miles² (40.66 km²). Mean width, 1.8 miles (2.89 km).
Perimeter: 25.2 miles (40.54 km). Axial length, 7.7 miles (12.38 km).
Maximum basin relief, 1,100 feet (335.28 m).

Geology:

Almost entirely acidic intrusive rocks with small amounts of gneiss and Ordovician sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls mile 3 (4.82 km). Height; 60 feet (18.28 m). Complete obstruction.

FISH POPULATIONS

Species Present: Atlantic salmon.

BOTTOM BROOK (Facheux Bay River)

Location: 47°47'41' N. 56°19'36" W. Bottom of Facheux Bay.

Map Reference: d'Espoir Brook. 11 P/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 67.6 miles² (175.08 km²). Mean width, 4.7 miles (7.56 km).

Perimeter: 45.6 miles (73.37 km). Axial length, 14.3 miles (23.00 km).

Maximum basin relief, 1,150 feet (350.52 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Main River:

Falls at mile 4 (6.43 km). Height: 100-120 feet (38.48-36.57 m).

Complete obstruction.

FISH POPULATIONS

Species Present: Atlantic salmon, brook trout (sea run).

BRENT COVE BROOK

Location: 47°41'55" N. 56°20'55" W. Facheux Bay.
Map Reference: Facheux Bay. 11 P/9 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 17.0 miles² (44.03 km²). Mean width, 2.8 miles (4.50 km).
Perimeter, 20.1 miles (32.34 km). Axial length, 6.3 miles (10.13 km).
Maximum basin relief, 1,100 feet (335.28 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

MORGAN BROOK

Location: $47^{\circ} 43' 18''$ N $56^{\circ} 30' 50''$. Hare Bay.

Map Reference: La Hune. 11 P/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 68.7 miles², (177.93 kilometers²). Mean width, 3.5 miles, (5.63 kilometers).

Perimeter, 58.6 miles, (94.28 kilometers). Axial length, 16.6 miles, (26.70 kilometers).

Maximum basin relief, 1,250 feet, (381.00 meters).

Geology:

Almost entirely acidic intrusive rocks with some gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 0. Height; 60-70 feet (18.5-21.6 m). Complete obstruction.

Location: 47° 43' 30" N 56° 34' 50" W. Northwest Arm,
Hare Bay.

Map Reference: La Hune. 11 P/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 1.4 miles², (3.62 kilometers²). Mean width, 0.7 miles,
(1.12 kilometers).

Perimeter, 5.1 miles, (8.20 kilometers). Axial length, 2.0 miles,
(3.21 kilometers).

Maximum basin relief, 1,278 feet, (389.53 meters).

Geology:

About equal amounts of gneiss and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

DOLLAND BROOK

Location: 47° 43' 40" N 56° 35' 10" W. North West Arm, Hare Bay.

Map Reference: La Hune. 11 P/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 265.6 miles², (687.90 kilometers²). Mean width, 7.4 miles, (11.90 kilometers).

Perimeter, 117.1 miles, (188.41 kilometers). Axial length, 32.5 miles, (52.29 kilometers).

Maximum basin relief, 1,350 feet, (411.48 meters).

Geology:

Predominantly acidic intrusive rocks with some gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Location: 47° 43' 08" N 56° 34' 30" W. Northwest Arm,
Hare Bay.

Map Reference: La Hune. 11 P/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.2 miles², (44.54 kilometers²). Mean width, 3.0 miles,
(4.82 kilometers).

Perimeter, 24.5 miles, (39.42 kilometers). Axial length, 5.2 miles,
(8.36 kilometers).

Maximum basin relief, 1,350 feet, (411.48 meters).

Geology:

About equal amounts of gneiss and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GREY RIVER

Location: 47° 41' 30" N. 57° 00' 15" W. North East Arm.

Map Reference: Ramea. 11 P/11 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 924.3 miles², (2393.93 kilometers²). Mean width, 11.4 miles, (18.34 kilometers).

Perimeter, 213.2 miles, (343.03 kilometers). Axial length, 63.5 miles, (102.17 kilometers).

Maximum basin relief 1,540 feet, (469.39 meters).

Geology:

Predominantly acidic intrusive rocks with some gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Length of all streams in system, not including standing water, 280 miles, (450.52 kilometers). Length of tributaries 230 miles, (444.08 kilometers).

Main river:

From mouth to mile point 5, (8.04 kilometers), (Salmon Bk. Junction):

Depth range: 1 - 2 ft., (.3 - .6 meters). Width range: 300 - 900 ft., (91.44 - 247.32 meters).

Velocity: Swift. Bottom types: (In wide sections) large rubble mixed with gravel and sand. (In narrow sections) bedrock and large boulders.

From mile point 5, (8.04 kilometers), to mile point 12 (19.32 kilometers) (Smoky Falls):

Width range: 300 - 600 ft. (91.44 - 182.88 meters). Velocity: Mostly sluggish.

Bottom types: Large and small boulders mixed with rubble.

From mile point 12, (3.65 kilometers), to mile point 30, (9.14 kilometers), (Meelpaeg Lake):

Width range: 400 - 1,500 ft., (121.92 - 457.20 meters).

Salmon Brook Tributary:

Total length of stream, 45 miles, (72.40 kilometers). Width range: 30 - 300 ft. (9.14 - 91.44 meters).

From mouth to mile point 3, (4.82 kilometers):

Bottom type: Layer of small and large boulders sparsely covering granite bedrocks.

From mile point 3, (4.82 kilometers), to mile point 11, (17.69 kilometers), Salmon Pond):

Bottom type: Gravel, sand and rubble broken by stretches of rapids and falls. There are a total of 11 small streams entering Salmon Brook, three of which are large enough to be utilized by salmon.

Spawning area:

Accessible areas -

Main river: Below Smoky Falls, one mile section, (1.61 kilometers).

Salmon Brook Tributary: From mouth to mile point 11, (17.69 kilometers), (Salmon Pond), 75% of total area. 40% of tributaries (10 miles), (16.1 kilometers), flowing into Salmon Brook, suitable for spawning.

Inaccessible areas -

Main river: From Smoky Falls (mile point 9) (14.48 kilometers), to Meelpaeg Lake (mile point 30), (48.30 kilometers). It is estimated that 50% of this section is suitable for spawning.

Full evaluation of spawning areas in this watershed have not been made to date. From an aerial survey unlimited spawning areas were observed above Smoky Falls.

Barriers to Fish Migration:

Main river:

From mile point 3 to mile point 11.5, (4.82 to 18.50 kilometers), 2 rapids and 3 falls; partial obstruction.

Smoky Falls, at mile point 12, (19.30 kilometers), upper section, 50 ft. high, (15.24 meters), 1,500 ft. (457.20 meters), long, 200 - 300 ft., (60.96-91.44 meters), wide. Lower section, 40 - 60 ft., (12.19 - 18.28 meters), high, 40 - 60 ft. (12.19 - 18.28 meters) long, angle 90°; complete obstruction.

Salmon River Tributary (main stream of tributary):

Falls at mile point 7 (11.26 kilometers); partial obstruction.

Falls at mile point 7.5, (12.06 kilometers); partial obstruction.

Low flood levels on Salmon Brook pose temporary hold up to salmon.

Location: 47° 39' 40" N 57° 04' 20" W. Northwest Arm, Grey
Map Reference: Ramea. 11 P/11 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 44.3 miles², 114.73 kilometers²). Mean width, 3.9 miles, (6.27 kilometers).

Perimeter, 35.9 miles, (57.76 kilometers). Axial length, 10.6 miles, (17.05 kilometers).

Maximum basin relief, 1,350 feet, (411.48 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GREY RIVER

Location—

On the South Coast at the bottom of Little or Grey River Bay.

Season—

June and July are the best months.

General Remarks—

This river offers splendid fishing on the main brook to Smoky Falls, and on its main tributary, Salmon Brook. Camping sites are numerous. The river is rough in places, but there are many excellent fishing pools. Dories can be used to advantage on the river, canoes not being necessary. The salmon range in weight from 5 to 25 lbs.

Tributaries:

Salmon Brook

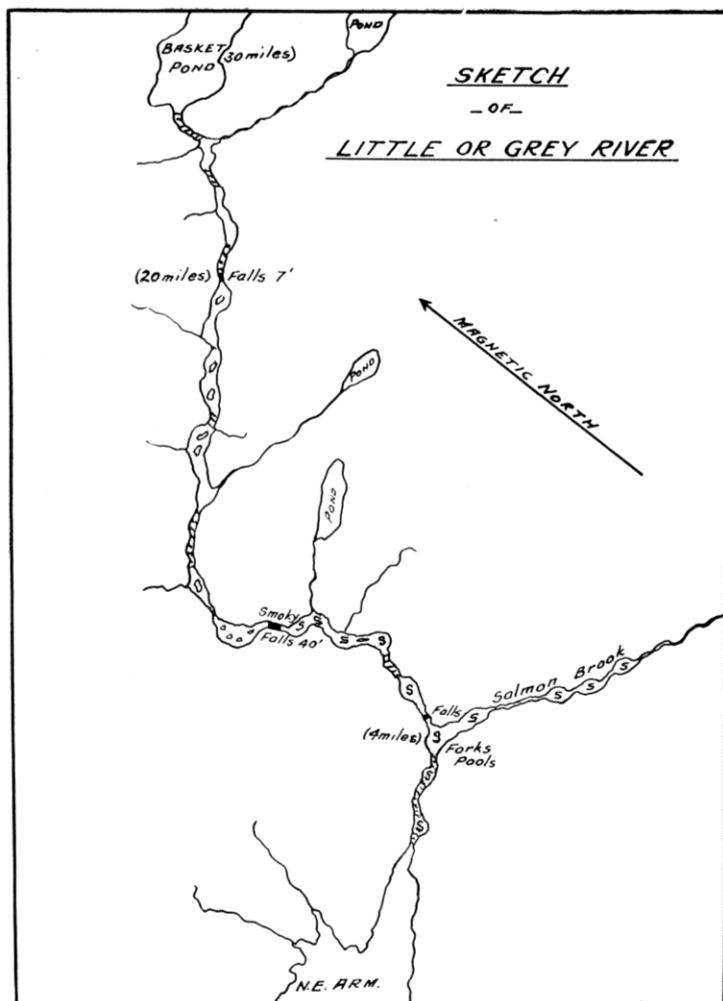
Note: Also called Little River.

Pools:

Forks Pools, 5 unnamed pools

Salmon Brook shows 3 unnamed pools





WHITE BEAR RIVER

Location: 47° 46' 50" N. 57° 16' 15" W. White Bear Bay.

Map Reference: White Bear River. 11P/14 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 782.5 miles², (2026.68 kilometers²). Mean width, 12.3 miles, (19.79 kilometers). Post diversion basin area 330 miles² (854.70 km). Perimeter, 211.3 miles, (339.98 kilometers). Axial length, 54.0 miles, (86.88 kilometers). Maximum basin relief, 2,083 feet, (634.89 meters).

Geology:

Predominantly acidic intrusive with some gneissis.

Vegetational Cover:

Balsom fir predominant along the river bank in the lower drainage, while stunted black spruce are dominant in upper sections.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of all tributaries not including standing water is 530 miles, (852.77 kilometers). The main river, which is that part of the system from White Bear Lake to the sea is 24 miles, (38.61 kilometers).

Main river sections:

From mouth to mile point 9.5, (15.28 kilometers), (Trib. #8): Width range: 150 - 250 ft. (45.72 - 76.20 meters).

Velocity: Medium with short rapids. Bottom types: Mostly boulder with bedrock, rubble and gravel.

From trib. #8 to mile point 17.5, (28.15 kilometers), (Trib. #15): Width range: 50 - 175 ft., (15.24 - 53.38 meters). Velocity: Rapid. Bottom types: Bedrock with some boulder.

From trib. #18 to mile point 24, (38.61 kilometers), (White Bear Lake): Width range: 200 - 300 ft., (60.96 - 91.44 meters). Velocity: Medium - slow. Bottom types: Mixed boulder - rubble bottom.

Tributaries:

Granite Lake Brook: Draining Granite Lake and enter the main channel near White Bear Lake. Total length 10 miles. Width range: 200 - 400 ft., (60.96 - 121.92 meters). Velocity: Slow, steadies are common. Bottom types: Mostly mixed boulder - rubble type.

Gravel and sand are less common.

Burnt Pond Brook: Total length not including standing water is 38 miles, (61.14 kilometers). Drainage area 308 square miles, (797.72 sq. kilometers). This brook is characterized by short stretches of wide channels alternating with large bodies of standing water, such as Burnt Pond, Rock Ridge Pond and Spruce Pond. These bodies of water are situated on the main channel and have a total length of 18 miles, (28.96 kilometers).

Bottom types: Boulder - rubble in the main channel, with gravel being more abundant in the secondary streams.

Spawning areas:

Big Indian Brook (Trib. #2) $\frac{1}{4}$ mile, (0.40 kilometers), of spawning gravel. Trib. #17 which enters the main river at mile point 17, (27.35 kilometers), 2 - 3 miles, (3.21 - 4.82 kilometers), of gravel.

Those areas are believed to be the main salmon spawning areas. There are other gravel patches scattered throughout the system.

Barriers to Fish Migration:

Main River:

Rapids - falls, 100 yds. long (91.44 meters), 40' - 50' (12.19 - 15.24 meters) wide gorge at mile point 12.0 (19.30 kilometers). In 1972, some boulders were removed, concentrating the water into one channel, facilitating migration.

Several 5'-8' (1.52-2.43 kilometers), (series of steps) at mile point 12.5 (20.11 kilometers). In 1972, falls were blasted, diverting total flow down one channel. A small rock ridge and an overhanging lip were also removed. Falls, 20' (6.09 meters) high, at mile point 13.3 (21.39 kilometers). In 1972, extensive blasting carried out at this location, diverting the flow to a new channel. Large boulders removed and some benches blasted into the rock to create a series of pools. Migrants should now by-pass this area without difficulty.

Tributary Streams:

Tributary #2, Big Indian Brook:

Falls at mile 2.4 (3.86 km), complete obstruction. Falls at mile 4
(6.4 km); complete obstruction.

Tributary #4, Spirit Brook:

Falls at mile 0.8 (1.3 km); complete obstruction.

Falls at mile 7.6 (12.2 km); complete obstruction.

Tributary #7:

Falls at mile 0.25 (0.4 km); complete obstruction.

Tributary #8:

Falls at mile 0.1 and 0.2 (0.1 and 0.3 km); partial obstruction.

Falls at mile 0.25 (0.40 km); complete obstruction.

Tributary #12:

Falls at mile 3.25 (5.22 km); complete obstruction.

Tributary #17:

Falls at mile 3.25 (5.22 km); complete obstruction.

Miscellaneous Information:

White Bear River is included in the Baie d'Espoir power development. A dam has been built on the main river, a few miles downstream from White Bear Lake. This poses a complete obstruction and causes a considerable drop in flow below the dam. The dam caused considerable flooding in the upper regions of the river. Consequently, Burnt Pond, White Bear Lake and Granite Lake are merged into one large body of water. The water is diverted from the Eastern end of Granite Lake via canal to the Grey River reservoir and thence to Salmon River reservoir.

The Newfoundland and Labrador Power Commission has agreed to maintain a minimum flow of 250 c.f.s. at the mouth of the river during the months of June to September inclusive. This will be accomplished by the release of 150 c.f.s. from Burnt Dam during the period. The

WHITE BEAR RIVER

Location—

At the bottom of White Bear Bay, on the South Coast.

Season—

June and July are the best months.

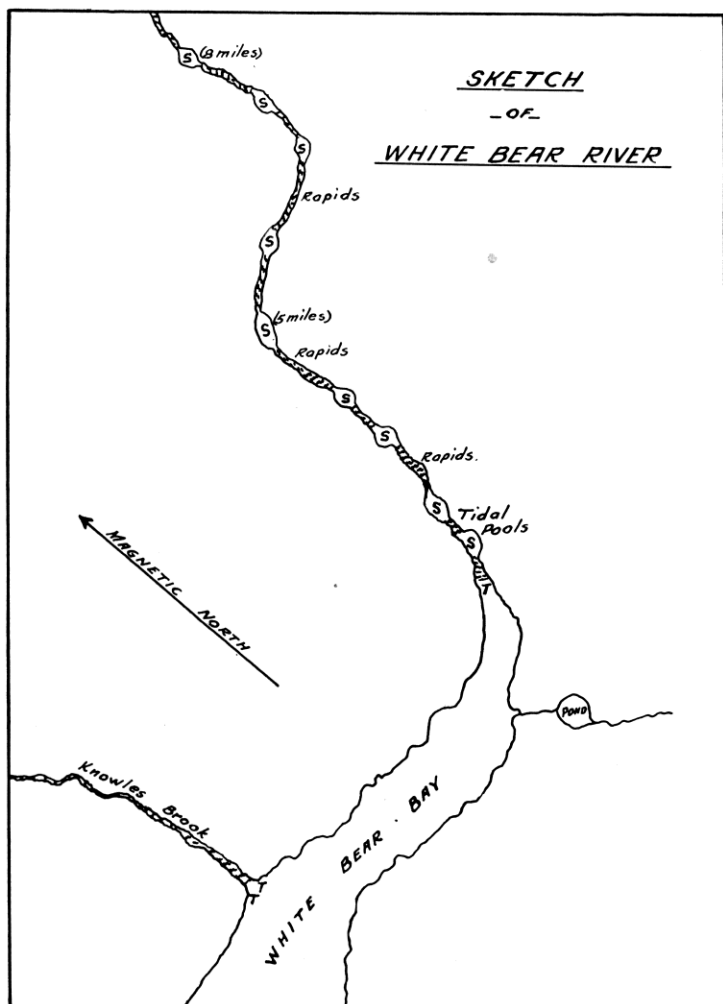
General Remarks—

A good river, but rather rough with numerous rapids, at the foot of which the salmon naturally rest on their way to their spawning beds in the upper reaches. Salmon ranging in size from 5 to 25 lbs. have been caught.

Pools:

Tidal Pools, 8 unnamed pools





KNOWLES BROOK

Location: $47^{\circ} 45' 58''$ N $57^{\circ} 18' 23''$ W. White Bear Bay.
Map Reference: White Bear River. 11 P/14 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 17.0 miles², (44.03 kilometers²). Mean width, 4.3 miles, (6.91 kilometers).

Perimeter, 18.7 miles, (30.08 kilometers). Axial length, 6.4 miles, (10.29 kilometers).

Maximum basin relief, 1,375 feet, (419.10 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTHWEST BROOK

Location: $47^{\circ} 44' 10''$ N $57^{\circ} 18' 48''$ W. White Bear Bay.
Map Reference: Ramea. 11 P/11 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.1 miles², (10.61 kilometers²). Mean width, 1.2 miles, (1.93 kilometers).

Perimeter, 11.0 miles, (17.69 kilometers). Axial length, 3.1 miles, (4.98 kilometers).

Maximum basin relief, 1,375 feet, (419.10 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

BAY DE LOUP RIVER

Location: $47^{\circ} 39' 40''$ N. $57^{\circ} 31' 18''$ W. Bay de Loup.

Map Reference: Burgeo. 11 P/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 21.3 miles² (55.17 kilometers²). Mean width, 2.2 miles (3.53 kilometers).

Perimeter, 25.2 miles (40.54 kilometers). Axial length, 9.4 miles (15.12 kilometers).

Maximum basin relief, 1,375 feet (419.10 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: from mouth to falls at mile point 2 (3.21 kilometers);

Average width: 50 ft. (15.24 meters). Depth range: 2 to 4 ft. (.1 - 1.21 meters).

Number of pools in section; 8. Velocity: Rapid.

Spawning area:

Main River: from mouth to mile point 2 (3.21 kilometers).

Small patches of gravel, scattered throughout section.

Barriers to Fish Migration:

Main river, between mile points 2 and 2.5 (3.21 - 4.02 kilometers); falls 35 ft. (10.66 meters) high, 90° angle; complete obstruction.

Falls 15 ft (4.57 meters) high, 90° angle; partial obstruction.

Falls 20 ft. (6.09 meters) high, 90° angle, complete obstruction.

SEAL BROOK

Location: 47°39'35" N. 57°31'58" W. Bay de Loup.
Map Reference: Burgeo. 11 P/12 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 8.6 miles² (22.3 km²). Mean width, 1.3 miles
(2.09 km).

Perimeter: 16.7 miles (26.87 km). Axial length, 6.4 miles
(10.29 km).

Maximum basin relief, 1,000 feet (304.80 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

KELLY BROOK

Location: $47^{\circ} 39' 06''$ N $57^{\circ} 33' 03''$ W. Bay de Loup.

Map Reference: Burgeo. 11 P/12 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 0.7 miles^2 , ($1.12 \text{ kilometers}^2$). Mean width, 0.4 miles, (.64 kilometers)

Perimeter, 4.7 miles, (7.56 kilometers). Axial length, 1.9 miles, (3.05 kilometers).

Maximum basin relief, 550 feet, (167.64 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

KINGS HARBOUR BROOK

Location: $47^{\circ} 38' 35''$ N $57^{\circ} 34' 40''$ W.

Map Reference: Burgeo. 11 P/12 East

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 49.5 miles², (128.20 kilometers²), Mean width, 2.7 miles, (4.34 kilometers).

Perimeter 49.4 miles, (79.48 kilometers), Axial length, 17.4 miles, (27.99 kilometers).

Maximum basin relief, 1,400 feet, (426.72 meters).

Geology:

About equal amounts of gneissis and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

GRANDY BROOK

Location: $47^{\circ} 41' 00''$ N $57^{\circ} 41' 20''$ W. Barachois Bay.

Map Reference: Burgeo. 11 P/12 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 101.8 miles², (263.66 kilometers²). Mean width, 10.5 miles, (16.89 kilometers).

Perimeter, 84.0 miles, (135.15 kilometers). Axial length, 26.2 miles, (42.15 kilometers).

Maximum basin relief, 2,085 feet, (635.50 meters).

Geology:

Acidic intrusive rocks.

Vegetational Cover:

River valley is covered predominantly with scrub spruce.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Total length of tributaries: 164 miles, (263.87 kilometers).

Total length of main river: 24 miles, (38.61 kilometers).

Total streams length: 188 miles (302.49 kilometers).

Main river:

From mouth to headwaters (24 miles), (38.61 kilometers).

Width range: 50 - 100 ft. (15.24-30.48 meters). Depth range: 3 - 5 ft. (.90-1.52 meters).

Velocity: Medium

Bottom types: Gravel 5%, Rubble 50%, Boulder 30%, Bedrock 15%.

Spawning areas:

Patches of spawning gravel in headwater region.

Barriers to Fish Migration:

Main river:

8 small falls in upper section; partial obstruction.

Tributary #12 (Trib. draining from Top Pond):

6 falls, 10 ft. (16.09 meters) high, 20° angle; partial obstruction.

GRANDY'S BROOK

Location—

In the bottom of the North East Arm of Barachois Bay, on the South Coast.

Season—

June and July are the best months.

General Remarks—

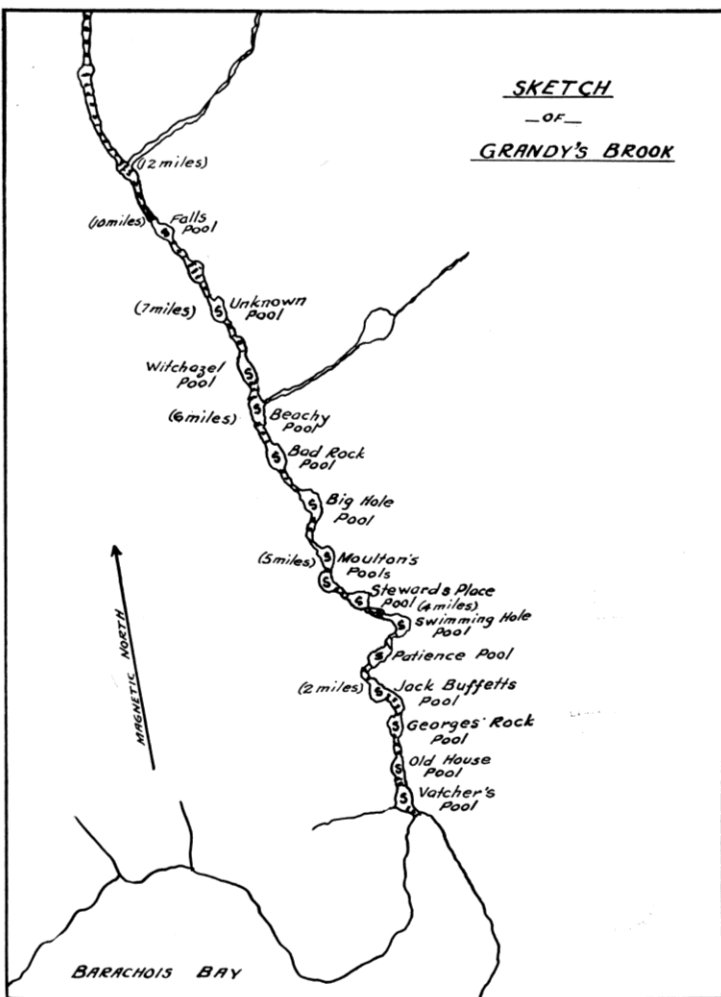
This is a splendid river for salmon, as fish of large size go up. Camping sites are numerous and there is also good sea trout fishing.

Pools:

Vatcher's Pool, Old House Pool, George's Rock Pool, Jack Buffet's Pool, Patience Pool, Swimming Hole Pool, Stewards Place Pool, Moulton's Pools, Big Hole Pool, Beachy Pool, Unknown Pool, Falls Pool



SKETCH
— OF —
GRANDY'S BROOK



RATTLING BROOK

Location: $47^{\circ} 39' 40''$ N $57^{\circ} 43' 30''$ W. Big Barasway,
Barasway Bay.

Map Reference: Burgeo. 11 P/12 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 4.4 miles², (11.39 kilometers²). Mean width, 1.2 miles,
(1.93 kilometers).

Perimeter, 11.0 miles, (17.69 kilometers). Axial length, 4.1 miles,
6.59 kilometers).

Maximum basin relief, 750 feet, (228.60 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

FIRST BROOK

Location: $47^{\circ} 38' 30''$ N $57^{\circ} 48' 20''$ W.

Map Reference: Burgeo. 11 P/12 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 15.4 miles², (39.88 kilometers²), Mean width, 1.7 miles, (2.73 kilometers).

Perimeter, 19.2 miles, (30.89 kilometers), Axial length, 8.8 miles, (14.15 kilometers).

Maximum basin relief, 800 feet, (243.84 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

MIDDLE BROOK

Location: 47° 38' 50" N 57° 49' 38" W.

Map Reference: Burgeo. 11 P/12 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 3.1 miles², (8.02 kilometers²). Mean width, 1.2 miles, (1.93 kilometers).

Perimeter, 6.9 miles, (11.10 kilometers). Axial length, 2.8 miles, (4.50 kilometers).

Maximum basin relief, 350 feet, (106.68 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

CUTTS BROOK

Location: $47^{\circ} 39' 35''$ N $57^{\circ} 50' 55''$ W.

Map Reference: Burgeo. 11 P/12 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 16.1 miles², (41.69 kilometers²). Mean width, 2.1 miles, (3.37 kilometers).

Perimeter, 20.5 miles, (32.98 kilometers). Axial length, 7.7 miles, (12.38 kilometers).

Maximum basin relief, 900 feet, (274.32 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

NORTH EAST BROOK

Location: $47^{\circ} 43' 25''$ N $57^{\circ} 52' 03''$ W. North East Arm,
Connoire Bay.

Map Reference: Burgeo. 11 P/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 18.6 miles², (48.17 kilometers²). Mean width, 2.6 miles,
(4.18 kilometers).

Perimeter, 24.1 miles, (38.77 kilometers). Axial length, 8.9 miles,
(14.32 kilometers).

Maximum basin relief, 1,100 feet, (335.28 meters).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Nil.

CONNOIRE BROOK (North West Brook)

Location: 47°45'00" N. 57°54'35" W. North West Arm,
Connoire Bay.

Map Reference: Burgeo. 11 P/12 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 120.0 miles² (310.80 km²). Mean width, 6.5 miles
(104.5 km).

Perimeter: 60.4 miles (97.18 km). Axial length, 17.2 miles
(27.67 km).

Maximum basin relief, 1,900 feet (579.12 m).

Geology:

About equal amounts of acidic intrusive rocks and gneissis.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Bottom types:

Main River: (% of total area):

Rubble and gravel 75%; boulders 15%; bedrock 10%.

Spawning Areas:

Plenty of good spawning ground throughout main stream.

Barriers to Fish Migration:

Main River:

Falls at mile 0.25 (0.40 km). Height; 75 feet (22.86 m). Slope; 90°.

Complete obstruction.

Falls at mile 10 (16.1 km). Height; 25 feet (7.62 m). Complete
obstruction.

COUTEAU RIVER

Location: 47°44'40" N. 58°01'35" W. Couteau Bay.
Map Reference: LaPoile. 11 0/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 51.1 miles² (132.34 km²). Mean width, 2.8 miles (4.50 km).

Perimeter: 44.2 miles (71.11 km). Axial length, 16.2 miles (26.06 km).

Maximum basin relief, 1,900 feet (579.12 m).

Geology:

About equal amounts of gneiss and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River:

Width range: 50 to 75 feet; (15.24-22.86 m). Depth range: 2 to 4 feet (0.6-1.21 m).

Spawning Areas:

Good spawning ground above and below impassable falls.

Barriers to Fish Migration:

Main River:

Falls at mile 0.3 (0.48 km). Height; 10 feet (3.1 m). Slope; 45°.

Partial obstruction.

Falls at mile 8 (12.87 km); complete obstruction.

Falls at mile 9, (14.48 km); complete obstruction.

CINQ CERF RIVER (Brook)

S-38-1849

Location: 47° 42' 20" N. 58° 09' 05" W. Cinq Cerf Bay.

Map Reference: LaPoile. 11 0/9 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area 79.1 miles² (204.86 kilometers²). Mean width, 4.5 miles (7.24 kilometers).

Perimeter, 60.3 miles (97.02 kilometers). Axial length, 19.0 miles (30.57 kilometers).

Maximum basin relief, 1,900 feet (579.12 meters).

Geology:

About half gneiss with some acidic intrusive rocks, Devonian volcanic and Devonian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River: From mouth to mile point 10 (16.09 kilometers);

Average width: 150 ft. (45.72 meters). Depth range: 3 to 6 ft. (0.9-1.82 meters). Water velocity range: Medium to sluggish.

Bottom types: Mixed rubble and gravel, 90%; boulder 8%; bedrock 2%

From falls at mile point 10.75 (17.29 kilometers) to headwaters:

Average width: 50 ft. (15.24 meters). Bottom types: Bedrock 50%; boulder, 50%.

Spawning Areas:

Main river: From mouth to mile point 10 (16.09 kilometers) 10% of total area considered to be good spawning ground

Barriers to Fish Migration:

Main River: Falls at mile point 4, (6.43 kilometers), 20 ft. (6.09 meters) high, 39 ft. (11.88 meters) long, 50 ft. (15.24 meters) wide, 45° angle; partial obstruction (series of natural steps on one side).

Falls at mile point 10 (16.09 kilometers), 5 to 8 ft. (1.52-2.43 meters) high; partial obstruction.

Falls at mile point 10.5 (16.89 kilometers), 100 ft. (30.48 meters) high; 90° angle; complete obstruction.

Falls at mile point 10.75 (17.29 kilometers), 100 ft. (30.48 meters) high, 90° angle; complete obstruction.

CINQ CERF RIVER

Location—

At the bottom of Cinq Cerf Bay, on the South Coast.

Season—

June, July and August are good months.

General Remarks—

A fine river with excellent fishing to the Forks, over which distance there are many splendid pools. Camping sites are good and numerous. A fine run of salmon, of average weight of 8 lbs., frequent this river.

Tributaries:

Mouse Pond Brook 110/16

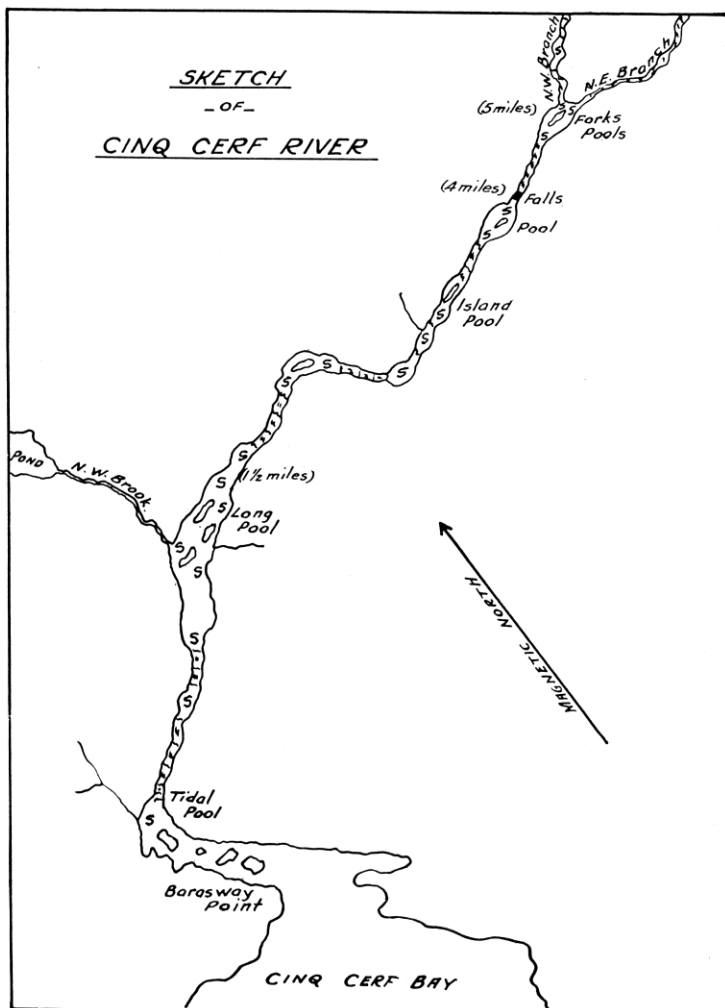
Two Way Brook 110/16

Pools:

Tidal Pool, Long Pool (6 pools), 5 unnamed pools, Island Pool, Falls Pool, Forks Pools



SKETCH
- OF -
CINQ CERF RIVER



EAST BAY RIVER

Location: 47°46'03" N. 58°15'05" W. East Bay, LaPoile.
Map Reference: LaPoile. 11 O/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 22.2 miles² (57.49 km²). Mean width, 2.6 miles (4.18 km).

Perimeter: 26.0 miles (41.83 km). Axial length, 7.8 miles (12.55 km).

Maximum basin relief, 1,300 feet (396.24 m).

Geology:

About half gneiss with the remainder consisting of Devonian volcanic and acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River:

From mile 0 to mile 1 (1.609 km). Average width: 50 feet (15.24 m).

Average depth; 2 feet (0.6 m). Velocity: Medium.

Barriers to Fish Migration:

Main River:

Falls at mile 1 (1.609 km). Height: 100 feet (30.48 m). Completed obstruction. Falls consists of three steps, height; 60, 20 and 20 feet (18.3, 6.1 and 6.1 m) respectively.

LAPOILE RIVER

Location: 47° 48' 00" N. 58° 19' 20" W. Bottom of Lapoile Bay.

Map Reference: LaPoile River. 11 0/16 West half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 227.2 miles² (588.44 kilometers²). Mean width, 7.8 miles (12.55 kilometers).

Perimeter, 90.4 miles (145.45 kilometers). Axial length, 24.8 miles (39.90 kilometers).

Maximum basin relief, 2,050 feet (624.84 meters).

Geology:

Predominantly Devonian sedimentary with some acidic intrusive rocks, gneiss and basic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: Width range: 50 to 75 ft. (15.24 - 22.86 meters).

Velocity: Medium.

Bottom types: Rubble and gravel, 3%; boulder 90%; bedrock 7%.

Spawning Areas:

Patches of suitable gravel scattered throughout main river.

Barriers to Fish Migration:

Main River: 3 small falls (approx.) half-way upstream; partial obstruction.

Falls 17½ miles (approx.) (28.15 kilometers) upstream from mouth; complete obstruction.

LA POILE RIVER

Location—

At the bottom of La Poile Bay, on the South Coast.

Season—

15th June till 15th August.

General Remarks—

A large flat river for the first 3 miles, when the river narrows and there are some excellent fishing pools. Salmon of large size, up to 35 lbs. in weight, frequent this river, also large sea trout.

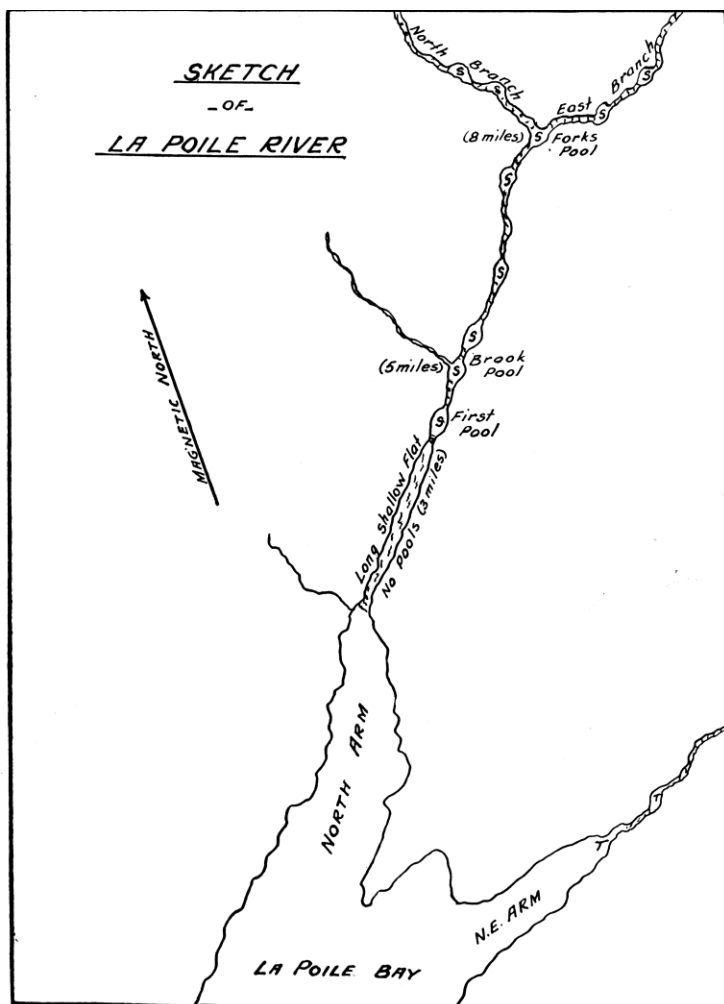
Tributaries:

Bunker Hill Brook	110/16
Deep Brook	110/16
Fox Hole Brook	110/16
Morg Keepings Brook	110/16
Northwest Brook	110/16
Rocky Ridge Brook	110/16
Round Hill Brook	110/16
Salmon Hole Brook	110/16
Two Way Brook	110/16
Woody Brook	110/16

Pools:

First Pool, Brook Pool, 3 unnamed pools, Forks Pool, 4 unnamed pools on North Branch and East Branch feeders

SKETCH
- OF -
LA POILE RIVER



BROAD COVE BROOK

Location: 47° 43' 35" N 58° 22' 35" W. LaPoile Bay.

Map Reference: LaPoile. 11 0/9 West.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 30.4 miles², (78.73 kilometers²). Mean width, 2.6 miles (4.18 kilometers).

Perimeter, 31.2 miles, (50.20 kilometers). Axial length, 12.6 miles, (20.27 kilometers).

Maximum basin relief, 1,650 feet, (502.92 meters).

Geology:

Almost entirely acidic intrusive rocks with some Devonian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Barriers to Fish Migration:

Falls at mile 0.25 (0.4 km). Height: 80 feet (24.4).

FARMERS BROOK

Location: 47°39'50" N. 58°30'10" W. Farmers Arm near
Garia Bay.
Map Reference: Rose Blanche, 11 0/10 East.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area: 34.2 miles² (88.57 km²). Mean width, 2.8 miles
(4.50 km).
Perimeter: 29.7 miles (47.78 km). Axial length, 12.6 miles
(20.27 km).
Maximum basin relief, 1,250 feet (381.00 m).

Geology:

Acidic intrusive rocks.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main River:

Width range: 50 to 70 feet (15.25-21.35 m).

Bottom types: Rubble, 20%; boulder, 60%; bedrock, 20%.

Spawning areas:

Between ponds number 5 and 6, good gravel.

Barriers to Fish Migration:

Main River:

Falls at mile 0. Height; 7 feet (2.1 m). Length: 30 feet (9.14 m).

Partial obstruction.

BURNT ISLAND BROOK

Location—

On the South Coast near Port aux Basques.

Season—

Late June, July and first half of August is the best time for this river.

General Remarks—

This river contains many fine pools. Good camping sites are abundant. Salmon from 10 to 25 lbs. frequent this river. There is also good sea trout fishing in the early part of the season.

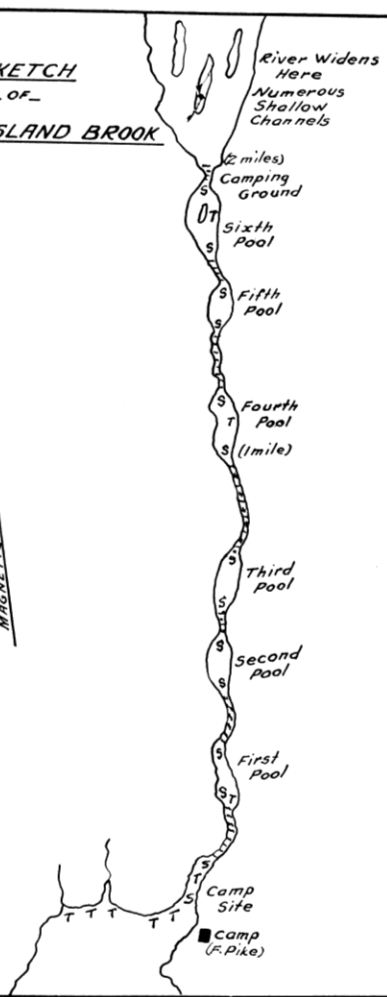
Pools:

First Pool, Second Pool, Third Pool, Fourth Pool, Fifth Pool, Sixth Pool



SKETCH
- OF -
BURNT ISLAND BROOK

MAGNETIC NORTH



GARIA RIVER

Location: $47^{\circ} 43' 25''$ N. $58^{\circ} 32' 10''$ W. Bottom of Garia Bay.

Map Reference: Rose Blanche. 11 0/10 East half.

CHARACTERISTICS OF DRAINAGE BASIN

Geomorphological Factors:

Basin area, 88.0 miles² (227.92 kilometers²). Mean width, 5.1 miles (8.20 kilometers).

Perimeter, 50.9 miles (81.89 kilometers). Axial length, 16.9 miles (27.19 kilometers).

Maximum basin relief, 1,950 feet (594.36 meters).

Geology:

About half gneiss with the remainder consisting of acidic intrusive rocks and some Devonian sedimentary.

CHARACTERISTICS OF STREAMS IN DRAINAGE BASIN

Channel Characteristics:

Main river: width range: 20 - 30 ft. (approx.) (6.09-9.14 meters).

Depth range: 2 to 3 ft. (0.6-0.9 meters). Velocity: Rapid.

Spawning areas:

Main river from mouth to mile point 10 (16.09 kilometers), scattered patches of spawning gravel.

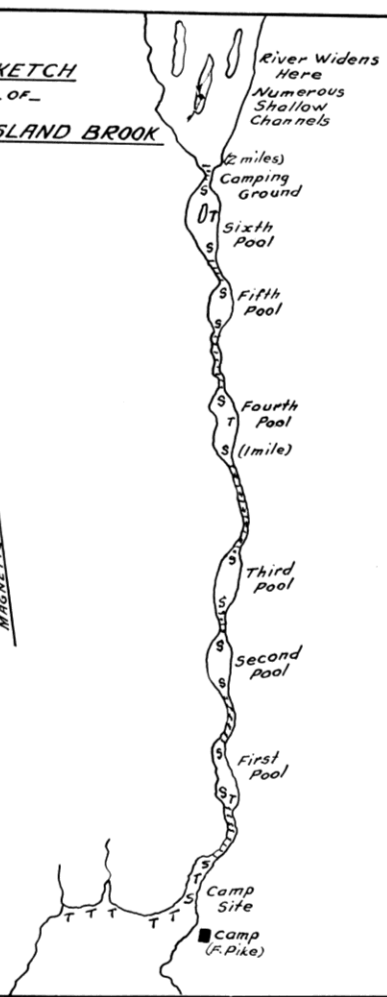
Barriers to Fish Migration:

Main river: Falls at approximately mile point 10 (16.09 kilometers), 20 ft. (6.09 meters) high; complete obstruction.

Four other falls on mainriver; partial obstruction.

SKETCH
- OF -
BURNT ISLAND BROOK

MAGNETIC NORTH



GARIA BAY RIVER

Location—

At the bottom of Garia Bay, on the South Coast.

Season—

June, July and August are all good months.

General Remarks—

A large river with excellent fishing pools. Camping sites are numerous and here is also good sea trout fishing. Salmon ranging in weight from 5 to 30 lbs. have been caught.

Notes:

Now Garia Brook.

110/10

Pools:

First Branch Pool, Second Branch Pool, Third Branch Pool, Fourth Branch Pool, Crooked Pools, 2 unnamed pools

