SOUTHEASTERN ALASKA STREAM CATALOG FOR REGULATORY DISTRICT Nos. 5, 6, 7 and 8

by Carl Rosier, Norm Johnston, and Russell F. Orrell

Marine Biological Laboratory

JAN 1 0 1960

WOODS HOLL, MASS.



UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

BUREAU OF COMMERCIAL FISHERIES

This work was financed by the Bureau of Commercial Fisheries under Contract No. 14-17-0005-24, with funds made available under the Act of July 1, 1954 (68 Stat. 376), commonly known as the Saltanstall-Kennedy Act.

UNITED STATES DEPARTMENT OF THE INTERIOR

Stewart L. Udall, Secretary
John A. Carver, Jr., Under Secretary
Stanley A. Cain, Assistant Secretary for Fish and Wildlife
FISH AND WILDLIFE SERVICE, Clarence F. Pautzke, Commissioner
Bureau of Commercial Fisheries, Donald L. McKernan, Director

STREAM CATALOG OF SOUTHEASTERN ALASKA REGULATORY DISTRICTS NOS. S, 6, 7, and 8

Edited by

Carl Rosier, Norm Johnston and Russel F. Orrell

Contribution No. 193, College of Fisheries University of Washington

United States Fish and Wildlife Service Special Scientific Report -- Fisheries No. \$23

Washington, D.C.

August 1965



CONTENTS

	Page
Abstract	1
Introduction	1
Sources of data	2
Limitations of data	2 2 3
Explanation of catalog format Stream designations Intertidal zone Upstream Escapement record Weir record	3 3 5 6 6 6
Mapping symbols	7
Alphabetical index of salmon streams	8
Numerical index of salmon streams	11
Regulatory District indexes of salmon streams	14
Map of stream locations	19
Map of Regulatory Districts Nos. 5, 6, 7, and 8 .	20
Stream descriptions	21



STREAM CATALOG OF SOUTHEASTERN ALASKA REGULATORY DISTRICTS NOS. 5, 6, 7, and $8^{\frac{1}{2}}$

Edited by
Carl Rosier and Norm Johnston
Alaska Department of Fish and Game
Juneau, Alaska
and
Russell F. Orrell
Fisheries Research Institute
University of Washington
Seattle, Washington

ABSTRACT

Information about part of Southeastern Alaska salmon streams is cataloged from the voluminous records of the Alaska Department of Fish and Game; the Alaska Salmon Industry; the Fisheries Research Institute of the University of Washington; the U.S. Fish and Wildlife Service, Bureau of Commercial Fisheries; and other agencies. Stream descriptions, maps, and historical records of salmon escapement data are compiled for 130 salmon streams in Southeastern Alaska Regulatory Districts Nos. 5, 6, 7, and 8. Each stream is located geographically by latitude and longitude and by orientation to prominent landmasses. A standard numbering system, number designations formerly in use, and common names of each stream are listed. Physical descriptions are presented for the intertidal zone and the upstream area of each stream. Available records of weather, water temperatures, and information useful to ground and aerial stream surveyors are presented in brief form. The species of salmon utilizing the spawning grounds and estimates of the escapements each year for many years are given.

INTRODUCTION

The pink salmon of Southeastern Alaska are an important fishery resource. Millions of these fish are captured annually by the commercial fishery during their spawning migration. There are more than 1, 100 known spawning streams, plus hundreds of small, individually unimportant ones, scattered along the 9,000 coastal miles of Southeastern Alaska.

For many years, management and research agencies of the Federal, Territorial, and State governments, Alaska salmon canners, and the Fisherles Research Institute of the University of Washington, have independently conducted stream surveys of the salmon spawning grounds. A vast amount of valuable information has been accumulated and has been, in the main, kept on file in the offices of the various organizations.

1/Contribution No. 193, College of Fisheries, University of Washington, Seattle, Wash. It is the fourth catalog of salmon streams of Southeastern Alaska. Previous catalogs cover areas as follows: Reg. Dist. No. 1, SSR--F 305; Reg. Dist. No. 2, SSR--F 453; Reg. Dist. Nos. 3 and 4, SSR--F 465.

To make full use of all these scattered materials, records from the various sources have been gathered together and methods of stream surveying have been studied on a comparative basis. This information has been consolidated into a standard form which is presented here as a stream catalog.

This catalog has been compiled under a contract given to the Fisheries Research Institute by the United States Fish and Wildlife Service. The material contained herein includes 130 major and numerous minor streams of Regulatory Districts Nos. 5, 6, 7, and 8.

Information on each stream is presented by a stream description and, when available, a map, and escapement record. Information pertinent to the identification of each stream by name, number, and location is given, and further physical features are described where necessary for positive identification. Descriptions of each stream are given as completely as available information allows. The catalog format is so designed that future surveys by various agencies can be recorded and conducted according to a uniform style.

As a handbook of salmon streams, this catalog is expected to serve as an aid to conservation agencies as well as others who have an interest in the valuable salmon resource of Southeastern Alaska.

SOURCES OF DATA

The information compiled in this catalog is derived from a number of sources, both in and outside of the field of fishery work. A complete list of these sources is given below.

Alaska Department of Fish and Game. Valuable stream and escapement information is available in reports by research and management personnel.

Alaska Salmon Industry. Surveys (made by individual members of the industry) are among some of the earliest records available.

Fisheries Research Institute. Records are available for each year starting with 1947. Many of the Institute research projects have been concerned with precise measurements of physical factors. Data from these projects provide some of the stream descriptions and escapement estimates included in this catalog. In 1950 and 1951 the Institute assembled a stream catalog for Southeastern Alaska with all the information then available. It has served as a guide for the present catalog.

- U. S. Coast and Geodetic Survey. Charts used throughout the catalog for standardization of stream location coor dinates are from this source. A number of large-scale charts have provided intertidal zone information. The U. S. Coast Pilot (1952, Southeast Alaska, Dixon Entrance to Yakutat Bay, Tenth Edition, 544 p. Plus charts) is the source of information on vessel approaches to stream mouths and the authority for spelling of proper names.
- U. S. Fish and Wildlife Service. District catalogs of this agency are a major source of stream physical data and salmon escapement records. Escapement records from the streams where weirs were operated are actual counts. The FWS stream numbering system is the basis for the numbering system used in this catalog. Information on some of the large mainland streams with headwaters in Canada was obtained from the Canadian government by the U. S. Fish and Wildlife Service.
- U. S. Federal Power Commission. The report, Water Power of Southeastern Alaska, 1947, published with the cooperation of the U. S. Forest Service, provides discharge rates and stream drainage areas, and other information about a number of important salmon streams.

U.S. Forest Service. Data on stream characteristics and salmon escapements are available on several streams in records of studies conducted by this agency on the effects of logging on the physical makeup of streams.

U.S. Geological Survey. Aerial photographs from this agency are the primary source for measurements of stream distances and areas and for valley features not visible from the ground. These photographs, which are of most of the streams in Southeastern Alaska, were made by the U.S. Navy (Patrol Squadron Four) in 1948.

Local residents. Another source is the descriptive information on several major streams provided by local residents.

LIMITATIONS OF DATA

Escapement estimates obtained by visual means are often limited in accuracy because fish are not seen in turbid water, under overhanging streambanks, or in areas inaccessible to observers. Actual counts throughout the duration of the salmon run past a counting weir or tower are relatively accurate estimates of total escapement. However, it is not economically feasible to establish a weir on each stream, and escapement surveys are the only source of information for a large part of the area which must be covered. The value of the catalog as a history of the salmon escapements can be realized only if its limitations are fully known.

Escapement Estimates

Escapement estimates do not indicate the actual total escapement. At no time are all the salmon in the stream simultaneously, since the spawning run extends over a period of weeks. Therefore, each escapement estimate is an index of the relative abundance at the time of survey.

The maximum estimate determined by survey methods at about the peak of the run is used as an estimate of the relative abundance of the total escapement. Reliable indices of relative abundance from year to year can be made only if the surveys are comparable. Evaluation of the following factors is necessary to determine the accuracy of the escapement estimates.

Observers. --The escapement records are from many different observers. Variability in estimating the number of salmon in a given area by different observers should be considered in judaing

the accuracy of the data. In general, with more observers variability increases.

<u>Survey systems.</u> --Different survey systems have been used by the various agencies. Reliability of the escapement estimates varies with the systems used.

Survey systems that employ standard counting techniques over standard distances are the most reliable method now available for comparison of abundance between years, particularly when streams can be only partially covered. Standard survey distances in comparatively long streams were not widely used prior to 1949.

Survey systems requiring periodic visits to each stream during the spawning period are more reliable for estimates of peak abundance than systems requiring only one or two visits. The peak period of abundance in a salmon stream is usually relatively short, and one or two visits may miss the peak.

Type of survey. --Two basic methods for covering the streams during escapement surveys are being used.

The oldest method is the ground survey in which the observer follows the stream course on foot or in a skiff with an outboard motor. Most parts of the stream can be closely observed by this type of survey.

The newer method is aerial survey. This is a fast, economical means of covering a large number of streams in a short period of time over stream distances greater than is possible on the ground. This method requires experienced personnel familiar with ground surveys as well.

Aerial surveys are best suited for large rivers and streams where ground coverage is limited usually to the lower portion of the stream near the banks. Ground surveys are more reliable than aerial surveys on small streams that offer poor visibility from the air.

Observation conditions. --Weather is an extremely important factor in the reliability of escapement estimates. During flooding, ground surveys can be made only with great difficulty. Visibility is also greatly reduced because of turbid water. Any estimate made during years that had heavy rains of long duration during the peaks of spawning runs is not comparable with an estimate made during normal water levels.

Streams in which intertidal spawning predominates may present difficult observation conditions at high tide. Spawning salmon in the intertidal zone behave differently when the spawning areas are flooded by the high tide.

Aerial observations vary with the different types of aircraft used. Observations made from small light planes capable of following winding stream courses are more reliable than those made from larger planes which must fly at considerable height above the stream and generally at greater speeds.

Physical Observations

Observations of the characteristics of each stream by different observers have been recorded with varying degrees of accuracy. Many details of stream descriptions are dependent upon the individual observer's ability and knowledge.

Many stream dimensions are merely estimates. Instruments for measurements were usually not available to observers, and pacing and estimating were used.

Most basic stream distances have been taken from aerial photographs and are relatively accurate. However, some errors may have occurred where reference points were difficult to identify. Drainage estimates were based on compensating polar planimeter measurements of valley areas, but occasionally drainage divides were difficult to distinguish and the areas given are only approximate.

EXPLANATION OF CATALOG FORMAT

Further descriptions of the data such as estimates of timing, temperature ranges, spawning facilities, etc., are included under these specific headings in the explanation of the catalog format that follows:

Stream Designations

<u>Statistical area number</u>. --The number used by the Alaska Department of Fish and Game to designate the statistical area is given in the upper left side of the heading.

Stream name. --This appears in the center of the first line of the heading. Recorded names or common local names are used when available. Otherwise unnamed streams of importance are given descriptive names corresponding to location or other distinguishing features. Some streams have identical

names; they are retained without change because of local usage. Many minor streams have no names; hence they are identified only by number.

Stream number. -- This number appears on the right side of the first line of the heading. The letter preceding the number designates the administrative district in Southeastern Alaska: e. g., "WR" for Wrangell. Continuity of stream numbers along a shoreline is followed where practical. Because of the numerous islands, breaks in the sequence have been necessary. Nonhyphenated numbers designate major or important streams. A catalog number which includes a hyphenated number designates a tributary to the stream of the same number. A catalog number combining numbers and letters designates a minor stream, either adjacent to or between major streams numbered in sequence. For example, stream number 76A is a minor stream adjacent to major stream number 76.

ADF Statistical number. -- A space for the new ADF Statistical number is provided for use when the new numbers are assigned.

Latitude and longitude. --This appears on the second line, left side, of the heading. Location of streams is given by the use of "N" for north latitude, and "W" for west longitude, stated in degrees (°), and minutes and tenths of minutes ('). Location of the high tide point on the stream is given for positive identification.

Previous number. --This appears on the second line, right side, of the heading. Stream number or numbers used in the past by Fish and Wildlife Service are given for positive identification of old stream records.

Geographic location. --This appears on the third line of the heading. Each stream location is described by the administrative district, major channel, bay or inlet, arm or cove, and location within the smallest division given by direction (from true north) and distance (nautical miles).

Major species. --Included are those species of solmon which furnish the bulk of spawning in the stream. Where more than one dominates, both (or more) are included.

Other species. --This indicates other known species of salmon and trout using the stream.

Escapement timing. --The timing is based on systematic stream survey records, which include

a number of years of surveys with visits before, near, and after the peaks of abundance. Extensive stream temperature studies were made on most of these surveys. The earliest runs of salmon occur along the colder mainland streams. The latest runs are in the outer channel and coastal areas where stream levels are dependent upon rainfall. An intermediate timing of the runs occurs in the region lying between the mainland and outer coastal areas. Three major time divisions are used to indicate the peak period that the major species are found in the stream. "Early" designates peaks before August 15: "middle," peaks between August 15 and September 15; "late, " peaks after September 15. The range of time in which the major species are found in the streams is given by months.

Escapement magnitude. --These are estlmates of the total escapement, based on stream
counts of the peak abundance of salmon, multiplied
by a certain factor. This factor was determined from
stream tagging experiments at Herman Creek in
1953 by the Fisheries Research Institute, who found
the total escapement was between two and three
times the peak count. The range of the escapement magnitude is given in thousands.

Spawning facilities. --This includes a general classification rating of poor, fair, good, excellent, etc. The rating is based on estimates made by various individuals.

Stream temperatures. --In this classification the following general ranges are used for each stream. Each range is for the 3-month period (July, August, and September) in which most of the salmon spawning migrations occur:

Cold-range, averaging less than $50^{\circ}\,\text{F.}$, usually an early-run stream.

Normal-range, averaging between 50° and 55° F. , usually a middle-run stream.

Warm-range, averaging over $55\,^\circ$ F. , usually a late-rum stream.

These ranges generally correspond to the geographic location of the stream and times of the runs. Where only limited temperature information is available for a stream, the range has been estimated from its location and timing of run. Cold-range streams are usually found along the mainland or on the larger islands in the northern part of Southeastern Alaska. Warm-range streams are usually found along the outer channels and coastal

areas, which are dependent upon precipitation as the primary source of supply. The normal-range streams appear to fall geographically between and may combine characteristics of both cold- and warm-range streams. Timing of the salmon runs, especially pink salmon, also follows the geographic distribution outlined above. Recording thermograph data, available from a number of streams with known escapement timing, have been used as a basis for comparison.

Valley description. --Glacial, stream-cut, etc., describe valley origin with a general description of the outstanding features such as length, width, timber, slopes, directions, etc. They have been obtained from aerial photographs and by direct observations.

Drainage area. --This has been either estimated in square miles or computed with a polar planimeter from aerial photographs. Estimates of the drainage area of large systems have been taken from the small-scale, key, composite photographs and are less reliable. Data from Water Power of Southeastern Alaska 1947 are included when available. Descriptions are given of supply sources, drainage topography, and characteristics governing water quality and temperature ranges during spawning from the editor's interpretation of aerial photos and local knowledge.

Stream mouth identification. --This is a description of some general features visible at the stream mouth.

Anchorage, --Descriptions of temporary anchorages which have been used for short stops by stream survey vessels are given. Overnight and storm anchorages are given in the <u>U.S. Coast Pilot</u>.

Trails and survey routes. --These include descriptions of trails that have been used by ground parties on stream surveys. Where other than the streambed was used, a description of routes is given, including difficult points, identification, outstanding features, presence of brown bears, etc. Reference to right or left bank is made while facing in the direction of the current.

Aerial survey notes. --The notes include remarks from various individual observations on the visibility in each stream and the conditions considered necessary for adequate observations. Approaches to valley, starting points, and any known hazards are described from aerial surveyor's notes and the editor's knowledge of the area.

Intertidal Zone

Length. --The distance is given in miles from mean high to mean low tide, obtained from aerial photographs measured to the nearest tenth of a mile. Where low tide locations were not known the measurement was made from the edge of tidal flats visible in the photographs.

Average width. --These are estimates in feet, based on observations by various individuals.

Average depth. --These are estimates in inches, or in feet in larger systems, based on observation by various individuals.

<u>Gradient.</u> --Estimates are in degrees from horizontal, based on observation by various individuals.

<u>Velocity</u>. --Estimates are in feet per second during normal water levels, based on observation by various individuals.

Bottom. --A description is given of the composition such as gravel (range from 1/4 inch to over 5 inches in diameter, arbitrary division point), mud, silt, organic materials, broken and water-washed rock, boulders, large rocks, bedrock, etc., according to observation by various individuals.

Low tide location. --The location of the mean low tide point is an approximation and is given only where It falls near good identification points, usually found in restricted stream outlets.

High tide location. --The mean high tide location generally has been found to correspond to the tree line. Other methods of locating the high tides, such as markers, are described when present.

Salmon schooling areas. --The areas are usually found near high tide where pools often occur. The areas are described with reference to the mean high tidemark. Annual variations in streambeds may alter locations of schooling areas.

<u>Spawning areas.</u> --Major areas are described with reference to the high tidemark. Location may change with change in stream conditions.

General notes. --This includes notes pertinent to the intertidal stream that are of interest and importance in the description of runs.

Upstream

Length accessible. --The length given in miles was measured from aerial photographs along the course of the stream to the known upper limits of salmon migration. Where barriers restrict major species but allow more vigorous species to pass, secondary species limits are given under "Barriers."

<u>Gradient.</u> --Slope was estimated in degrees from horizontal, based on observation by various individuals.

Velocity. --It is in feet per second during normal water levels and is an estimate from observation by various individuals.

Bottom. --A description is given whether gravel (range from 1/4 inch to over 5 inches in diameter, arbitrary division point), mud, silt, organic materials, broken and water-washed rock, boulders, bedrock, etc., are present, from observation by various individuals.

Marker distance. -- Distance is given in miles along stream course to standard termination point for salmon counting.

<u>Marker identification.</u> --Descriptions of an artificial marker or of identification feature marking termination point for salmon spawning surveys is given.

Barriers. --Distance and location above high tide point to known barrlers, both passable and impassable, are listed. Descriptions are also given when available.

<u>Tributaries.</u> --Tributaries used by spawning salmon are listed by distance from the mouth of the main stream, by direction, and by importance. Tributaries not used by salmon, but numerous, are mentioned under "Drainage."

<u>Salmon schooling areas.</u> --Based on survey records, major salmon schooling areas are listed where specific locations have been observed for an individual stream.

<u>Spawning areas.</u> --Major areas are described by distance above high tide or from a reference point in the stream.

<u>General notes.</u> --The notes include data pertinent to the upstream areas that are of interest and importance in the description of salmon escapements.

Escapement Record

Statistical area number. --The number used by the Alaska Department of Fish and Game to designate the statistical areas is given on the upper left side of the heading.

Stream name. -- This appears in the cent er of the first line of the heading.

Stream number. --The new and old numbers appear on the right side of the first line of the heading on the first page of the escapement record.

<u>Date surveyed</u>, --Surveys are listed chronologically.

Miles surveyed. -- Distances are given as measured along stream courses to the termination point of the regular survey. Ground surveys are designated by "G" and aerial surveys by "A." These symbols precede miles surveyed.

Surveyed by. --Initials of surveying organizations are listed as follows: Alaska Department of Fish and Game, ADF; Alaska Salmon Industry, ASI; Fisheries Research Institute, FRI; U.S. Fish and Wildlife Service, Bureau of Commercial Fisheries, FWS; and U.S. Forest Service, IISFS.

Pinks, chums, other species. --Abundance of salmon observed during surveys is given as a numerical estimate. Estimates of secondary species are usually less reliable than those for the primary species. Estimates of dead salmon of all species usually are very general, having been based on the percentage of the count.

Remarks. --Adjective ratings are given first when available. The ratings range from poor to excellent and describe the abundance of salmon for the surveyed date only. They do not indicate seasonal escapement abundance. Other notes entered in this column include survey conditions, behavior and distribution of salmon, and salmon observations beyond stated survey distances.

Weir Record

Salmon escapement counts made by weirs operated by the U. S. Fish and Wildlife Service and the Alaska Department of Fish and Game follow Escapement Record when available.

MAPPING SYMBOLS Bridge North <u>~</u> Cabin LANDFORMS Instrument Shelter Bank MIIIIII \€ Cable Crossing MALLUTTE Bedrock Munullin Dam - Company Boulders Pier Canyon 11/5 Piling Dry Channel Weir Glacier Windfall Gorge VEGETATION 25 5 65 C Gravel 600 Brush HILL alle alle Grass Low or Ralling Grade _ _ Muskeg Steep Grade 6 Stump Ridge Trees Jan Barre Sand (bor) Conifers MARKERS ্লে Deciduous ----Fish and Wildlife WATER FORMS Limit Marker Anchorage Farest Service Trail Morker Channel (in sand and gravel) High Tide Marker ΗТ Falls • Marker Fathom 3 Section Marker Float Call. Stream Gage Pool ROUTES Rapids Railroad 15/ Riffle Road Stream Entrance Trail (type designated)

STRUCTURES

Beaver Dam

Tidal Area (sand and

Water (gray value)

gray value)

ALPHABETICAL INDEX OF SALMON STREAMS

ALDON ODERW DILL OL LAND LAND LAND LAND LAND	TALED	_	
AARON CREEK, Blake Channel, enters large bay immediately	WR	6	(8)
E. of Neptune I. ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker,	WR	97	(131)
E. fork			
ANAN BAY CREEK, Bradfield Canal, Anan Bay, Head	WR	14	(17)
ANAN CREEK, Bradfield Canal, Humpback Bay, Head	WR	15	(18)
ANDREW CREEK, Frederick Sound, Dry Strait, Stikine River tributary, S. bank, SE. of Limb I.	WR	3 – 1	(5)
BARRIE CREEK, Sumner Strait, Keku Strait, 2.5 miles N. of Pt. Barrie	WR	65	(90)
BEAR CREEK, El Capitan Passage, Dry Pass, 1 mile E. of en-	WR	61	(14)
trance to Dry Pass BIG CREEK, Frederick Sound, 8 miles SE. of Frederick Pt.	WR	52	(69)
BIG CREEK, Sumner Strait, Red Bay, SW. corner	WR	101	
BIG JOHN CREEK, Big John Bay, 3.8 miles from head	E	34A	(135)
BUSTER CREEK, Sumner Strait, 5 miles W. of entrance to	WR	98	(132)
Red Bay	AA 17	90	(132)
CALDER CREEK, Sumner Strait, Shakan Bay, Calder Bay, Head	WR	93	(126)
CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of	WR	61	(85)
Big Castle I.			,
Clarence Strait, Gold and Gilligan Lagoon, entrance to Kash.	WR	107	(150)
Clarence Strait, Kashevarof Passage, Whale Passage, S. corner	WR	106	(144)
Clarence Strait, Kashevarof Passage, Exchange Cove, Head	WR		(139)
Clarence Strait, Stikine Strait, 2 miles SW. of NW. tip	WR	43	(57)
of Etolin I.			(/
Clarence Strait, Stikine Strait, Meter Bight, 4 miles SW. of S. Craig Pt.	WR	44	(58)
Clarence Strait, Stikine Strait, Meter Bight, 4.5 miles SW. of	WR	45	(59)
of S. Craig Pt.			
Clarence Strait, Kashevarof Passage, Whale Passage, Neck	WR		(142)
Lake, 1.5 miles from head	WR	48	(62)
Clarence Strait, 1 mile N. of Macnamara Pt.		36	(49)
Clarence Strait, McHenry Lake Creek, McHenry Inlet, 0.2 mile from E. head of E. arm	** 1	30	(43)
Clarence Strait, Mosman Inlet, 1 mile from head	WR	39	(53)
Clarence Strait, Mosman Inlet, Head	WR	40	(54)
Clarence Strait, Ratz Harbor, Head	WR	110	(156)
Clarence Strait, Salmon Bay, Head	WR	103	(137)
Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt	WR	46	(60)
Clarence Strait, Snow Passage, NE. of Bushy I.	WR	47	(61)
COFFMAN CREEK, Clarence Strait, Kashevarof Passage, Coff-	WR	108	(154)
man Cove, Head			
CRITTENDEN CREEK, Eastern Passage, 1 mile NE. of	WR	4	(5)
Babbler Pt., N. of Mill Creek DOG SALMON CREEK, Zimovia Strait, Anita Bay, N. shore of	WR		(27)
entrance	** 10		(27)
DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough	WR	58	(81)
Duncan Canal, Towers Bay, Head	WR	59	(83)
Duncan Canal, 3.5 miles NW. of Indian Pt.	WR	60	(84)
EAGLE RIVER, Bradfield Canal. Eagle Bay, head on S. shore	WR	13	(16)
EAGLE CREEK, Clarence Strait, 1.8 miles 5. of Luck Pt.	WR	109	(155)
EAST BRADFIELD RIVER, Bradfield Canal, E. head	WR	12	(15)
EL CAPITAN CREEK, El Capitan Passage, N. end of Passage	WC	60	(16)
El Capitan Passage, S. of El Capitan Creek	WC	64	(15)
El Capitan Passage, opposite Aneskett Pt.	WC	58	(18)

EMERALD CREEK, Ernest Sound, Emerald Bay, Head	WR	20	(24)
Ernest Sound, 1 mile W. of entrance to Canoe Passage	WR	34	(47)
Ernest Sound, Canoe Passage, NW. of Brownson I.	WR	33	(45)
Ernest Sound, Canoe Passage, NW. of Brownson I. Ernest Sound, Fools Inlet, E. head	WR	24	(32)
FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt.	WR	55	(78)
FIVEMILE CREEK, Frederick Sound, W. Sukhoi Islets	E	3ID	,
FLICKER CREEK, Sumner Strait, 3.8 miles E. of Pt. Baker,	WR	96	(130)
S. fork	*** **	20	(150)
FOOLS CREEK, Ernest Sound, Fools Inlet, W. head	WR	25	/ 221
		25	(33)
FRANK'S CREEK, Bradfield Canal, 8 miles from entrance on	WR	8	(11)
N. shore	_		
Frederick Sound, Keku Strait, Big John Bay, 2.7 miles from	E	34	
head on E. side			
Frederick Sound, Dry Strait, 3.5 miles SE. of Cosmos Pt.	WR	53	(72)
Frederick Sound, 2 miles SE. of Frederick Pt.	WR	50	(66)
Frederick Sound, 3 miles SE. of Frederick Pt.	WR	S 1	(67)
Frederick Sound, Le Conte Bay, SE. corner	WR	2	(3)
FROSTY CREEK, Seward Passage, Frosty Bay, Head	WR	16	(19)
HARDING RIVER, Bradfield Canal, 6.3 miles from head on N.	WR	10	(13)
shore			()
IRISH CREEK, Frederick Sound, Keku Strait, Rocky Pass,	E	34C	
opposite High I., E. shore		340	
	TAT TO	4	/ 11
JAP CREEK, Frederick Sound, Le Conte Bay, 3.5 miles N. of	WR	1	(1)
entrance to Le Conte Bay			
KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head	WR	62	(86)
KUDAY'S CREEK, Ernest Sound, 2 miles W. of entrance to	WR	35	(48)
Canoe Passage			
KUNK (KONKE) CREEK, Zimovia Strait, W. of Nemo Pt.	WR	28	(38)
LOVELESS CREEK, Summer Strait, Keku Strait, 4 miles N. of	WR	66	(91)
Skiff I.			
MARBLE CREEK, Sumner Strait, Shakan Bay, 1.5 miles N. of	WR	92	(125)
Dry Pass			, ,
MARTEN CREEK, Bradfield Canal, 1 mile from entrance on N.	WR	7	(10)
shore			` ′
McHENRY LAKE CREEK, Clarence Strait, McHenry Inlet, head	WR	37	(50)
of E. arm		٠,	(00/
MENEFEE CREEK, Ernest Sound, Menefee Inlet, Head	WR	32	(44)
MILL CREEK, Eastern Passage, N. side, S miles from Pt. Madan	WR	5	(6)
MUDDY RIVER, Frederick Sound, S. of Pt. Agassiz	E	7 A	(0)
NAVY CREEK, Clarence Strait, Burnett Inlet, 2 miles NE. of	WR		(52)
	AA T	38	(52)
Isle Pt.	74170		
NORTH ARM CREEK, Clarence Strait, Stikine River, 1 mile	WR	3 - 2	(FWS 4)
NE. of Farm I., N. shore			
NORTH BRADFIELD RIVER, Bradfield Canal, N. head	WR	11	(14)
OHMER CREEK, Duncan Canal, Ohmer Slough, Head	WR	5 7	(80)
PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt.	WR	56	(79)
PINE CREEK, Summer Strait, Red Bay, 0.7 mile S. of Pine Pt.	WR	102	(136)
PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head	WR	42	(56)
SANTA ANNA CREEK, Seward Passage, Santa Anna Inlet, Head	WR	17	(20)
Seward Passage, 1.5 miles E. of Watkins Pt.	WR	19	(22)
SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay	WR	91	(118)
SMITH CREEK, Shakan Strait, 0.5 mile SW. of entrance to	WC	63	(13)
Dry Pass			(/
SNAKE CREEK, Zimovia Strait, Olive Cove, Head	WR	31	(42)
	** **		(34)
SOUTHEAST CREEK, Clarence Strait, Ernest Sound, Southeast	WR		
Cove Head	WR	26	(01)
Cove, Head			
SQUAW CREEK, Clarence Strait, Kashevarof Passage, Whale	W R W R	104	(140)
SQUAW CREEK, Clarence Strait, Kashevarof Passage, Whale Passage, on inlet N. of W. side of Thorne I.	WR	104	(140)
SQUAW CREEK, Clarence Strait, Kashevarof Passage, Whale			

```
Summer Strait, Eastern Passage, in cove 2 miles SE. of
                                                                WR
                                                                      23
                                                                          (31)
    Channel I.
Sumner Strait, Affleck Canal, head NW. corner
                                                                WR
                                                                      85
                                                                          (110)
Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm
                                                                WR
                                                                      86
                                                                          (111)
Sumner Strait, Affleck Canal, 10.5 miles S. of head of
                                                                WR
                                                                      84
                                                                          (109)
    Affleck Canal, E. shore
Sumner Strait, Affleck Canal, 2.5 miles from head on W. shore
                                                                WR
Sumner Strait, Affleck Canal, Kell Bay, head of N. arm
                                                                WR
                                                                      88
                                                                          (113)
Sumner Strait, Alvin Bay, Head
                                                                WR
                                                                      73
                                                                          (99)
Sumner Strait, Alvin Bay, 0.5 mile from head on N. shore
                                                                WR
                                                                     73A
                                                                          (99 - )
                                                                WR
                                                                          (73)
Sumner Strait, Blind Slough, head of N. arm
                                                                      54
                                                                WR
                                                                      94
                                                                          (128)
Sumner Strait, Hole in the Wall, Head
                                                                WR
                                                                      78
                                                                          (104)
Sumner Strait, Pt. Beauclerc, head of N. arm
                                                                WR
                                                                      79
Sumner Strait, Pt. Beauclerc, 2 miles S. of head on N. arm
                                                                          (105)
Sumner Strait, Pt. Beauclerc, 2.5 miles S. of head on N. arm
                                                                WR
                                                                     79 A
                                                                WR
Sumner Strait, Pt. Beauclerc, 4 miles S. of head on N. arm
                                                                      80
                                                                          (106)
                                                                WR
Sumner Strait, Pt. Beauclerc, head of S. arm
                                                                      81
                                                                          (107)
                                                                WR
                                                                      82
Summer Strait, Pt. Beauclerc, S. of SE. tip of Edwards I.
Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius
                                                                WR
                                                                      83
                                                                          (108)
Sumner Strait, Pt. Beauclerc, 2.3 miles from entrance
                                                                WR
                                                                      77
                                                                          (103)
    on N. shore
                                                                      95
                                                                WR
                                                                          (129)
Summer Strait, Port Protection, head of S. arm
                                                                WR
                                                                      72
                                                                          (98)
Sumner Strait, 1 mile S. of entrance to No Name Bay
                                                                WR
                                                                      99
                                                                          (133)
Sumner Strait, 4 miles W. of entrance to Red Bay
Sumner Strait, Red Bay, SW. corner
                                                                WR
                                                                     100
                                                                          (134)
Sumner Strait, Reid Bay, head of N. arm
                                                                WR
                                                                      74
Sumner Strait, Reid Bay, 0.2 mile from head of N. arm
                                                                WR
                                                                    74A
    on W. shore
                                                                WR
                                                                      75
                                                                          (100)
Sumner Strait, Reid Bay, in bight 1.5 miles S. of head
    of N. arm
Sumner Strait, Reid Bay, in bight 1.6 miles S. of head
                                                                WR
                                                                     75 A
                                                                          (100 -)
    of N. arm
Sumner Strait, Reid Bay, head of W. arm
                                                                WR
                                                                      76
                                                                          (101)
Sumner Strait, Reid Bay, 0.1 mile N. of head of W. arm
                                                                WR
                                                                     76A
                                                                          (101 - )
    from head
Sumner Strait, Seclusion Harbor, Salt Lagoon, Head
                                                                WR
                                                                      71
                                                                          (96)
Sumner Strait, Shipley Bay, in cove 2 miles from head
                                                                WR
                                                                      90
                                                                          (117)
    of bay
Sumner Strait, Threemile Arm, in cove 5 miles E. of head
                                                                 WR
                                                                      68
                                                                          (93)
                                                                 WR
                                                                      69
                                                                          (94)
Sumner Strait, Threemile Arm, Head
Sumner Strait, Totem Bay, Head
                                                                 WR
                                                                      64
                                                                          (89)
SUNNY CREEK, Seward Passage, Sunny Bay, Head
SUTTER CREEK, Shakan Strait, 2 miles SW. of entrance
                                                                 WR
                                                                      18
                                                                          (21)
                                                                 WC
                                                                      62
                                                                          (12)
    of Dry Pass
THOMS CREEK, Zimovia Strait, Thoms Place, Head
                                                                 WR
                                                                      27
                                                                          (35)
                                                                WR
                                                                       9
                                                                          (12)
TOM CREEK, Bradfield Canal, 9.5 miles from entrance on
    N. shore
                                                                          (88)
TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of
                                                                 WR
                                                                      63
    head
                                                                          (116)
                                                                 WR
                                                                      89
TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt.
                                                                WR
                                                                      67
                                                                          (92)
TUNEHEAN CREEK, Sumner Strait, Keku Strait, 2 miles
    S. of Devils Elbow
VIXEN CREEK, Ernest Sound, Vixen Inlet, Head
                                                                WR
                                                                      22
                                                                          (26)
WHALE PASS, Head, Clarence Strait, Kashevarof Passage
                                                                WR
                                                                     105 (141:108)
                                                                WC
                                                                      59
                                                                          (17)
WOLF CREEK, El Capitan Passage, N. of Aneskett Pt.
                                                                          (40)
                                                                WR
                                                                      29
Zimovia Strait, Anita Bay, Head
                                                                 WR
                                                                      30
                                                                          (41)
Zimovia Strait, Anita Bay, W. head
```

NUMERICAL INDEX OF SALMON STREAMS

WR JAP CREEK, Frederick Sound, Le Conte Bay, 3.5 miles N. of (1) entrance to Le Conte Bay WR 31 Frederick Sound, Le Conte Bay, SE, corner WR 5) ANDREW CREEK, Frederick Sound, Dry Strait, Stikine River tributary S. bank, SE. of Limb I. 3-2 (FWS 4) NORTH ARM CREEK, Clarence Strait, Stikine River, 1 mile NE. WR of Farm I., N. shore WR CRITTENDEN CREEK, Eastern Passage, 1 mile NE. of Babbler 51 Pt. . N. of Mill Creek WR 6) MILL CREEK, Eastern Passage, N. side, S miles above Pt. Madan AARON CREEK, Blake Channel, enters large bay immediately WR 8) E. of Neptune I. WR (10) MARTEN CREEK, Bradfield Canal, 1 mile from entrance on WR (11) FRANK'S CREEK, Bradfield Canal, 8 miles from entrance on N. shore WR 9 (12)TOM CREEK, Bradfield Canal, 9.5 miles from entrance on N. shore WR 10 (13) HARDING RIVER, Bradfield Canal, 6.3 miles from head on N. shore WR 11 (14) NORTH BRADFIELD RIVER, Bradfield Canal, N. head EAST BRADFIELD RIVER, Bradfield Canal, E. head EAGLE RIVER, Bradfield Canal, Eagle Bay, head on S. shore W R 12 (15) WR 13 (16) WR 14 (17)ANAN BAY CREEK, Bradfield Canal, Anan Bay, Head WR 15 (18) ANAN CREEK, Bradfield Canal, Humpback Bay, Head WR 16 (19) FROSTY CREEK, Seward Passage, Frosty Bay, Head WR 17 (20) SANTA ANNA CREEK, Seward Passage, Santa Anna Inlet, Head (21) WR 18 SUNNY CREEK, Seward Passage, Sunny Bay, Head (22) Seward Passage, 1.5 miles E. of Watkins Pt. WR 19 (24) WR 20 EMERALD CREEK, Ernest Sound, Emerald Bay, Head WR 22 (26) VIXEN CREEK, Ernest Sound, Vixen Inlet, Head (31) WR 23 Sumner Strait, Eastern Passage, in cove 2 miles SE. of Channell. Ernest Sound, Fools Inlet, E. head WR 24 (32) WR 25 FOOLS CREEK, Ernest Sound, Fools Inlet, Head (33) WR 26 (34) SOUTHEAST CREEK, Clarence Strait, Ernest Sound, Southeast Cove, Head (35) WR 27 THOMS CREEK, Zimovia Strait, Thoms Place, Head WR 28 (38) KUNK (KONKE) CREEK, Zimovia Strait, W. of Nemo Pt. Zimovia Strait, Anita Bay, Head (40) WR 29 Zimovia Strait, Anita Bay, W. head SNAKE CREEK, Zimovia Strait, Olive Cove, Head WR 30 (41)WR 31 (42) WR 32 (44) MENEFEE CREEK, Ernest Sound, Menefee Inlet, Head Ernest Sound, Canoe Passage, NW. of Brownson I. WR 33 (45) WR (47) 34 Ernest Sound, 1 mile W. of entrance to Canoe Passage WR 35 (48)KUDAY'S CREEK, Ernest Sound, 2 miles W. of entrance to Canoe Passage WR 36 (49) Clarence Strait, McHenry Inlet, 0.2 mile from E. head of E. arm WR 37 (50) McHENRY LAKE CREEK, Clarence Stroit, McHenry Inlet, head of E. arm WR 38 (52) NAVY CREEK, Clarence Strait, Burnett Inlet, 2 miles NE. of Isle Pt. WR 39 (53)Clarence Strait, Mosman Inlet, 1 mile from head WR 40 (54)Clarence Strait, Mosman Inlet, Head WR 41 (55) STREETS LAKE CREEK, Clarence Strait, Rocky Bay, Head WR 42 PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head (56)WR 43 (57) Clarence Strait, Stikine Strait, 2 miles SW. of NW. tip of

Etolin I.

```
(58)
                  Clarence Strait, Stikine Strait, Meter Bight, 4 miles SW. of
WR
     44
                      S. Craig Pt.
                  Clarence Strait, Stikine Strait, Meter Bight, 4.5 miles SW.
WR
     45
          ( 591
                      of S. Craig Pt.
                  Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt
WR
     46
          (60)
WR
     47
          (61)
                  Clarence Strait, Snow Passage, NE. of Bushy I.
                  Clarence Strait, 1 mile N. of Macnamara Pt.
          (62)
WR
     48
                  ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head
          (64)
WR
     49
                  Frederick Sound, 2 miles SE. of Frederick Pt.
WR
     50
          (66)
                  Frederick Sound, 3 miles SE. of Frederick Pt.
     51
          (67)
WR
WR
     52
         ( 69)
                  BIG CREEK, Frederick Sound, 8 miles SE. of Frederick Pt.
WR
     53
         (72)
                  Frederick Sound, Dry Strait, 3.5 miles SE. of Cosmos Pt.
                  Summer Strait, Blind Slough, head of N. arm
         (73)
WR
     54
                  FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt.
         (78)
WR
     55
                  PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt.
WR
     56
         ( 79)
WR
     57
          (80)
                  OHMER CREEK, Duncan Canal, Ohmer Slough, Head
                  DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough
WR
     58
          (81)
                  Duncan Canal, Towers Bay, Head
Duncan Canal, 3.5 miles NW. of Indian Pt.
WR
     59
          (83)
WR
     60
         (84)
WR
     61
          (85)
                  CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big
                      Castle I.
WR
     62
          (86)
                  KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head
WR
     63
          (88)
                  TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head
                  Sumner Strait, Totem Bay, Head
BARRIE CREEK, Sumner Strait, Keku Strait, 2.5 miles N. of
WR
     64
          (89)
WR
     65
          (90)
                     Pt. Barrie
WR
     66
          (91)
                  LOVELESS CREEK, Sumner Strait, Keku Strait, 4 miles N. of
                     Skiff I.
                  TUNEHEAN CREEK, Sumner Strait, Keku Strait, 2 miles S. of
WR
     67
          (92)
                      Devil's Elbow
WR
     68
          (93)
                  Sumner Strait, Threemile Arm, in cove 5 miles E. of head
                  Sumner Strait, Threemile Arm, Head
WR
     69
          (94)
                  Sumner Strait, Seclusion Harbor, Salt Lagoon, 0.5 mile from
WR
     70
          (95)
                     head
WR
     71
          (96)
                  Sumner Strait, Seclusion Harbor, Salt Lagoon, Head
     72
WR
          (98)
                  Sumner Strait, 1 mile S. of entrance to No Name Bay
WR
     73
          (99)
                  Sumner Strait, Alvin Bay, Head
WR
     73A (99-)
                  Sumner Strait, Alvin Bay, 0.5 mile from head on N. shore
                  Sumner Strait, Reid Bay, head of N. arm
Sumner Strait, Reid Bay, 0.2 mile from head on N. arm
WR
     74
          (No)
WR
     74A ( No)
                     on W. shore
WR
          (100)
                  Sumner Strait, Reid Bay, in bight 1.5 miles S. of head of
     75
                      N. arm
WR
     75A (100-)
                  Sumner Strait, Reid Bay, in bight 1.6 miles S. of head of
                      N. arm
WR
     76 (101)
                  Sumner Strait, Reid Bay, head of W. arm
WR
     76A (101-)
                  Sumner Strait, Reid Bay, 0.1 mile N. of head of W. arm
WR
     77
          (103)
                  Sumner Strait, Port Beauclerc, 2,3 miles from entrance on
                     N. shore
                  Sumner Strait, Port Beauclerc, head of N. arm
Sumner Strait, Port Beauclerc, 2 miles S. of head
WR
     78
          (104)
WR
     79
          (105)
                  Sumner Strait, Port Beauclerc, 2.5 miles S. of head of
WR
     79A (No)
                      N. arm
WR
     80
                  Sumner Strait, Port Beauclerc, 4 miles S. of head of N. arm
          (106)
                  Sumner Strait, Port Beauclerc, head of S. arm
Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I.
WR
     81
          (107)
WR
     82
          (No)
WR
     83
          (108)
                  Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius
                  Sumner Strait, Affleck Canal, in cove 10.5 miles S. of
WR
      84
          (109)
```

```
WR
                 Sumner Strait, Affleck Canal, 2.5 miles from head on
                     W. shore
WR
          (110)
     85
                 Sumner Strait, Affleck Canal, head of NW. corner
                 Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm
WR
     86
         (1111)
WR
     88
         (113)
                 Sumner Strait, Affleck Canal, Kell Bay, head of N. arm
                 TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt.
WR
     89
          (116)
                 Sumner Strait, Shipley Bay, in cove 2 miles from head
WR
     90
         (117)
WR
     91
         (118)
                 SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay
WR
     92
         (125)
                 MARBLE CREEK, Sumner Strait, Shakan Bay, 1. S miles N. of
                     Dry Pass
WR
     93
         (126)
                 CALDER CREEK, Sumner Strait, Shakan Bay, Calder Bay, Head
W R
     94
         (128)
                 Sumner Strait, Hole in the Wall, Head
                 Sumner Strait, Port Protection, head of S. arm
     ЭS
WR
          (129)
                 FLICKER CREEK, Sumner Strait, 3.8 miles E. of Pt. Baker,
WR
     96
         (130)
                     S. fork
WR
     97
         (131)
                 ALDER CREEK, Summer Strait, 4.8 miles E. of Pt. Baker,
                     E. fork
WR
     98
         (132)
                 BUSTER CREEK, Sumner Strait, S miles W. of entrance to Red
                     Bay
WR
     99
         (133)
                 Sumner Strait, 4 miles W. of entrance to Red Bay
WR
    100
         (134)
                 Sumner Strait, Red Bay, SW. corner
WR
    101
         (135)
                 BIG CREEK, Sumner Strait, Red Bay, SW. corner
WR
    102
         (136)
                 PINE CREEK, Sumner Strait, Red Bay, 0.7 mile S. of Pine Pt.
WR
    103
                 Clarence Strait, Salmon Bay, Head
         (137)
                 Clarence Strait, Kashevarof Passage, Exchange Cove, Head
WR
         (139)
WR
    104
         (140)
                 SQUAW CREEK, Clarence Strait, Kashevarof Passage, Whale
                    Passage, in inlet N. of W. side of Thorne I.
WR
    10S (141;108) WHALE PASS, Head, Clarence Strait, Kashevarof Passage
WR
         (142)
                 Clarence Strait, Kashevarof Passage, Whale Passage, Neck Lake,
                     1.5 miles from head
WR
    106
                 Clarence Strait, Kashevarof Passage, Whale Passage, S. corner
         (144)
WR
    107
         (150)
                 Clarence Strait, Kashevarof Passage, Gold and Gilligan Lagoon,
                    entrance to Kashevarof Passage
WR
    108
         (154)
                 COFFMAN CREEK, Clarence Strait, Kashevarof Passage,
                    Coffman Cove, Head
WR
    109
         (155)
                 EAGLE CREEK, Clarence Strait, 1.8 miles S. of Luck Pt.
WR
    110
         (156)
                 Clarence Strait, Ratz Harbor, Head
WR
         ( 27)
                 DOG SALMON CREEK, Zimovia Strait, Anita Bay, N. shore
                    of entrance
Е
     34
                 Frederick Sound, Keku Strait, Big John Bay, 2,7 miles from
                    head on E. side
E
     34A
                 BIG JOHN CREEK, Frederick Sound, Keku Strait, Big John Bay,
                    3.8 miles from N. head on E. side
Ε
     34C
                 IRISH CREEK, Frederick Sound, Keku Strait, E. of High I.
E
      7 A
                 MUDDY RIVER, Frederick Sound, S. of Pt. Agassiz
E
                 FIVEMILE CREEK, Frederick Sound, W. of Sukhoi Islets
     31D
WC
     S8
         (18)
                 El Capitan Passage, opposite Aneskett Pt.
         (17)
WC
     59
                 WOLF CREEK, El Capitan Passage, N. of Aneskett Pt.
WC
     60
         (16)
                 EL CAPITAN CREEK, El Capitan Passage, N. end of Passage
WC
     61
         (14)
                 BEAR CREEK, El Capitan Passage, Dry Pass, 1 mile E. of
                    entrance to Dry Pass
WC
     62
         (12)
                 SUTTER CREEK, Shakan Strait, 2 miles SW. of entrance to
                    Dry Pass
WC
     63
         (13)
                 SMITH CREEK, Shakan Strait, 0.5 mile SW. of entrance to
                    Dry Pass
WC
     64
         (15)
                 El Capitan Passage, S. of El Capitan Creek
```

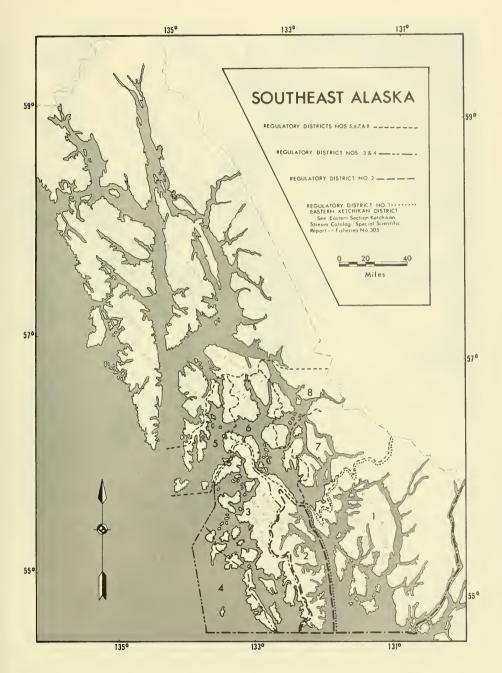
El Capitan Passage, opposite Aneskett Pt.	WC	58	(18)
WOLF CREEK, El Capitan Passage, N. of Aneskett Pt.	WC		
FI CAPITAN OPER El Capitan Passage, N. of Aneskett Pt.			(17)
EL CAPITAN CREEK, El Capitan Passage, N. end of Passage	WC		(16)
BEAR CREEK, El Capitan Passage, Dry Pass, 1 mile E. of	WC	61	(14)
entrance to Dry Pass			
SUTTER CREEK, Shakan Strait, 2 miles SW. of entrance	WC	62	(12)
to Dry Pass			
SMITH CREEK, Shakan Strait, 0.5 mile SW. of entrance to	WC	63	
Dry Pass			
El Capitan Passage, S. of El Capitan Creek	WC	64	(15)
Frederick Sound, Keku Strait, Big John Bay, 2.7 miles from	E	34	· /
No head on E. side	2	J-1	
BIG JOHN CREEK, Frederick Sound, Keku Strait, Big John	E	34A	
	L	JAA	
Bay, 3.8 miles from head	r	240	
IRISH CREEK, Frederick Sound, Keku Strait, E. of High I.	E	34C	
BARRIE CREEK, Sumner Strait, 2.5 miles N. of Pt. Barrie	WR		(90)
LOVELESS CREEK, Sumner Strait, 4 miles N. of Skiff I.	WR	66	(91)
TUNEHEAN CREEK, Sumner Strait, Keku Strait, 2 miles	WR	67	(92)
S. of Devil's Elbow			
Sumner Strait, Threemile Arm, in cove S miles E. of head	WR	68	(93)
Sumner Strait, Threemile Arm, Head	WR	69	(94)
Sumner Strait, Seclusion Harbor, Salt Lagoon, 0.5 mile	WR		(95)
from head			(/
Sumner Strait, Seclusion Harbor, Salt Lagoon, Head	WR	71	(96)
	WR		
Sumner Strait, 1 mile S. of entrance to No Name Bay			(98)
Sumner Strait, Alvin Bay, Head	WR		(99)
Sumner Strait, Alvin Bay, 0.5 mile from head on N. shore	WR		(99-)
Sumner Strait, Reid Bay, head of N. arm	WR	74	
Sumner Strait, Reid Bay, 0.2 mile from head of N. arm on	WR	74 A	
W. shore			
Sumner Strait, Reid Bay, in bight 1.5 miles S. of head of	WR	75	(100)
N. arm			
Sumner Strait, Reid Bay, in bight 1.6 miles S. of head of	WR	75A	(100-)
N. arm			
Sumner Strait, Reid Bay, head of W. arm	WR	76	(101)
Sumner Strait, Reid Bay, 0.1 mile N. of head of W. arm	WR		(101-)
Sumner Strait, Port Beauclerc, 2.3 miles from entrance on	WR		(103)
N. shore	** 11		(+ 0 0)
14. 31101 C			
Summer Strait Port Requelers head of N arm	W D		(104)
Summer Strait, Port Beauclerc, head of N. arm	W R	78	(104)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar	m WR	78 79	(104) (105)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N.		78	
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm	m WR WR	78 79 79 A	(105)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar	m WR WR m WR	78 79 79 A	(105) (106)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm	m WR WR m WR	78 79 79 A 80 81	(105)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I.	m WR WR m WR WR	78 79 79 A 80 81 82	(105) (106) (107)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius	m WR WR m WR	78 79 79 A 80 81 82	(105) (106)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I.	m WR WR m WR WR	78 79 79 A 80 81 82 83	(105) (106) (107)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius	m WR WR m WR WR WR	78 79 79 A 80 81 82 83	(105) (106) (107) (108)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of	m WR WR m WR WR WR	78 79 79 A 80 81 82 83	(105) (106) (107) (108)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner	m WR WR m WR WR WR WR	78 79 79 A 80 81 82 83 84	(105) (106) (107) (108) (109) (110)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, bead of S. arm Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm	m WR WR m WR WR WR WR WR	78 79 79 A 80 81 82 83 84	(105) (106) (107) (108) (109) (110) (111)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm Sumner Strait, Affleck Canal, Kell Bay, head of N. arm	m WR WR MR WR WR WR WR WR	78 79 79 A 80 81 82 83 84 85 86 88	(105) (106) (107) (108) (109) (110) (111) (113)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt.	m WR WR m WR WR WR WR WR WR	78 79 79 A 80 81 82 83 84 85 86 88 89	(105) (106) (107) (108) (109) (110) (111) (113) (116)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm Sumner Strait, Affleck Canal, Kell Bay, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of the	m WR WR WR WR WR WR WR WR WR	78 79 79 A 80 81 82 83 84 85 86 88 89 90	(105) (106) (107) (108) (109) (110) (111) (113) (116) (117)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm Sumner Strait, Affleck Canal, Kell Bay, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of the SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of	m WR WR WR WR WR WR WR WR WR	78 79 79 A 80 81 82 83 84 85 86 88 89 90	(105) (106) (107) (108) (109) (110) (111) (113) (116)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm Sumner Strait, Affleck Canal, Kell Bay, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of the SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay	m WR W	78 79 79 A 80 81 82 83 84 85 86 88 89 90	(105) (106) (107) (108) (109) (110) (111) (113) (116) (117) (118)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay MARBLE CREEK, Sumner Strait, Shakan Bay, 1.5 miles N.	m WR WR WR WR WR WR WR WR WR	78 79 79 A 80 81 82 83 84 85 86 88 89 90	(105) (106) (107) (108) (109) (110) (111) (113) (116) (117)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of the SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay MARBLE CREEK, Sumner Strait, Shakan Bay, 1.5 miles N. of Dry Pass	m WR W	78 79 79 A 80 81 82 83 84 85 86 88 89 90 91	(105) (106) (107) (108) (109) (110) (111) (113) (116) (117) (118) (125)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, S. of SE. tip of Edwards I. Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm Sumner Strait, Affleck Canal, Kell Bay, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay MARBLE CREEK, Sumner Strait, Shakan Bay, 1.5 miles N. of Dry Pass CALDER CREEK, Sumner Strait, Shakan Bay, Calder Bay, H	m WR W	78 79 79 A 80 81 82 83 84 85 86 88 89 90 91	(105) (106) (107) (108) (109) (110) (111) (113) (116) (117) (118) (125)
Sumner Strait, Port Beauclerc, 2 miles S. of head on N. ar Sumner Strait, Port Beauclerc, 2.5 miles S. of head on N. arm Sumner Strait, Port Beauclerc, 4 miles S. of head on N. ar Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Port Beauclerc, head of S. arm Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Louise Cove, 2 miles W. of Pt. Amelius Sumner Strait, Affleck Canal, 10.5 miles S. of head of Affleck Canal, E. shore Sumner Strait, Affleck Canal, Head, NW. corner Sumner Strait, Affleck Canal, Bear Harbor, head of N. arm TROUT CREEK, Sumner Strait, 1.8 miles S. of Ruins Pt. Sumner Strait, Shipley Bay, in cove 2 miles from head of the SHIPLEY CREEK, Sumner Strait, Shipley Bay, NE. corner of bay MARBLE CREEK, Sumner Strait, Shakan Bay, 1.5 miles N. of Dry Pass	m WR W	78 79 79 A 80 81 82 83 84 85 86 88 89 90 91	(105) (106) (107) (108) (109) (110) (111) (113) (116) (117) (118) (125)

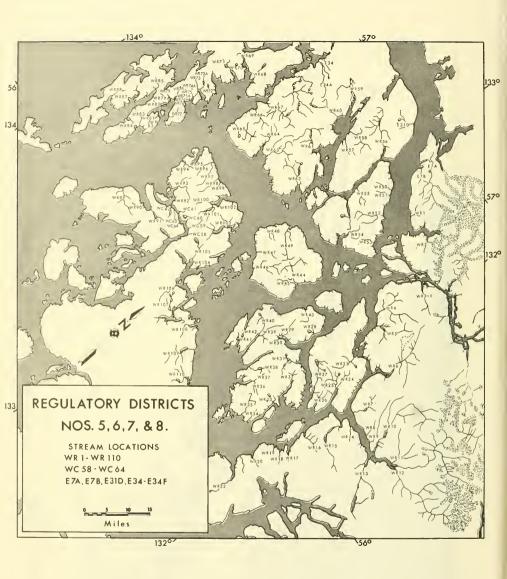
Sumner Strait, Port Protection, head of S. arm WR 95 (129) Sumner Strait, Affleck Canal, 2.5 miles from head on W. WR shore

E. arm McHENRY LAKE CREEK, Clarence Strait, McHenry Inlet, head of E. arm NAVY CREEK, Clarence Strait, Burnett Inlet, 2 miles NE. of Isle Pt. Clarence Strait, Mosman Inlet, 1 mile from head Clarence Strait, Mosman Inlet, 1 mile from head WR 39 (53) Clarence Strait, Mosman Inlet, Head WR 40 (54) STREETS LAKE CREEK, Clarence Strait, Rocky Bay, Head WR 41 (55) PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head WR 42 (56) Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt WR 46 (60) Clarence Strait, Snow Passage, NE. of Bushy I. Clarence Strait, 1 mile N. of Macnamara Pt. WR 48 (62) ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough Duncan Canal, Towers Bay, Head Duncan Canal, 3.5 miles NW. of Indian Pt. WR 59 (83) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR AD CASTLE RIVER, Duncan Canal, 3.8 miles E. of Point Baker, S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, E. fork Sumner Strait, Totem Bay, Head WR 98 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, E. fork Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, SW. corner PINE CREEK, Sumner Strait, Red Bay, O. 7 mile S. of Pine Pt. WR 103 (137)
NAVY CREEK, Clarence Strait, Burnett Inlet, 2 miles NE. of Isle Pt. Clarence Strait, Mosman Inlet, 1 mile from head Clarence Strait, Mosman Inlet, 1 mile from head Clarence Strait, Mosman Inlet, Head STREETS LAKE CREEK, Clarence Strait, Rocky Bay, Head PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt WR 42 Clarence Strait, Snow Passage, NE. of Bushy I. Clarence Strait, 1 mile N. of Macnamara Pt. ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 48 WR 49 (64) FALL CREEK, Wrangell Narrows, NW. of Bayou Pt. OHMER CREEK, Duncan Canal, Ohmer Slough, Head DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough Duncan Canal, Towers Bay, Head Duncan Canal, 3.5 miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEET'S CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 KAH SHEET'S CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, 8 miles W. of entrance to Red Bay Sumner Strait, 8 miles W. of entrance to Red Bay Sumner Strait, Red Bay, SW. corner WR 100 (1336) PINE CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (1356)
Clarence Strait, Mosman Inlet, 1 mile from head Clarence Strait, Mosman Inlet, 1 mile from head Clarence Strait, Mosman Inlet, Head WR 40 (54) STREETS LAKE CREEK, Clarence Strait, Rocky Bay, Head WR 41 (55) PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head WR 42 (56) Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt WR 46 (60) Clarence Strait, Snow Passage, NE. of Bushy I. WR 47 (61) Clarence Strait, 1 mile N. of Macnamara Pt. WR 48 (62) ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 96 (130) S. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O. 7 mile S. of Pine Pt.
Clarence Strait, Mosman Inlet, Head STREETS LAKE CREEK, Clarence Strait, Rocky Bay, Head WR 41 (55) PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head WR 42 (56) Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt WR 46 (60) Clarence Strait, Snow Passage, NE. of Bushy I. Clarence Strait, 1 mile N. of Macnamara Pt. WR 47 (61) Clarence Strait, 1 mile N. of Macnamara Pt. WR 48 (62) ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mile S. of Pine Pt. WR 102 (136)
STREETS LAKE CREEK, Clarence Strait, Rocky Bay, Head WR 41 (SS) PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head WR 42 (S6) Clarence Strait, Snow Passage, 2.S miles NW. of Pt. Nesbitt WR 46 (60) Clarence Strait, Snow Passage, NE. of Bushy I. WR 47 (61) Clarence Strait, 1 mile N. of Macnamara Pt. WR 48 (62) ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.S miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, 3.S miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.S miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FIICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 96 (133) Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, 5 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, SW. corner
PORCUPINE CREEK, Clarence Strait, Steamer Bay, Head WR 42 (\$6) Clarence Strait, Snow Passage, 2.S miles NW. of Pt. Nesbitt WR 46 (60) Clarence Strait, Snow Passage, NE. of Bushy I. Clarence Strait, 1 mile N. of Macnamara Pt. WR 47 (61) Clarence Strait, 1 mile N. of Macnamara Pt. WR 48 (62) ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.S miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.S miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.S miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, Red Bay, SW. corner WR 100 (134) PINE CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, SW. corner
Clarence Strait, Snow Passage, 2.5 miles NW. of Pt. Nesbitt WR 46 (60) Clarence Strait, Snow Passage, NE. of Bushy I. WR 47 (61) Clarence Strait, 1 mile N. of Macnamara Pt. WR 48 (62) ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, SW. corner
Clarence Strait, Snow Passage, NE. of Bushy I. Clarence Strait, 1 mile N. of Macnamara Pt. ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.S miles NW. of Ohmer Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.S miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.S miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, 4 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, Red Bay, SW. corner WR 100 (134) PINE CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mile S. of Pine Pt. WR 102 (136)
Clarence Strait, 1 mile N. of Macnamara Pt. ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FIICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) PINE CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mile S. of Pine Pt. WR 102
ST. JOHN CREEK, Sumner Strait, Pt. St. John, Head WR 49 (64) FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
FALL CREEK, Wrangell Narrows, 1 mile N. of Rock Pt. WR 55 (78) PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR 56 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mile S. of Pine Pt. WR 102 (136)
PETERSBURG CREEK, Wrangell Narrows, NW. of Bayou Pt. WR S6 (79) OHMER CREEK, Duncan Canal, Ohmer Slough, Head WR 57 (80) DUNCAN CREEK, Duncan Canal, 2.S miles NW. of Ohmer WR S8 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.S miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.S miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FIICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
OHMER CREEK, Duncan Canal, Ohmer Slough, Head DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer Slough Duncan Canal, Towers Bay, Head Duncan Canal, 3.5 miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip Of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, Red Bay, SW. corner WR 100 (134) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
DUNCAN CREEK, Duncan Canal, 2.5 miles NW. of Ohmer WR 58 (81) Slough Duncan Canal, Towers Bay, Head WR 59 (83) Duncan Canal, 3.5 miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102
Slough Duncan Canal, Towers Bay, Head Duncan Canal, 3.5 miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
Duncan Canal, Towers Bay, Head Duncan Canal, 3.5 miles NW. of Indian Pt. CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, 4 miles W. of entrance to Red Bay Sumner Strait, 4 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
Duncan Canal, 3.5 miles NW. of Indian Pt. WR 60 (84) CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip WR 61 (85) of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
CASTLE RIVER, Duncan Canal, 3.5 miles W. of N. tip of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, 4 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102
of Big Castle I. KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
KAH SHEETS CREEK, Sumner Strait, Kah Sheets Bay, Head WR 62 (86) TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
TOTEM CREEK, Sumner Strait, Totem Bay, 3 miles E. of head WR 63 (88) Sumner Strait, Totem Bay, Head WR 64 (89) FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
Sumner Strait, Totem Bay, Head FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
FLICKER CREEK, Sumner Strait, 3.8 miles E. of Point Baker, WR 96 (130) S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, WR 97 (131) E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, O.7 mileS. of Pine Pt. WR 102 (136)
S. fork ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
ALDER CREEK, Sumner Strait, 4.8 miles E. of Point Baker, E. fork Sumner Strait, 5 miles W. of entrance to Red Bay Sumner Strait, 4 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
E. fork Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
Sumner Strait, 5 miles W. of entrance to Red Bay WR 98 (132) Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
Sumner Strait, 4 miles W. of entrance to Red Bay WR 99 (133) Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
Sumner Strait, Red Bay, SW. corner WR 100 (134) BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
BIG CREEK, Sumner Strait, Red Bay, SW. corner WR 101 (135) PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
PINE CREEK, Sumner Strait, Red Bay, 0.7 mileS. of Pine Pt. WR 102 (136)
Clarence Strait, Salmon Bay, Head WR 103 (137)
SQUAW CREEK, Clarence Strait, Kashevarof Passage, Whale WR 104 (140)
Passage, on inlet N. of W. side
WHALE PASS, Head, Clarence Strait, Kashevarof Passage WR 105 (141;108)
Clarence Strait, Kashevarof Passage, Whale Passage, S. WR 106 (144)
corner
Clarence Strait, Gold and Gilligan Lagoon, entrance to WR 107 (150)
Kashevarof Passage
COFFMAN CREEK, Clarence Strait, Kashevarof Passage WR 108 (154)
Coffman Cove, Head
EAGLE CREEK, Clarence Strait, 1.8 miles S. of Luck Pt. WR 109 (155)
Clarence Strait, Ratz Harbor, Head WR 110 (156)
Clarence Strait, Kashevarof Passage, Exchange Cove, Head WR (139)
Clarence Strait, Kashevarof Passage, Whale Passage, Neck WR (142)
Lake, 1.5 miles from head

CRITTENDEN CREEK, Eastern Passage, 1 mile NE. of Babbler Pt., N. of Mill Creek	WR	4	(S)
MILL CREEK, Eastern Passage, N. side, 5 miles above Pt. Madan	WR	5	(6)
AARON CREEK, Blake Channel, enters large bay immediately E. of Neptune I.	WR	6	ţ	8)
MARTEN CREEK, Bradfield Canal, 1 mile from entrance on N. shore	WR	7	(10)
FRANK'S CREEK, Bradfield Canal, 8 miles from entrance on N. shore	WR	8	(11)
TOM CREEK, Bradfield Canal, 9.5 miles from entrance on N. shore	WR	9	(12)
HARDING RIVER, Bradfield Canal, 6.3 miles from head on N. shore	WR	10	(13)
NORTH BRADFIELD RIVER, Bradfield Canal, N. head	WR	11	1	14)
EAST BRADFIELD RIVER, Bradfield Canal, E. head	WR	12		15)
EAGLE RIVER, Bradfield Canal, Eagle Bay, head on S. shore	WR	13		16)
ANAN BAY CREEK, Bradfield Canal, Anan Bay, Head	WR	14		17)
ANAN CREEK, Bradfield Canal, Humpback Bay, Head	WR	15		18)
	WR	16	•	19)
FROSTY CREEK, Seward Passage, Frosty Bay, Head		17	,	20)
SANTA ANNA CREEK, Seward Passage, Santa Anna Inlet, Head			,	
SUNNY CREEK, Seward Passage, Sunny Bay, Head	WR	18	(21)
Seward Passage, 1.5 miles E. of Watkins Pt.	WR	19	•	22)
EMERALD CREEK, Ernest Sound, Emerald Bay, Head	WR	20	(
VIXEN CREEK, Ernest Sound, Vixen Inlet, Head	WR	22	(
Eastern Passage, in cove 2 miles SE. of Channel I.	WR	23	(31)
Ernest Sound, Fools Inlet, E. head	WR	24	(32)
FOOLS CREEK, Ernest Sound, Fools Inlet, W. head	WR	25	(/
SOUTHEAST CREEK, Clarence Strait, Ernest Sound, Southeast Cove, Head	WR	26	(
THOMS CREEK, Zimovia Strait, Thoms Place, Head	WR	27	(35)
DOG SALMON CREEK, Zimovia Strait, Anita Bay, N. shore of entrance	WR		(27)
Zimovia Strait, Anita Bay, Head	WR	29	(40)
Zimovia Strait, Anita Bay, W. head	WR	30	(41)
SNAKE CREEK, Zimovia Strait, Olive Cove, Head	WR	31	ì	42)
MENEFEE CREEK, Ernest Sound, Menefee Inlet, Head	WR	32		44)
Ernest Sound, Canoe Passage, NW. of Brownson I.	WR	33	•	45)
Ernest Sound, 1 mile W. of entrance to Canoe Passage	WR	34		47)
KUDAY'S CREEK, Ernest Sound, 2 miles W. of entrance to	WR	35		48)
Canoe Passage	,, ,,		,	101

MUDDY RIVER, Frederick Sound, S. of Pt. Agassiz FIVEMILE CREEK, Frederick Sound, W. of Sukhoi Islets JAP CREEK, Frederick Sound, Le Conte Bay, 3.5 miles N. of entrance to Le Conte Bay	E E WR	7A 31D 1 (1)
Frederick Sound, Le Conte Bay, SE. corner	WR	2 (3)
ANDREW CREEK, Frederick Sound, Dry Strait, Stikine River tributary, S. bank SE. of Limb I.	WR	3-1 (S)
NORTH ARM CREEK, Clarence Strait. Stikine River, 1 mile NE. of Farm I., N. shore	WR	3-2 (4)
KUNK (KONKE) CREEK, Zimovia Strait, W. of Nemo Pt.	WR	28 (38)
Sumner Strait, Stikine Strait, 2 miles SW. of NW. tip of Etolin I.	WR	43 (57)
Sumner Strait, Stikine Strait, Meter Bight, 4 miles SW. of S. Craig Pt.	WR	44 (58)
Sumner Strait, Stikine Strait, Meter Bight, 4.5 miles SW. of S. Craig Pt.	WR	45 (59)
Frederick Sound, 2 miles SE. of Frederick Pt.	WR	SO (66)
Frederick Sound, 3 miles SE. of Frederick Pt.	WR	51 (67)
BIG CREEK, Frederick Sound, 8 miles SE. of Frederick Pt.	WR	52 (69)
Frederick Sound, Dry Strait, 3.5 miles SE. of Cosmos Pt.	WR	53 (72)
Sumner Strait, Blind Slough, head of N. arm	WR	54 (73)





ADF STAT. No. WC S8 Previous No. 18

144-62 56°09.2' N. 133°14' W.

WEST COAST, EL CAPITAN PASSAGE, Opposite Aneskett Pt.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING Late. Sept.
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 1.6 square miles (polar planimeter)
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Poor for aerial survey.

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

GRADIENT AND VELOCITIES
BOTTOM

MARKER DISTANCE

MARKER IDENTIFICATION

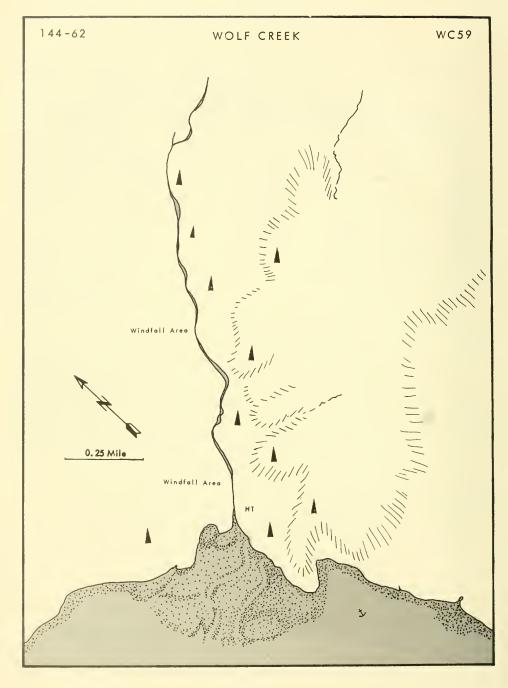
BARRIERS Logs and debris, two places impassable at low water.

TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES May be capable of producing some fish in the good areas.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SUR VEYED Miles	By	PIN Live	K Dead	CHUM Live Dead	OTHER SPECIES Live	REMARKS
		•					
1941							
		FWS	4,000		2,000		Fair
1942							
Sept 12		FWS	1,000		200		Poor
1943							
Sept 23		FWS	5,000		1,000		Fair
1944							
Sept 24		FWS	6,500				Good
1945							
Sept 8		FWS	20,000				Excellent
1957							
Sept 19	G 0.8	FWS	60	20			



ADF STAT. No.

WOLF CREEK

144-62 56°09,8' N. 133°17.8' W. WC 59 Previous No. 17

WEST COAST, EL CAPITAN PASSAGE, N. of Aneskett Pt.

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Late. Sept (estimated)

SPAWNING FACILITIES

OTHER SPECIES Chums.

ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Warm range. No observed temperatures.

VALLEY DESCRIPTION Stream-cut. A mile upstream the creek runs along the base of a snow-capped mountain. The valley runs in a SW. direction.

DRAINAGE 5.3 square miles (polar planimeter) Precipitation-fed. The outlets of two lakes drains into this stream. Snowfields at the head of the valley contribute snowmelt at certain times of the year.

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES Cannot be surveyed by air.

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

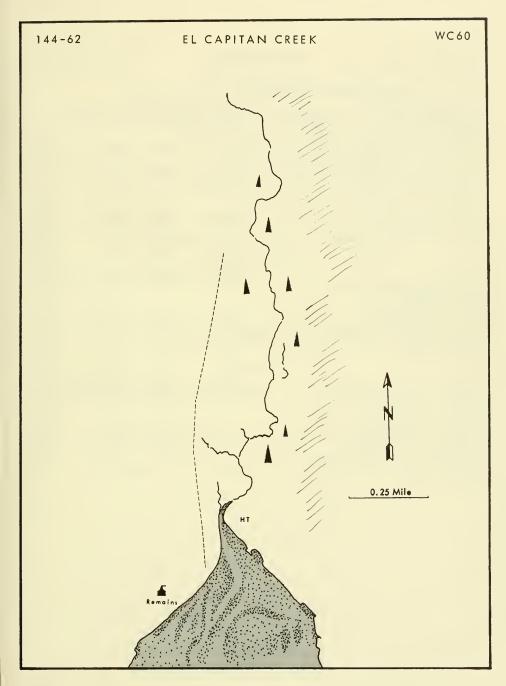
WOLF CREEK

ADF STAT. No. WC 59
Previous No. 17

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SURVEYED		PINK		PINK CHUM OTHER SPECIES		REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	
1940							
Sept 30		FWS	6,000				Fair
1942							
Sept 12		FWS	1, SO 0		S00		Poor
1943							
Sept 22		FWS	30,000				Excellent
1944							
Sept 17		FWS	14,000				Fair
1945							
Sept 17		FWS	40,000				Excellent
1957							
Sept 19	G 1.3	FWS	400	200			



GENERAL NOTES

WEST COAST, EL CAPITAN PASSAGE, N. end of Passage.

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Late. Aug. -Oct. (est.)

SPAWNING FACILITIES Fair to good.

OTHER SPECIES Chums, cohos.

ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Warm range. No observed temperatures.

VALLEY DESCRIPTION Glacial-cut. The valley is bordered on the E. side by a mountain, and the slope on this side is steep in places. The valley widens upstream.

DRAINAGE 5.6 square miles (polar planimeter). Precipitation fed. A few small lakes are found within the drainage area, but the stream is fed largely by surface run-off.

STREAM MOUTH IDENTIFICATION Enters on a large grass flats at extreme NW. corner of El Capitan Passage.

ANCHORAGE Anchor right off stream mouth in 6 fathoms.

TRAILS AND SURVEY ROUTES An old quarry trail following the stream banks is overgrown, but can be used for travel.

AERIAL SURVEY NOTES Impossible to survey by air due to heavy overstory.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 50'-60'/15"-18".

GRADIENT AND VELOCITIES Slight.

BOTTOM Gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A pool below the high tide mark offers facilities for schooling salmon.

SPAWNING AREAS Most of the spawning takes place in this zone.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 3 miles. AVERAGE WIDTH/DEPTH 20'-30'/6"-10".

GRADIENT AND VELOCITIES Steep.

BOTTOM Gravel and marble,

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Two bedrock falls 0.7 mile upstream are partial blocks to salmon passage at low flow.

TRIBUTARIES None reported.

SCHOOLING AREAS Numerous pools.

SPAWNING AREAS Spawning is limited to the lower part because of extensive areas of bedrock.

EL CAPITAN CREEK

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; derial surveys by A]

	SURVEYED		PIN	к	СН	UM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1940								
Sept 30		FWS	25,000		2,000			Good
1941		F7440	10.000					
1942		FWS	12,000					Fair
Sept 11		FWS	12,000		6,000			Fair
1943								
Sept 22		FWS	35,000		15,000			Good
1944 Sept 17		FWS	16,500		1,200			Fair
194S		1113	10,500		1,200			run
Sept 19		FWS	45,000		2,,500			Excellent
1946								
Oct 11 1947		FWS	25,000		5,000			Fair
Oct 1	G 0.5	FWS						1,000 chums off mouth
1948								,
Aug 16	G 2.0	ASI	130		78			
Aug 25	G 1.5	ASI	12,000	0.4.000	3, 200			15,000 off mouth
Sept 1S Oct 9	G 2. S G 1. S	ASI ASI		34,000 1,3S0		4, 400 2, 850	180 cohos	Good
1949	0 1. 3	ASI	1,000	1,550	333	2,030	100 conos	Good
Aug 8	G 1.8	FRI	s		25			
Aug 21	G 0.8	FWS	5,000		200			
Sept 3	G 0.3	FRI	3,480	17	260	11		
Sept 11	G 1.5	FRI	5, 160	>20	850	225		
Sept 25	G 1.5	FWS	4,850	322	126	133	20 cohos	
1954	_							
Sept 17	G	FWS	30,000	4,000				Totantidal name
Sept 17	G C 1 6	FWS FWS	25,000	3, 000				Intertidal zone
1987 Sept 19	G 1. S	FWS	8,000	6,012				Few chums
Sept 19		L MA 2	0,000	0,012				ten chums

WEST COAST, EL CAPITAN PASSAGE, DRY PASS, 1 mile E. of entrance to Dry Pass.

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Late. Sept.-Oct. (est.)

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Warm range. No observed temperatures.

VALLEY DESCRIPTION

DRAINAGE 0.3 square mile (polar planimeter)

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES No trails. Brushy banks make travel difficult.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile.

GRADIENT AND VELOCITIES Steep.
BOTTOM Bedrock, small rock, and boulders.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Two falls are present. The first is passable, but the second is a total block to salmon.

TRIBUTARIES

SCHOOLING AREAS A few holes are available for schooling.

SPAWNING AREAS

GENERAL NOTES Carries a large volume of water, but most of the stream is torrential.

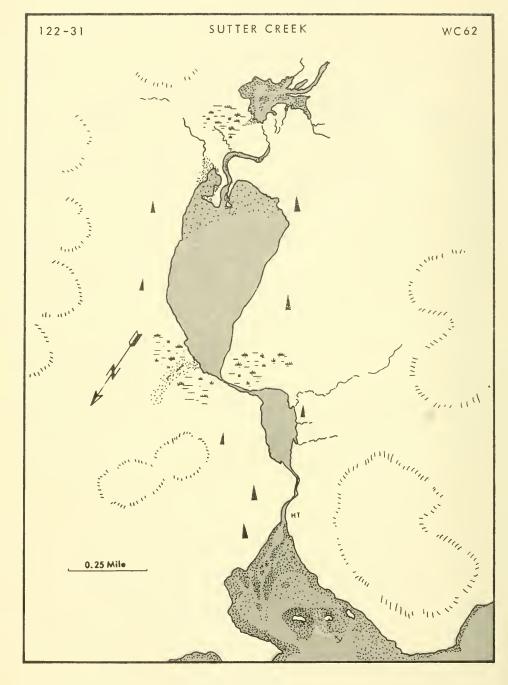
BEAR CREEK

ADF STAT. No. WC 61
Previous No. 14

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED Miles	Ву	PIN Live	K Dead	CHI	JM Dead	OTHER SPECIES Live		REMARKS
Dute	1411163	Dy	2110	Dedu	Live	Dead	Live		
1940									
Oct 1		FWS	10,000					Good	
1942									
Sept 10		FWS	20,000		5,000			Good	
1943									
Sept 22		FWS	1,000		50,000			Good	
1944									
Sept 18		FWS	250		700			Poor	
1945					400				
Sept 18		FWS	500		100			Poor	
1946		ENVC	7 000					D	
Oct 11 1947		FWS	7,000					Poor	
Oct 1		FWS	5,000		1,000			Good	
000		1.44.2	3,000		1,000			Good	



WC 62 Previous No. 12

WEST COAST, SHAKAN STRAIT, 2 miles SW. of entrance to Dry Pass,

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Late. Sept-Oct. (est.)

SPAWNING FACILITIES

OTHER SPECIES Cohos, reds

ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Warm range. No observed temperatures.

VALLEY DESCRIPTION Glacial cut.

DRAINAGE 6.8 square miles (polar planimeter). Drains two lakes. The first is 0.3 mile long and the second 0.5 mile long. These lakes are fed by small feeder streams. Snowfields surround the upper valley.

STREAM MOUTH IDENTIFICATION ANCHORAGE TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

UPSTREAM

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

LENGTH ACCESSIBLE 0.2 mile to lake.
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial by A]

Date	SURVEYED Miles By	PIN Live	K Dead	CHU L ive	M Dead	OTHER SPECIES Live		REMARKS
1942								
Sept 11 1943	FWS	S,000						
Sept 21 1944	FWS	5,000				2, SOO cohos	Fair	
Sept 24 194S	FWS	1, 600				1,800 cohos, 8,500 reds	Fair	
Sept18	FWS	15,000					Good	

ADF STAT. No. WC 63

Previous No. 13

SMITH CREEK

122-31 56°09,6' N. 133°24.9' W.

WEST COAST, SHAKAN STRAIT, 0.5 mile SW. of entrance to Dry Pass.

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Late. Sept.

SPAWNING FACILITIES

STREAM TEMPERATURES

VALLEY DESCRIPTION Stream-cut. The valley runs in a northeasterly direction.

DRAINAGE 2 square miles (polar planimeter), Precipitation-fed.

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

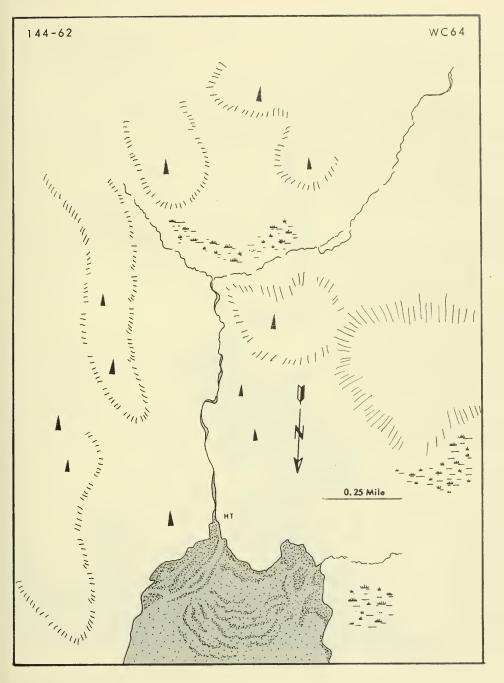
AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial by A]

Date	SURVEYED Miles	Ву	PINI Live	K Dead	CHU Live	M Dead	OTHER SPECIES Live		REMARKS
1941		FWS	17,000					Good	
1942 Sept 11		FWS	8,000		2,000			Fair	
1943 Sept 22		FWS	5,000					Fair	



ADF STAT. No. WC 64

Previous No. 15

144-62 S6°08.8' N. 133°20.7' W.

WEST COAST, EL CAPITAN PASSAGE, S. of El Capitan Creek.

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Late. Sept-Oct. (est.)

OTHER SPECIES Chums.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITES

STREAM TEMPERATURES Warm range. No observed temperatures.

VALLEY DESCRIPTION Stream-cut. The valley runs NE. in its upper reaches and N. near its lower end. Broadens at the stream's headwaters.

DRAINAGE 4.4 square miles (polar planimeter)
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 151/? .

LENGTH 0.8 mile
GRADIENT AND VELOCITES Moderate.
BOTTOM Fine gravel and sand.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS A few pools.
SPAWNING AREAS None.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile, AVERAGE WIDTH/DEPTH 10'-15'/6"-10". GRADIENT AND VELOCITIES Steep.

BOTTOM Coarse gravel and boulders.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Gradient becomes very steep a short distance upstream and makes travel upstream difficult for salmon.

TRIBUTARIES None.

SCHOOLING AREAS Numerous pools.

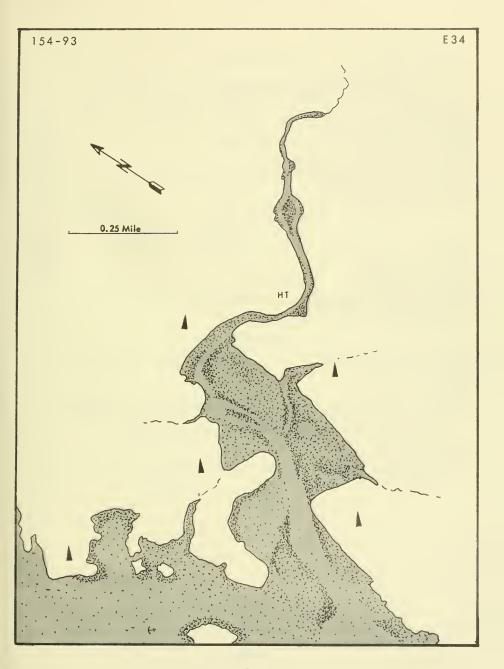
SPAWNING AREAS Very limited. The lower section has the most available spawning area.

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial by A]

	SURVEYED		PIN	K	CHL	IM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1943 Sept 22 1944		FWS	so, 000					Good
Sept18		FWS	10, 150		3SO			Fair
1945								
Sept19		FWS	101,000					Excellent
1946								
Oct 11		FWS	1,500					Poor
1957								
Sept 20	G 0.3	FWS	60	20				



ADF STAT. No. E 34 Previous No.

154-56 56°54' N. 133°40.5' W

EASTERN, FREDERICK SOUND, KEKU STRAIT, BIG JOHN BAY, 2.7 miles from head on E. side.

MAJOR SPECIES Chum. OTHER SPECIES Pink. ESCAPEMENT TIMING Middle. Late Aug. to early Sept. SPAWNING FACILITIES Good. STREAM TEMPERATURES No observed temperatures. VALLEY DESCRIPTION DRAINAGE 6.7 square miles (polar planimeter). STREAM MOUTH IDENTIFICATION ANCHORAGE Fishing vessels anchor in SE. arm in 18 to 24 fathoms; soft bottom. TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES BOTTOM LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS

SPAWNING AREAS In many places at the mouth of this stream, the bottom is bedrock shale interspersed with good spawning areas.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2 miles. GRADIENT AND VELOCITIES

AVERAGE WIDTH/DEPTH 751/20".

AVERAGE WIDTH/DEPTH

BOTTOM MARKER DISTANCE MARKER IDENTIFICATION

BARRIERS One-third mile upstream is a S'accessible falls; three-fourths mile up is a 4' accessible falls; 2 miles up is a 6 falls impassable to salmon. Stream should accommodate \$0,000 salmon with some blasting. The upper falls could be made accessible by blasting.

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Good.

GENERAL NOTES Barrier data source: Microfilm No. 137-2 FRI - SE. Alaska Research. Stream Survey Data, 1931-S0, 1952.

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SURVEYED		PIN	IK	CHI	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
10.48								
1943	• •							
Sept 16	2. 0	FRI	7,500		7,500			
1950								
Sept 9								No fish observed
1955	a.s. o	400	05.000					
5ept 11	G 2.0	ADF	25,000					
1956								
Aug 24	0.7	FWS			8,000			
Sept 7	3.0	FWS						500 p inks, 1,000 chums
								at mouth
5 ept 9	6.0	FWS	7,000		13,000			
Sept 15	2. 0	FWS	450		8,000			
1957								
Aug 16	A 2.0	FWS						No fish observed
1963								
Aug 9	A length	ADF						No fish observed in stream; jumps in bay

154-56 56*48.9' N. 133*40.5' W. BIG JOHN CREEK

E 34A

EASTERN, FREDERICK SOUND, KEKU STRAIT, BIG JOHN BAY, 3.8 miles from head.

MAJOR SPECIES Formerly pinks. OTHER SPECIES ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURE No observed temperatures.
VALLEY DESCRIPTION
DRAINAGE
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES

INTERTIDAL ZONE

LENGTH
CRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AERIAL SURVEY NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS	
Date	Miles	By	Live	Dead	Live	Dead	Live	
1956								
Aug 24	1.0	FWS			169			
Sept 1	0.7	FWS						8,000 pinks at mouth
1957								
Aug 16	A 2. 0	FWS	S00					
1963								
Aug 9	A length	ADF						No fish observed in stream; jumps in bay

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

ADF STAT. No.

154-56 56°43.7' N. 133°40.6 W. IRISH CREEK

E 34C

EASTERN, FREDERICK SOUND, KEKU STRAIT, ROCKY PASS, opposite High I., E. shore.

MAJOR SPECIES Pink, chum.

OTHER SPECIES Coho.

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES This creek has a falls that prevents spawning in the upper spawning grounds.

About one-tenth of the stream is utilized; area above the falls is idle.

STREAM TEMPERATURES No observed temperatures.

VALLEY DESCRIPTION Drains long, flat musked valley; several small lakes.

DRAINAGE 11.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Low narrow flats.

ANCHORAGE

TRAILS AND SURVEY ROUTES Easy game trail on left bank.

AERIAL SURVEY NOTES It is the opinion of the surveyor that this stream is an ideal one and is capable of a tremendous potential above the falls. Several miles above the falls it branches, with two lakes at the inlet.

INTERTIDAL ZONE

LENGTH 0.5 mile.

AVERAGE WIDTH/DEPTH 75'/16".

AVERAGE WIDTH/DEPTH 75'/20".

GRADIENT AND VELOCITIES Slight.

BOTTOM Fine gravel and sand.

LOW TIDE LOCATION Flats.
HIGH TIDE LOCATION Almost to falls.

SCHOOLING AREAS

SPAWNING AREAS Upper half of intertidal zone has good spawning.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE To falls.
GRADIENT AND VELOCITIES
BOTTOM Gravel and sand.

MARKER DISTANCE

MARKER IDENTIFICATION BARRIERS 22 barrier falls.

TRIBUTARIES None below falls.

SCHOOLING AREAS Deep hole under falls.

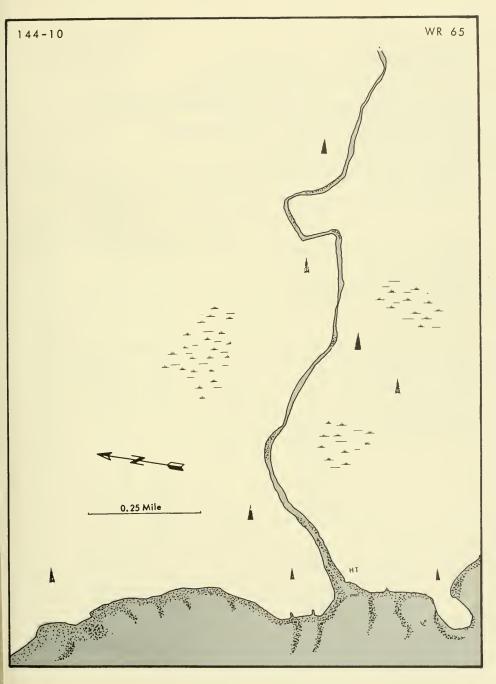
SPAWNING AREAS Good.

GENERAL NOTES Miles of excellent spawning area is available above falls; however, laddering of these falls would be extensive. Preliminary engineers survey by G. Liemer made 1963.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; Gerial surveys byA]

	SURVEYED		PINK		CHU	М	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Miles	
1052								
1953		ETHIC			100			
Aug 10	G	FWS			100			
1956								
Aug 29	0.7	FWS			1,500			
Sept 6	6.0	FWS						2,500 mixed
Sept 8	3.0	FWS	800		1,200			
Sept 13	6.0	FWS	2, 250		2, 250			
1957								
Aug 16	A abv falls	FWS	100					
_	A past falls	FWS	8,000					
Sept 9	G 0. 2	FWS	71		258			
1958	0 0.2							
Aug 25	A 0.2	FWS			100			
Aug 26	G 0.2	FWS			300			
1959	60.2	LWS			300			
	4 . 6 11	PUIC						No fish observed
	A to falls	FWS						NO 11sti observed
1960								
Aug 29	A 1.0	ADF						No fish observed
1963								
Aug 9	A length	ADF			10			



ADF STAT. No.
WR 65
Previous No. 90

BARRIE CREEK

56°28.4' N. 133°39.6 W.

WRANGELL, SUMNER STRAIT, KEKU STRAIT, 2.5 miles N. of Pt. Barrie.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle, Aug. - Sept. (est.) ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION

DRAINAGE 20.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Adequate anchorage is found S00 yards S. of the mouth.

TRAILS AND SURVEY ROUTES Many gravel bars run along the stream, making travel easy. Wading possible.

AERIAL SURVEY NOTES The stream is open enough for aerial survey, often too dark to survey.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 40'/12".

LENGTH
GRADIENT AND VELOCITIES Mostly swift.
BOTTOM

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A few deep holes.

SPAWNING AREAS Some spawning gravel in the lower portion.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 5 miles to lake. AVERAGE WIDTH/DEPTH 20'-40'/8"-12". GRADIENT AND VELOCITIES Moderate.

BOTTOM Mostly bedrock and some gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Beaver dams are sometimes a problem.

TRIBUTARIES

SCHOOLING AREAS A few good pools, but mostly riffles.

SPAWNING AREAS Good spawning facilities.

GENERAL NOTES A small stream with mainly a bedrock bottom.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

		-		, ,			* *	7 - 7 - 3
	SURVEYE)	PIN	ĸ	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	KLIMAKKS
Date	Milles	Бу	Live	Dead	Live	Dead	Live	
1051								
1951		57.10						
Sept 8	1. 2	FWS	15,000	437	250	50	1 cohos	
1953								
July 30	A 0. 6	FW5						No fish observed. Water
								very, low
1955								ŕ
July 13	G 0.5	FWS					40 reds	
July 15	G 0.5	FWS					200 reds	
July 25	G 0.5	FWS					SO reds	
July 27	G 0.5	FW5					60 reds	
Aug 9	G 0.5	FWS					>300 reds	
1956	0 0. 5	1 113					>300 reus	
	G	FWS						h1 6: 1 1 1
June 29								No fish observed
July 7	G	FWS					1,000 reds	
Aug 4	A 0.5	FWS	3,000					
Aug 9	A length	FWS					12 reds	
Aug 10	G 0.5	FWS	2,000					
Aug 18	G	FWS	>7,000					7,000 entered creek
Aug 19	G	FWS						No fish observed
1957								
July 23	G mouth	FWS					30,000-40,000 reds	
Aug 17	G 0. 2	FWS	800				30,000 10,000 100	10,000 pinks at mouth
Aug 20	G length	FWS	1,500					10,000 pinks at mouth
					1 700		2001	
Aug 22	G mouth	FWS	6, 375		1,700	_	200 cohos	
Aug 30	G 0.5	FWS	480	20	150	5		
Sept 3	A 1.0 FF		300		188			
Sept 4	A 1.0	FWS						No fish observed
1958								
July 20	G 0. 1	FWS					>2,000 reds	
July 26	G	FWS					500 reds	
July 29	G	FW5			200		600 reds	
July 30	G	FWS					600 reds	
Aug 2	G	FWS					100 reds	
Aug 3	G	FWS	3,000				200 1000	
Aug 4	G 0. 2	FWS	2,000				1,000 reds	
Aug 8	G 0. 5	FWS	300				1,000 reus	
	G 5.0						25 1 -	
Aug 29	G 5. U	FW5	5,000		200		25 cohos	
Season		FWS	11,600		200		10,000 reds, 25 coho	S
Sept 2	A to lake		1,200		200			
Sept 15	G 1.5	FWS	800				6 cohos, 1 reds	
1959								
July 11	G flats	FWS					2,000 reds	On flats
July 14	G flats	FWS					1,000 reds	On flats
July 21	G flats	FWS					25 reds	
Aug 4	G mouth	FWS	150				50 reds	
Aug 5	G mouth	FWS	150				40 reds	
Aug 7	G mouth	FWS	200				100 reds	
Aug 8	G mouth	FWS	300				SO reds	
Aug 10	G mouth	FWS	3,000				JO Teus	
Aug 12	G mouth	FWS	2,000					

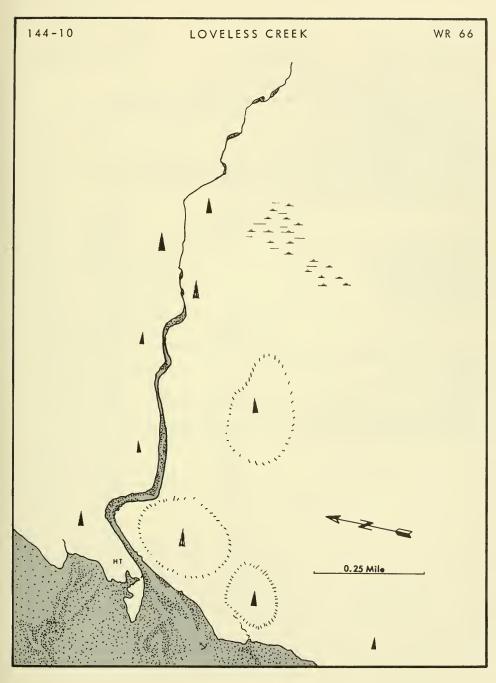
ADF STAT. No. WR 65

Previous No. 90

BARRIE CREEK - Continued

144-10

OTHER SPECIES REMARKS PINK CHUM SURVEYED Dead Live Dead Live Miles By Live Date 1959 G mouth FWS 1,000 Aug 16 G mouth FWS 1,000 Aug 18 FWS 1,000 Aug 21 1960 No fish observed A 5.0 ADF June 24 ADF No fish observed A 5.0 July 31 No fish observed A 0.1 ADF Aug 24 1961 No fish observed July 4 A 5.0 ADF Fish present. Stream Aug 25 A 5.0 ADF present too dark 1962 No fish observed A 1.0 ADF Aug 20 ADF 40,000 Aug 29 A length 1963 Aug 9 A 1.0 ADF few 1,000 at mouth; 100 in intertidal; vision poor Aug 19 A to lake ADF 9,000 Low water



LOVELESS CREEK

ADF STAT. No.
WR 66

56°33.3' N 133°39.2' W.

Previous No. 91 FWS No. 67

WRANGELL, SUMNER STRAIT, KEKU STRAIT, 4 miles N. of Skiff I.

MAJOR SPECIES Pink, chum.
ESCAPEMENT TIMING
SPAWNING FACILITIES Excellent.
STREAM TEMPERATURES
VALLEY DESCRIPTION

OTHER SPECIES ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 10'/8".

DRAINAGE 16 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Lies on the S. side of a small, partially wooded peninsula. ANCHORAGE Anchor S. of the mouth in front of the FWS stream guard cabin.

TRAILS AND SURVEY ROUTES Easily traveled up the streambed except in areas of windfalls. A good game trail follows the right bank.

AERIAL SURVEY NOTES Usually too dark color to survey.

INTERTIDAL ZONE

LENGTH 0.7 mile.
GRADIENT AND VELOCITIES GentleBOTTOM Gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS

GENERAL NOTES

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 10'-15'/8".
GRADIENT AND VELOCITIES Gentle to moderate.
BOTTOM Gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES Two miles upstream, the creek splits into numerous channels.
SCHOOLING AREAS Numerous pools.
SPAWNING AREAS Good spawning riffles are found throughout the distance surveyed.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

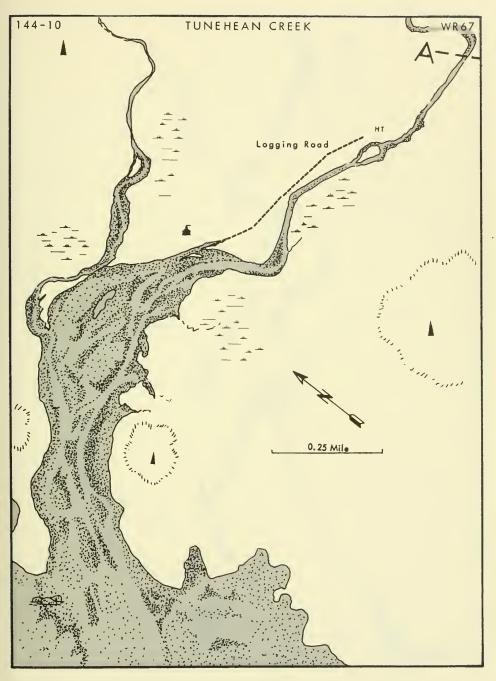
	SURVEYE		PIN		CHU		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
. 1954								
July 30	0.7	FWS	2		195			
Aug 12	A	FWS	0		2,000			
Aug 10	A	FWS			2,000			Estimated
Aug 27	A 0.5	FWS	3,600		350			
1988								
July 25	G mouth	FWS			100			
July 29	G mouth	FWS			40			
July 31	G mouth				2,000			
Aug 17	G mouth				200			
Aug 22	G mouth							200 pinks at mouth
Aug 24	A length		12,500					
Aug 27	G mouth		0.000					A few fish present
Sept 6	A 3.0	FWS	8,000					Total 10,000, no dead
1956 Aug 5	A	FWS	8					
Aug 12	G	FWS	400					
Aug 17	G 1.5	FWS	1,400		100			
Aug 21	A 1. 2	FWS	1, 100		100			3,000 salmon present
Aug 27	G 1.7	FWS	5,000		10,000			-,
Sept 10	A 3.0	FWS	,		,			2,000 salmon seen
1957								
July 28	G 0.5	FWS	350		15			
July 31	G 1.2	FWS	1,000		30			
Aug 7	G 1.7	FWS	600		200			
Aug 11	G 0.2	FWS	200		200			
Aug 19	G 1.5	FWS			1,750	60		10 000 :
Aug 20	A 6.0	FWS						18,000 in stream, 8,000 at mouth
Aug 23	G 0. 2	FWS	1, 200		2,800			
Aug 25	G 2.7	FWS	325		1,575			
Aug 28		FWS	20		100			
Aug 30	G 2.0	FRI	1,000		2,000			1,500 dead
Sept 3	G 1.0	FRI-FWS	360		188			
Sept 4	A 1.0	FWS	15,000		7,000			
Sept 14	G 1.0 F	RI-FWS	85		125		4 cohos	
1958								
July 23	G 0.5	FWS			10			
July 28	A 0. S	FWS	210		75			
Aug 9 Aug 22	G 0.5 G 2.7	FWS FWS	210 1,350		490 3, 160	200		
	1st hole	FWS	150		150	200		
Aug 30	G 1. S	FWS	620		800	298		
Season		FWS	1,500		4,500			
Sept 2	A 2.0	FWS	4,000		700	700		
Sept 10	A 2.0	FWS	1, 200		500			600 mixed dead
Sept 15	G 0.5	FWS	400					A few dead pinks

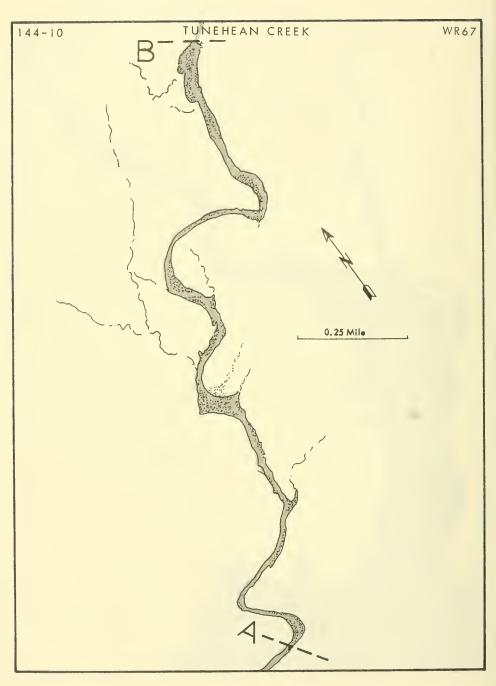
144-10

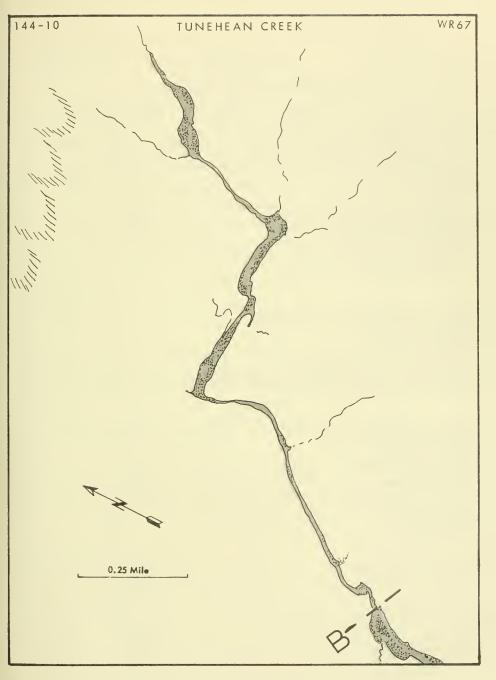
ADF STAT. No.
WR 66
LOVELESS CREEK - Continued Previous No. 91

ESCAPEMENT RECORD	
-------------------	--

	5UR VEYED		PINK		CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1959								
July 18	G 0.5	FW5						No fish observed
July 19	G 0.5	FW5			5			
July 21	G 0.5	FWS	50		25			
July 28	G 1.7	FWS	518		220			
Aug 1	A 1.0	FW5	800		100			
Aug 9	G 2.5	FWS	5,559		2, 155			
Aug 11	G 0. 2	FWS	2,500		2,600			
1960								
Aug 24	A 2.0	ADF	300		150			
1961								
	No survey	'S						
1962	•							
July 26	A 1.0	ADF						No fish observed
Aug 8	A mouth	ADF						Many jumps, could not
								estimate
Aug 20	A 1.0	ADF						Pinks present
1963								
Aug 9	A 1.5	ADF	200					2,000 in intertidal zone
Aug 19	A length		1,500					3,000 in intertidal zone
9 22	11 10119411		, , , , , ,					-,







ADF STAT. No. TUNEHEAN CREEK WR 67 Previous No. 92 FWS No. 68

56° 35.9' N. 133° 38.7' W.

144-10

WRANGELL, SUMNER STRAIT, KEKU STRAIT, 2 miles S. of Devil's Elbow.

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug. -Sept. SPAWNING FACILITIES Good to excellent.

OTHER SPECIES Chum, coho. ESCAPEMENT MAGNITUDE Est. 60,000, 9/18/43

STREAM TEMPERATURES Normal range. Observed temperatures: 63°F., 8/10/50; 51°F., 9/4/50; 49°F., 9/20/50; 55°F., 8/14/51; 56°F., 8/25/51; 53°F., 9/12/51; 70°F., 8/13/52; 55°F., 8/23/52; 48° F., 9/9/52; 50.5° F., 9/19/52; 57.5° F., 8/12/53; 55° F., 8/23/53; 55° F., 9/6/53.

VALLEY DESCRIPTION Meanders through a wide, flat valley surrounded by rolling hills. Numerous muskea areas.

DRAINAGE 36 square miles (polar planimeter). Precipitation-fed. Several small creeks drain into this stream.

STREAM MOUTH IDENTIFICATION Enters an extensive grass flat. An old logging camp is at the upper end of the flats near the high tide mark.

ANCHORAGE Suitable anchorage is found S. of the creek mouth. Rocky Pass and its tributary bays are very foul. Navigate with caution.

TRAILS AND SURVEY ROUTES Wadeable at normal water levels. Gravel bars are numerous. A logging road, grown over in places, follows the right bank for about 2.5 miles.

AERIAL SURVEY NOTES Water usually dark color.

INTERTIDAL ZONE

LENGTH 1.6 miles.

AVERAGE WIDTH/DEPTH 40'-60'/10"-20".

GRADIENT AND VELOCITIES Gentle to moderate. BOTTOM Gravel, rock and occasional bedrock outcrops.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Salmon school throughout the lower deep area in the lower part of this zone and in a large pool just below the high tide mark.

SPAWNING AREAS The upper 0.6 mile offers good spawning facilities.

GENERAL NOTES In this area the stream divides many times as it flows through a large grass flat.

UPSTREAM

LENGTH ACCESSIBLE

AVERAGE WIDTH/DEPTH 1001/24".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Ccarse gravel. MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES None.

SCHOOLING AREAS Long deep areas and pools occur throughout. The lower part has some very large, deep bedrock pools.

SPAWNING AREAS Riffle areas offering excellent spawning facilities are found throughout the distance surveyed.

GENERAL NOTES

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; periol surveys by A]

	CID VEVE	,	DINI	,	CH	11).4	OTHER SPECIES	DEMARKS
Date	SUR VEYE Miles	By	PINI Live	Dead		UM Dead	OTHER SPECIES Live	REMARKS
		-,						
1949 Sept 23 1950	G 2.0	FRI						Poor visibility. No estimate
Aug 10	G 0.6	FRI	528	1	184	2		Manager and the Physics of the Property of the Physics of the Phys
Sept 4 Sept 20 1951	G 0. S G 0. S	FRI FRI	750	240	0	0		No estimate possible. Flooding
Aug 14	G 0.6	FRI	6, 210	0	100	0		S,000 in intertidal zone
Aug 25	G 0.6	FRI	24,000	3	770	4	40 1	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Sept 12 Sept 19 1952	G 0. 6 G 0. 2	FRI FRI	5,000 1,030		SS S.		40 cohos	15 dead cohos. Peak past Many dead chum. All spawning
Aug 13	G 0. S	FRI	660	0	815	0		Several thousand off mouth
Aug 23	G 0.5	FRI	7, 200	0	800			Several thousand off mouth
Sept 9	G 1.0 G 1.0	FRI FRI	2, 600 595	28 185	0	21 21		Poor visibility. Peak over Run is over
Sept 19 1953	G 1. U	LL/1	393	103	U	21		Nun is over
July 30	G 1.0	FWS						No fish seen
Aug 7	G 1.5	FWS	150	0	150	0		300 at mouth
Aug 8	G 0. 2	FWS	100	0	150	0		200 1 1 1
Aug 11 Aug 12	A G 1.0	FWS FRI	300	0	700	0		300 salmon in stream
Aug 18	G 0. 3	FWS	150	0	150	0		
Aug.21	G 1.5	FWS	300	0	500	0		
Aug 23	G 1.0	FRI	34	0	150	0		
Sept 6	G 1.0	FRI	160	0	20	1	158 cohos	M. Caladan J
Sept 18 1954	A	FWS						No fish observed
July 30	G 1.0	FWS	110		93			
Aug 12	A 6.0	FWS	2,000		5,000			
Aug 15	A	FRI	6,500	0	0	0		3,000 off mouth
Aug 16	A	FWS	4 000		10,000			10,000 in intertidal zone
Aug 16 Aug 24	A A	FWS FRI	4,000 6,000	0	10,000 >300			Many dead
Aug 27	1.0	FWS	28, 200	J	150		17S cohos	many accu
Sept 10	A 6.0	FWS	2,000		5,000			Just above creek mouth
Sept 10	A	FRI	2,000					Some dead pinks, few live chums
Season		FWS	28,000					
1955 Aug 3	A 3.0	FWS	0	0	0	0		
Aug 17	A 3.0	FWS	0	o	0	0		
Aug 19	A 3.0	FRI	>200	0		0		Some live chums present
Aug 24		FWS	6, 200					324 43 434
Aug 26	A 3.0	FRI	10,000	0	0	0		Visibility poor 7,000 spawning above marker
Sept 5 Sept 6 1956	A 3.0 A 3.0	FRI FWS	6,000 25,000	0		0		Some chums and cohos
Aug 17	G 1.0	FWS	28,500					
Aug 21	A 2.5	FWS						Estimated 30,000 upstream
Aug 26	A mkr	FRI	3,000					
Sept 7	A mkr A 7. 0	FRI FWS	17,000					
Sept 10 Sept 17	A 7.0 A mkr	FRI	10,000 50,000					80,000 pinks above marker
20pt 27			,					S miles

ADF STAT. No.

WR 67
TUNEHEAN CREEK - Continued Previous No. 92
FWS No. 68

Date	SUR VEYED Miles By		PINI Live	K Dead	CHI L ive	JM Dead	OTHER SPECIES	REMARKS
2000	1111100	-,						
1957 Aug 6 Aug 6 Aug 8 Aug 11 Aug 13 Aug 15 Aug 18 Aug 20	G 0. S G 0. 7 G 1. 0 G 0. 7 G 1. 0 G 1. 0 G 1. 0	FWS FWS FWS FWS FWS FWS FWS	150 30 40 100 1,000 1,200 5,000 12,000		50 2 15 40 200 1,000 3,000 6,000			
Aug 23	G 1.0	FWS	8,000		4,000		6 cohos	
Aug 25 Aug 25	G 1.5 A marker		1,000 3,000		1,500			1,000 pinks, 7,000 chums above marker
Aug 27 Aug 29	G 1.5 G 1.5	FWS FWS	1, 200 1, 200		1,800 2,800			
Sept 2	A marker		1, 400					2,000 pinks, 3,000 chums above marker
Sept 3	G 1.5 A 2.0	FRI FWS	840 25,000		100 20,000		12 cohos	
Sept 4 Sept 14 1958	G 0.5	FRI	50		30		300 cohos	
July 17	G 2.0	FWS	200		15			
July 22 July 28	G 2. 0 G 1. 2	FWS FWS	350 400		10 6			
Aug 1	G 1.5	FWS	600		12			
Aug 8 Aug 19	G 1. 2 G 1. 0	FWS FWS	15 12		8			
Aug 19 Aug 25	A morker		2,000					2,000 dead
Season	_	FWS	7,000		1,000			Total
Aug 29 Sept 2	G A 2.0	FRI FWS	510 4,500		15 250	4		
Sept 16 Sept 19	G 1.0 A marker	FWS	100	100				No fish observed. Many dead
1959 July 18	G 0.5	FWS						No fish observed
July 22	A 2.0	FWS	2.5		20			No fish observed
Aug 10 Aug 22	G 1.0 G	FWS FWS	35		30			Water too dark
Oct 2	G	FWS	200		•			
1960 July 31 Aug 24	A length A 0.5	ADF						No fish observed 150 chums and pinks at mouth Jumps at mouth. Water dark
Aug 29 1961	A length	ADF						,
10.05	No surveys							
1962 Aug 8	A 1.0	ADF						No pinks observed
Aug 14	G 1.5	ADF					1 cohos	3,000 mixed fish
Aug 20 1963	A 5.0	ADF	2 000		1 500			Pinks present 200 in intertidal zone
Aug 9 Aug 19	A length A length	ADF ADF	3,000		1,500			17,000 mixed

144-10 56°36.5' N. 133°48.9' W. ADF STAT. No. WR 68
Previous No. 93
FWS No. 69

WRANGELL, SUMNER STRAIT, THREEMILE ARM, in cove S miles E. of head.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho.
ESCAPEMENT TIMING Middle. Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES
STREAM TEMPERATURES Normal range. No observed temperatures.
VALLEY DESCRIPTION
DRAINAGE 8 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE The arm offers good anchorage in S to 8 fathoms.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 30'/18".

AVERAGE WIDTH/DEPTH

ESCAPEMENT RECORD Previous No. 93 [Counts made by ground surveys are designated by G; Gerial surveys by A]

144-10

			, .	, .	,	,	, , .	, , ,
	SUR VEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1950								
Aug 23		FWS						S00 pinks and chums
1951								
Sept 10	0.7	FWS	3,000		250			
1953		FTIVE						N 7 1 1 1
July 31	А	FWS						No salmon observed
1954 July 29	0.7	FWS	6		150			
Aug 16	A length	FWS	5,000		150			
Aug 18	A length	FWS	6,000					
Aug 28	G 0. S	FWS	5,000		1,660			
1955	0.00		0,000		1,000			
Aug 3	A length	FWS	25					
Aug 17	A	FWS						50 pinks in intertidal zone
Aug 24	A	FWS						2,000 pinks in intertidaI
Aug 24	A length	FWS	50					
Sept 6	A	FWS						200 pinks in intertidal zone
Sept 13	G 0.5	FWS	150					
1956								
Aug 21	A 0. 2	FWS						Fish present
Sept 10	A 0.5	FWS	300		300			
Sept 25 1957	G 0.7	FWS	800					
Aug 20	A 2.0	FWS	800					
Sept 3		RI-FWS	30	0	80	30	1 coho	Fair spawning area. Stream
								low
Sept 15	G FI	RI-FWS	0	0	30	0		
1958								
July 21	G 0.5	FWS	75		176			
Sept 2	A length	FWS	150					
1959	1 1 0	EMC						No fish observed
Aug 1 1960	A 1.0	FWS						No 11sh observed
1900	No survey							
1961	110 341 409	3						
Aug 17	A	ADF	few		0			1,500 pinks in intertidal
								area and several schools
								off mouth
1962								
Aug 13	mouth							Few jumps at mouth
Aug 20	A 1.0	ADF						No fish observed
Aug 29	A 1.0	ADF						A few pinks seen
1963 Aug 19	A 2.0	ADF						Dead chums; poor vision
Aug 19 Aug 22	G 0, 5	ADF			2,000			Good showing
	-,-				_,			

ADF STAT. No.

144-10 S6°36.4' N. 133°S6.2' W.

WR 69 Previous No. 94 FWS No. 70

WRANGELL, SUMNER STRAIT, THREEMILE ARM, Head,

MAJOR SPECIES Pink, chum. ESCAPEMENT TIMING Late. Sept. SPAWNING FACILITIES Good. STREAM TEMPERATURES VALLEY DESCRIPTION Heavily timbered. DRAINAGE 4 square miles (polar planimeter). STREAM MOUTH IDENTIFICATION ANCHORAGE Anchor well out in bay at head. Approach to left side where banks are fairly steep. TRAILS AND SURVEY ROUTES Easily waded.

AVERAGE WIDTH/DEPTH

OTHER SPECIES

AERIAL SURVEY NOTES Heavy overstory.

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES Slight. BOTTOM Gravel, small rock, some boulders. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES Slight. BOTTOM Fine gravel and sand. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES The FWS conducted environmental studies on this stream in 1958.

AVERAGE WIDTH/DEPTH 151/8".

ADF STAT. No. WR 69
ESCAPEMENT RECORD Previous No. 94

[Counts made by ground surveys are designated by G; aerial surveys by A]

144-10

[County Made by ground state) of a designated by 5, 1-01d state by 5, 1-1										
D-+-	SUR VEYED		PINK By Live Dead			JM Dead	OTHER SPECIES	REMARKS		
Date	Miles	Ву	Live	Dead	Live	Dead	Live			
1950										
Aug 23		FWS			2,000					
1951										
Sept 10	0.7	FWS	2,000		500					
Sept 10 1953	G 0.7	FRI	1,480	37	341	47				
July 31	A	FWS						50 pinks in stream		
July 51	••							40 at mouth		
Sept 18	A	FWS						No fish observed		
1954										
Aug 12	A	FWS	3,000							
Aug 16 Aug 28	A G	FWS FWS	4,000		129					
1955	G	1.44.2			123					
Aug 17	A length	FWS						50 pinks in intertidal zone		
Aug 24	A length	FWS						2,000 pinks in intertidal zone		
Sept 5	A length	FWS						200 pinks in intertidal zone		
1956										
Aug 21	A 0.5	FWS	900					In school at mouth		
Aug 29 Sept 10	A length A 0.5	FWS FWS	2,500 250					in school at mouth		
Sept 10	G 0. 7	FWS	250		25					
1957										
Aug 7	A length	FWS	250							
Aug 16	A length	FWS	600							
Sept 3	G 0.5	FRI	30		80		1 coho			
Sept 15 G 0.5 FRI-FWS 1958					47					
Aug 18	G length	FWS			900					
Aug 19	A length	FWS	400							
Aug 25	G length	FWS	109		225					
Aug 27	G length	FWS			1			500 salmon in intertidal		
1959	4.1.0	THE	500							
Aug 1 Aug 21	A 1.0 A 1.0	FWS FWS	500 350		100					
1960	A 1.0	1 110	330		100					
Aug 29	A	ADF						300 fish in intertidal area		
Sept 6	A	ADF						No fish observed		
1961								1 000 (1 1 (6 1)		
Aug 17	A	ADF						1,000 fish off mouth		
1962 Aug 20	A length	ADF						200-300 in intertidal zone		
Aug 29	A 1.0	ADF						Few pink seen, 5,000 in		
1963								intertidal zone		
July 31	G 0.2	ADF						2,000 chums in intertidal		
Aug 22	G 0.5	ADF			500			1,000 in intertidal; 1,000		
Aug 29	A length	ADF						dead		
. rug 25	- rengtii	ADI						3,500 at mouth		



ADF STAT. No.
WR 70
Previous No. 95
FWS No. 71

56°34.3' N. 133°54.6' W.

144-10

WRANGELL, SUMNER STRAIT, SECLUSION HARBOR, SALT LAGOON, 0.5 mile from head.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle, Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE SPAWNING FACILITIES Limited.

STREAM TEMPERATURES Normal range. No observed temperatures, VALLEY DESCRIPTION

VALLEY DESCRIPTION
DRAINAGE 2.4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Anchor near the E. shore opposite the cabin, between the beach and the first rock.

TRAILS AND SURVEY ROUTES Easily waded.

AERIAL SURVEY NOTES Too brushy for survey.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 30'/12'.

LENGTH Short.
GRADIENT AND VELOCITIES Moderate.
BOTTOM Coarse gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION Edge of woods.
SCHOOLING AREAS Off mouth.
SPAWNING AREAS None.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

GRADIENT AND VELOCITIES Moderate.

BOTTOM Mixed gravel and bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES None.

SCHOOLING AREAS Several pools.

SPAWNING AREAS Good riffles.

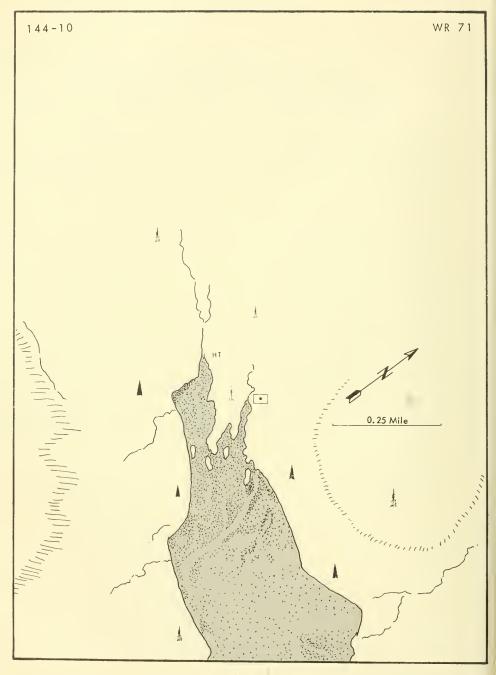
GENERAL NOTES This watershed to be logged in 1963-1964. Timber is to be left adjacent to the stream.

62

Previous No. 95

[Counts made by ground surveys are designed by G; Gerial surveys by A]

	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Aug 28	G 0.5	FRI	825	2	8	1		
Sept 11	0. 2	FWS	5,000	_	200			
1953	0. 2	15	3,000		200			
Sept 18	G 0.3	FWS						No salmon observed
1954								water black
Aug 10		FWS						No salmon observed
rrug 10								water low
1955								
Aug 17	A 0.3	FWS	0		0			
Aug 24	A 0.3	FWS	9,000		1,000			
Sept 6	A 0.3	FWS	10,000					
Sept 13	G 0.6	FWS	4,000		300			
1956								
Aug 17	A	FWS	5,000					
Aug 29	A length	FWS	6,000					
Sept 10	A length	FWS	15,000		15,000			
1957	4.4	27110	600					1 200 (* 1
Aug 15	A length	FWS	600		90			1,200 fish at mouth
Sept 2	G 0.5	FRI	140 10		25			
Sept 4 Sept 15	A length G 0.5 FR				40			
1958								
Aug 11	A to lake		500		10			
Aug 21	G 2001	FWS	6		15			
Aug 25	A length	FWS	250					
Sept 9	A length	FWS	900					
Sep ^t 16 1959	G 0. 2	FWS	95		2			
Aug 11 1960	A 0.5	FWS	800					300 off mouth
	No survey	S						
1961								
10.62	No survey	s						
1962 Aug 20	A mouth	ADF						No fish observed



ADF STAT. No. WR 71 Previous No. 96

144-10 56°34.2'N. 133°55' W.

LENGTH 0.5 mile.

LENGTH ACCESSIBLE

WRANGELL, SUMNER STRAIT, SECLUSION HARBOR, SALT LAGOON, Head.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle, Aug. -Sept.

SPAWNING FACILITIES Good.

ETREAM TEMPERATURES Normal same Observed townsestyres; 56° F 8/12/52, 50°

STREAM TEMPERATURES Normal range. Observed temperatures: 56° F., 8/12/52; 50° F., 8/23/52; 49° F., 9/19/52; 48° F., 8/12/53; 51.5° F., 8/23/53; 51° F., 9/6/53.

49° F., 9/19/52; 48° F., 8/12/53; 51.5° F., 8/23/
VALLEY DESCRIPTION
DRAINAGE 6.2 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE Refer to WR 70.
TRAILS AND SURVEY ROUTES Brush bordered.
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 201/101.

AVERAGE WIDTH/DEPTH 151/10".

GRADIENT AND VELOCITIES Gentle.
BOTTOM Gravel and mud in lower part.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS A few pools.
SPAWNING AREAS Excellent spawning facilities in the upper section.
GENERAL NOTES Flows through a grass flat for most of its length.

UPSTREAM

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES The stream forks 1 mile above the mouth; both forks go to small lakes.

SCHOOLING AREAS

SPAWNING AREAS Riffles with excellent spawning gravel are found throughout.

GENERAL NOTES This section continually splits and rejoins.

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SUR VEYED		PINK		CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1950		TTILLE	20		300			
Aug 24		FWS	20		300			
1951	G 0.5	ETD I	6,000	0	100	10	10 cohos	
Aug 28 Sept 11	G 0. 2	FRI FRI	5,000	50	50	10	10 Collos	
1952	G 0. 2	rm	3,000	30	30			
Aug 12	G 0.2	FR1	405	0	42	0		Several hundred at mouth
Aug 23	G 0.2	FR1	3, 390	0	480	1		Jumps in bay
Sept 19 1953	G 0, 2	FRI	460	31	6	0		Run appears to be over
Season		FWS	250					
July 31	A	FWS						Water very low
Sept 6 1954	G 0.2	FWS	250		600			200 chums in lagoon
Aug 10 1955	A length	FWS	50					
Aug 24	A length	FWS	9,000		1,000			
Sept 6	A length	FWS	,					10,000 salmon in stream
Sept 13 1956	G 0.7	FWS	4,000		300			
Sept 10 1957	A length	FWS						15,000 salmon in stream
Sept 2	G 0.5	FRI	140	0	90	0		Stream low
Sept 15 1958	G 0.5	FRI	37	0	40	0		Stream still very low
Aug 11	A to lake	FW5	500		10			
Aug 21	G 0.04	FWS	6		15			
Aug 25	A length	FWS	250					
Sept 9	A length	FWS	900					
Sept 16 1959	G 0. 2	FWS	95		2			
Aug 11 1960	A 0.5	FW5	800					300 off mouth
1200	No survey	s						
1961	,	_						
	No survey	s						
1962	,							
	no record							
1963								
July 30	Mouth	ADF						No fish observed
Aug 19	A length	ADF	2,000					1,000 in intertidal; dead chums
Aug 22	G 0.5	ADF	5,000					1,500 at mouth; l,500 mixed in intertidal zone

ADF STAT. No. WR 72 Previous No. 98

144-10 \$6°28' N. 133°\$2.5' W.

WRANGELL, SUMNER STRAIT, 1 mile S. of entrance to No Name Bay.

MAJOR SPECIES

ESCAPEMENT TIMING

ESCAPEMENT

SPAWNING FACILITIES

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 3.0 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Anchor at 5 fathoms in cove, 0.12 mile off stream mouth.

OTHER SPECIES ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE 0.6 mile.
GRADIENT AND VELOCITIES
BOTTOM Mostly bedrock and boulders.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 10'/10".

ESCAPEMENT RECORD

	SURVEYED	PINK		CHUI	M	OTHER SPECIES	REMARKS	
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Aug 21 1954	G 0.7	FWS	1	0	13	3		
Aug 10 1988		FWS						Stream dried up
Aug 13	G 0. S	FWS						No fish observed
Sept 22 1960	A length	FWS						No fish observed
	No survey	rs						
1961	,							
1962	No survey	rs						
Aug 8	A bay	ADF						No fish observed
Aug 14	Mouth	ADF						No fish observed
						1-		

ADF STAT. No. WR 73 Previous No. 99

144-21 56°25.9' N. 133°56.6' W.

WRANGELL, SUMNER STRAIT, ALVIN BAY, Head.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 2 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES
ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
CRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Excellent gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 10'/3"

ESCAPEMENT RECORD

144-21

	SUR VEYED		PINK		CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1000								
1980 Sept 19		FWS	321					
19 S 1		1113	321					
Aug 6		FRI	1,S00		30		20 cohos	
Aug 18		FRI	2,000					At mouth of 2 streams
Aug 27	G 0. 1	FRI	0		0			Jumps off mouth
Sept 19 1953	G 0.7	FRI	1,134		32		1 coho	
July 31	A 0.5	FWS						No fish observed
Sept 8 19SS	A 0. S	FWS						No fish observed
Aug 13	A 0.S	FWS						No fish observed
Aug 17	A 0.5	FWS						No fish observed
Sept 22 1956	A 0. S	FWS						No fish observed
Sept 14	G 0.7	FWS	45					200 at mouth
Sept 26	G to falls	FWS	150					Right side
Sept 26 1957	G 0.7	FWS	225		25			Left side
Aug 7 1958	A length	FWS						No fish observed
Sept 2	A length	FWS	25					
Sept 16 - 1989	G	FWS	1					
1960	No data							
1961	No survey	s						
1901	No survey	'S						

ADF STAT. No.
WR 73A
Previous No. 99

144-21 \$6°26.2'N. 133°\$6' W.

WRANGELL, SUMNER STRAIT, ALVIN BAY, O. S mile from head on N. shore.

MAJOR SPECIES
ESCAPEMENT TIMING
ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES
STREAM TEMPERATURES No observed temperatures.
VALLEY DESCRIPTION
DRAINAGE 3.5 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

CRADIENT AND VELOCITIES Moderate to swift.

BOTTOM Very rocky.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS Rocky with limited area.

GENERAL NOTES

70

ESCAPEMENT RECORD

Date	SUR VEYED	Ву	PI) Live	JK Dead	CHU Live	JM Dead	OTHER SPECIES	REMARKS
Date	MITTES	Бу	Live	Dead	Live	Dead	Live	
1951								
Aug 18		FWS						2,000 at mouth
Aug 18	G 0.2	FRI	40	0	0	0		
Aug 27	G 0. 1	FRI	3S	0	0	0		
Sept 19	0.7	FWS	3,000		50		1 coho	
Sept 19 1953	G 0. 2	FRI	1,615					
Season 1954		FWS						No fish observed
Aug 10 1955	A	FWS						No fish observed
Aug 13	G 0.5	FWS						No fish observed
Aug 17	A length	FWS						No fish observed
Sept 22 , 1956	A length	FWS						No fish observed
Sept 14	G 0.7	FWS	245					
Sept 26	G to falls	FWS	150					Right side
Sept 26 1957	G 0.7	FWS	225		25			
Aug 7 1988	A length	FWS						No fish observed
Sept 2	A length	FWS	25					200 pinks at mouth
Sept 16	G 0. 1	FWS	1					No dead salmon
Sept 29 1959	A length	FWS						No fish observed
	No data							
1960								
1961	No survey	S						
Aug 17 1962	A 0.1	ADF						A few fish off mouth
Aug 14	Mouth	ADF						No fish observed
Aug 20	A	ADF						150 at mouth
Sept 29	A	ADF						1,500 on intertidal zone

ADF STAT. No. WR 74 No previous No.

144-21 56°24.2' N. 133°5' W

WRANGELL, SUMNER STRAIT, REID BAY, head of N. arm.

MAJOR SPECIES

ESCAPEMENT TIMING

SPAWNING FACILITIES Spawning areas are limited but could handle several hundred salmon if water level was higher.

STREAM TEMPERATURES No observed temperatures.

VALLEY DESCRIPTION

DRAINAGE 0.47, square mile (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM Gravel and algae.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS

GENERAL NOTES A very small stream twisting through continuous gravel bars and numerous windfalls.

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate.
BOTTOM Fine gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 41/2".

AVERAGE WIDTH/DEPTH 15'/2".

ESCAPEMENT RECORD

	SURVEYED		PINK		СНИМ		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1953								
Season		FWS						Poor
1954		THIC	1 000					
Aug 29 1956		FWS	1,000					
Aug 21	A 0.1	FWS						No fish observed
Sept 10	A length	FWS						No fish observed
Sept 26	G 1. 2	FWS					1 coho	No salmon observed
1958	0 1						1 00110	rio saimon observed
Sept 16	G 0.5	FWS	3					
1959								
Aug 11	A 0.5	FWS						No fish observed
1960								
	No survey	S						
1961								
Aug 17	A	ADF	100	0	0	0		200 fish at mouth

ADF STAT. No. WR 74A No previous no.

144-21 56°24' N. 133°55.3' W.

WRANGELL, SUMNER STRAIT, REID BAY, 0.2 mile from head on N. arm on W. shore.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 0.95 square mile (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES
ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 201/2".

INTERTIDAL ZONE

LENGTH
CRADIENT AND VELOCITIES Gentle.
BOTTOM Gravel with algae in lower part.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS One hundred fifty yards of spawning gravel at the upper end.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 6'/3".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Broken rock and bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES A very small stream with poor spawning facilities in upper area.

144-21

ESCAPEMENT RECORD

	SUR VEYED		PIN	PINK		IM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1949								
Aug 31 1988			0	3				Off mouth
Sept 12 1956	G 0.7	FWS	80		25			
Sept 10 1957	A length	FWS						200 salmon
1958	No record	S						
Sept 2 19 5 9	A length	FWS	25					
Aug 11 1960	A 2.0	FWS						No fish observed
1961	No surveys							
Aug 17 1962	A mouth	ADF						400 at mouth
Aug 20	A	ADF						A few pink. Too brushy for survey

144-21 56°23.2' N. 133°55' W.

WRANGELL, SUMNER STRAIT, REID BAY, in bight 1. S miles S. of head of N. arm.

MAJOR SPECIES Pink.

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle. Aug.-Sept.

SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION

DRAINAGE 1.7 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters the bay between two small islands which lie near the beach and have gravel bars running to the beach at low tide.

ANCHORAGE Anchor on the W. side of the peninsula point on the S. side of the bay entrance.

Enter the bay with caution. There are dangers off the points at the entrance.

TRAILS AND SURVEY ROUTES Travel up the stream is easy. Numerous game trails along the banks.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.5 mile. GRADIENT AND VELOCITIES Slight. BOTTOM Gravel with much brown algae. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS Possibly the upper 300 to 400 yards could be used for spawning.

GENERAL NOTES Meanders through a grassy flat.

HPSTREAM

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES Slight. BOTTOM Small gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS Numerous holes formed by downfall logs. SPAWNING AREAS GENERAL NOTES

AVERAGE WIDTH/DEPTH 6' -30'/2"-10".

AVERAGE WIDTH/DEPTH 301/3".

ESCAPEMENT RECORD

Date	SUR VEYED Miles	Ву	PIN Live	K Dead	CHU Live	JM Dead	OTHER SPECIES Live	REMARKS
1949								
Aug 31 1951	G 0. 2	FR1	10S		25			Upper stream
Aug 24	G 1. S	FRI	SSO	0	2S	0		
Aug 24	0.2	FWS	341					
Sept 13	G 0. S	FRI	321	0	12	0		
1954								
Aug 10 1955	A	FWS						No salmon. Low water
Sept 22	A 0. S	FRI	0	0	0			Small stream. No salmon observed

ADF STAT. No. WR 75A
Previous No. 100-

144-21 56°23.2' N. 133°55.1' W

WRANGELL, SUMNER STRAIT, REID BAY, in bight 1.6 miles S. of head of N. arm.

MAJOR SPECIES Pink,

ESCAPEMENT TIMING Middle, Aug. -Sept. ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES 200 yards of tidal spawning area.

STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE <1 square mile.

STREAM MOUTH IDENTIFICATION Common intertidal to WR 7S.

ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 151/6".

AVERAGE WIDTH/DEPTH

LENGTH
GRADIENT AND VELOCITIES
BOTTOM Rocky,
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS Little spawnin

 ${\tt SPAWNING}$ AREAS Little spawning area above intertidal zone. ${\tt GENERAL}$ ${\tt NOTES}$

ESCAPEMENT RECORD

SURVEYED)	PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Aug 17	G	FRI	30	0	20	0		
Sept 13 1960	G 0. 1	FRI	341	0	8	0		
	No surve	eys						
1961	No surve	evs						

ADF STAT. No. WR 76 Previous No. 101

144-21 56°22.S' N. 133°35.8' W.

WRANGELL, SUMNER STRAIT, REID BAY, head of W. arm.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING Middle. Aug. -Sept.
SPAWNING FACILITIES
STREAM TEMPERATURES None observed.
VALLEY DESCRIPTION
DRAINAGE 0.9 square mile (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 31/2".

AVERAGE WIDTH/DEPTH 3'/1".

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES Moderate.
BOTTOM Fine gravel and brown algae.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS

GENERAL NOTES The intertidal zone is straight and with the stream higher would be fairly rapid.

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate.
BOTTOM Fine gravel and small broken rocks.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
SPAWNING AREAS

GENERAL NOTES A very small stream, with numerous holes and some available spawning area.

Previous No. 101

144-21

	SUR VEYED	,	PI	NK	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Aug 31	G 0.1	FRI	0	0	0	0		Very small stream
Sept 25 1950	G 0.1	FRI	600	86	13	23		
Sept 10		FWS	100		150			
1951								
Aug 18	0.5	FWS						1,500 at mouth
Sept 13 1954	1.0	FWS	1,000		200			
	A	FWS						NT- 1 - 1
Aug 10 1955	A	L W 2						No salmon, low water
Aug 29		FWS	1,000					
1958								
Aug 24	G 0.5	FWS	10		20			
Aug 25	A length	FWS			50			
Aug 8-30		FWS	1,000		500			
Sept 10	A length	FWS	250		100			
Sept 17	G 0. 1	FWS	20		2			
Sept 29 1959	A length	FWS	100		50			
Aug 11	A 0.5	FWS						No salmon observed
1960								
	No survey	S						
1961								
Aug 17	A	ADF						400 fish observed off stream mouth
1962								
Aug 29	A	ADF						Brush prevents survey

144-21 56° 22.6' N. 133° 55.7' W.

WRANGELL, SUMNER STRAIT, REID BAY, 0.1 mile N. of head of W. arm.

MAJOR SPECIES ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES VALLEY DESCRIPTION DRAINAGE 1.5 square miles. STREAM MOUTH IDENTIFICATION ANCHORAGE TRAILS AND SURVEY ROUTES Fairly rough travel. AERIAL SURVEY NOTES

OTHER SPECIES ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 301/15".

AVERAGE WIDTH/DEPTH 201/6".

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES BOTTOM LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES BOTTOM Excellent gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SPAWNING AREAS Some available spawning areas.

GENERAL NOTES

SCHOOLING AREAS Numerous holes.

ESCAPEMENT RECORD

	SURVEYED PINK		ζ.	CHL	JM	OTHER SPECIES	REMARKS	
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949 Aug 3 1	G 0. 1	FRI						No fish in the stream or off the mouth. Very small stream
1951								
Aug 18	G 0.5	FRI	100	0	0	0		Jumps at mouth
Sept 13 1960		FRI	1,400	0	25	0		
	No survey	/S						
1961								
	No surve	/S						

ADF STAT. No. WR 77 Previous No. 103

144-22 \$6°18.5' N. 133°53.9' W.

WRANGELL, SUMNER STRAIT, PORT BEAUCLERC, 2.3 miles from entrance on N. shore.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Late. After Sept. 15.

SPAWNING FACILITIES Good.

OTHER SPECIES Chum, coho.

ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Cold range. Observed temperatures: 49.5°F., 9/5/50; 50°F., 9/15/50; 45.5°F., 9/28/50.

VALLEY DESCRIPTION Stream-cut.

DRAINAGE S square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters a marshy meadow three-fourths of a mile in diameter S.-SW. of the old cannery site.

ANCHORAGE A good anchorage may be found either in the S. arm or on the N. side of the small island lying N. of Edward Island.

TRAILS AND SURVEY ROUTES Game trails follow the banks, but it is easiest to travel up the stream.

AERIAL SURVEY NOTES Too brushy for good surveys.

INTERTIDAL ZONE

LENGTH 0.2 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Small gravel, coarse sand, and bedrock near upper limit.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel and small rock.

MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS Many deep holes, some of which were formed by piles of downfall trees, offer

facilities for schooling salmon.

SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

	SUR VEYEL)	PINE	ζ	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Sept 25	G 1.0	FRI	900	4	0	0	6 cohos	
1980								
Sept 3	000	FWS	315		,	0		
Sept 5	G 0.6	FRI	312	4	4 7	0		
Sept 1S Sept 28	G 0. 6 G 0. 6	FRI FRI	88 23	0	0	0		
1951	0 0.0	11/1	23	O	O	U		
Sept 19	0.7	FWS	452		43			
1953								
Aug 1	A 0.5	FWS						No salmon observed
1954 Aug 10		FWS						No salmon, low water
/ 19SS		1 113						140 Satinon, tow water
Sept 4	A 0.5	FWS	0	0	0	0		No salmon observed
Sept 12	G 1.5	FWS	165	0	0	0		Fish in fair condition
1956		EINC						Maria I and all annual
Aug 29 Sept 10	A A	FWS FWS						No salmon observed 600 fish
Sept 26	G lake	FWS	1, 200		10			000 11511
Sept 26	G 0.7	FWS	800		10			
1957	0 0.7		000					
Aug 11	G 1.0	FWS	50					
Aug 15	G 0.5	FWS	30					
Aug 15	G 1.0	FWS	50					
Aug 21	G 1.0	FWS	80		80			
1958								
Aug 28	G 1.0 G 1.0	FWS FWS	20 20					
Aug 30 Sept 9	A length	FWS	200		50			100 salmon at mouth
1959	A tengen		200		30			
Aug 11 1960	A 2.0	FWS						No fish observed
Jul 31	A 0.1	ADF						No salmon observed
1961								
Aug 9	A 0.1	ADF						4,000 fish off mouth
Aug 17 1962	A 0. 1	ADF						Jumpers off mouth
Jul 26	A mouth	ADF						No salmon observed
Aug 1	A	ADF						200 salmon at mouth
Aug 13 1963	A mouth	ADF						Few salmon at mouth
Jul 29	A	ADF						2,000 at mouth
Aug 3	G 0.5	ADF	5,000		200			3,000 at mouth; 3,000 mixed in intertidal
Aug 18	G 0, S	ADF	7,500					1,500 at mouth; 3,500 mixed in intertidal zone

ADF STAT. No. WR 78 Previous No. 104

144-22 56°22.8' N. 134'00.1' W.

WRANGELL, SUMNER STRAIT, PORT BEAUCLERC, head of N. arm.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle. Aug. Sept (est.) ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION A heavily forested valley with rolling hills.

DRAINAGE 5.9 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Good anchorage can be obtained off the mouth between the island and the right bank.

TRAILS AND SURVEY ROUTES The stream is easily waded, but no trails follow its course. AERIAL SURVEY NOTES Heavy overstory makes aerial survey difficult.

INTERTIDAL ZONE

LENGTH 200-300 yards.

A VERAGE WIDTH/DEPTH 10'-20'/6"-12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Fine gravel and gravel rubble.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS School below the low tide mark.

SPAWNING AREAS The upper 200 yards contains good spawning gravel.

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile. AVERAGE WIDTH/DEPTH 6'-10".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Fine gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS One partial falls barrier about half a mile upstream.
TRIBUTARIES None reported.
SCHOOLING AREAS Few holes are available for schooling salmon.

SPAWNING AREAS The spawning gravel is good in the distance surveyed but limited by the stream's

small size.

GENERAL NOTES Numerous windfalls.

GENERAL NOTES

ESCAPEMENT RECORD

ADF STAT. No. WR 78
Previous No. 104

	SURVEYED)	PIN	ΙK	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949	C 0 1	FRI	6	103	6	0		S
Aug 31 1951	G 0. 1	1/11	0	103	0	U		Small stream, water low
Sept 18	0.7	FWS	1,320		6			
Oct 5	G 0. S	FRI	490	103	4		17 cohos	Peak past. None off mouth
1954								Α
Aug 6		FWS	100					
Aug 10		FWS						No salmon, water low
Aug 12		FWS	450					
1955	2.0.4	TTMC	100	0	0	0		West Star and Mark
Aug 23 Sept 12	A 0.5 A 0.5	FWS FWS	100 911	0	0	0		Visibility excellent Good spawning area
Sept 22	A 0.5	FWS	900	0	0	0		Good spowning area
1956	24 0. 5	1 110	200	· ·	Ü	0		
Aug 17	G length	FWS						10,000-15,000 chums
Sept 10	A length	FWS						Few hundred fish
Sept 26	G 1.0	FWS	1,100		40			
1957								
Aug 13	G 1.0	FWS	4					No dead
Aug 23 1958	G 1.0	FWS	1		31			
1958 Aug 24	G 0.5	FWS	10		20			
Aug 25	G length	FWS	10		50			
Aug 8-30		FWS	1,000		500			
Sept 10	A length	FWS	250		100			
Sept 17	G 0.1	FWS	20		2			
Sept 29	A length	FWS	100		50			
1959								
10.00	No record							
1960 July 31	A mouth	ADF						No salmon observed
1961	A moun	ADI						NO sufficiences ved
Aug 9	A mouth	ADF						2,000 schooled fish at mouth
Aug 17	A mouth	ADF						Several thousand off mouth
Sept 4 1962	G 0.7	ADF	1,000	0	2,000	0		Many dead chums
Aug 29	A 0.2	ADF						8,000 at mouth, 400 in intertidal zone
Sept 5	G 0.5	ADF	900		100			500 at mouth
1963	0.5	rust	500		100			ood de moden
July 21	G 0.5	ADF						No fish observed
July 29	A	ADF						No fish observed
Aug 4	G 0. 2	ADF						No fish observed
Aug 18	G 0.7	ADF	001		350			1,500 mixed in intertidal
4 20	Α.	ADE						zone 4,000 at mouth
Aug 28	A	ADF						T, OOO at mouth

ADF STAT. No. WR 79 Previous No. 10S

144-22 56°21.3' N. 134°00.7' W.

WRANGELL, SUMNER STRAIT, PORT BEAUCLERC, 2 miles S. of head of N. arm.

MAJOR SPECIES Pink. OTHER SPECIES Chum. ESCAPEMENT TIMING Middle. Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE SPAWNING FACILITIES Poor. STREAM TEMPERATURES Normal range. No observed temperatures. VALLEY DESCRIPTION DRAINAGE 2 square miles (Aerial). STREAM MOUTH IDENTIFICATION ANCHORAGE Refer to WR 77. TRAILS AND SURVEY ROUTES None. AERIAL SURVEY NOTES Impossible to survey due to small size.

INTERTIDAL ZONE

LENGTH 0.1 mile. AVERAGE WIDTH/DEPTH GRADIENT AND VELOCITIES Moderate. BOTTOM Shale and large boulders. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS Below low tide location. Off mouth. SPAWNING AREAS None. GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.1 mile. GRADIENT AND VELOCITIES Swift, BOTTOM Boulders and shale bedrock. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES None. SCHOOLING AREAS Small pools. SPAWNING AREAS Very limited. GENERAL NOTES Stream is a series of cascades and falls over boulders and bedrock.

AVERAGE WIDTH/DEPTH 15'/6".

ESCAPEMENT RECORD

S	UR VEYED		PIN	K	СН		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
10.40								
1949	G 0.2	FRI	0	0	0	0		Few jumps at mouth
Aug 31 1952	G U. Z	1.1/1	O	0	0	Ü		•
Aug 6 1983		FWS						No fish observed
Sept 8	A 0.5	FWS	0	0	0	0		
1984								
Aug 13	A	FWS	50					
Aug 30 1955	A length	FWS	460		1			
Aug 24	A 0.5	FWS	0	0	0	0		
Sept 4	A 0.5	FWS	S00	0	0	0		Stream damaged by logging
Sept 12 1956	A 0.5	FWS	100	0	400	0		50% pinks, 50% chums in poor condition
Sept 10	A length	FWS						600 indefinite species
Sept 26 19 5 7	G to lake	FWS	1, 200		10			
Aug 15	G 0.2	FWS	0		0			
Aug 23 19 5 8	G 1.0	FWS	5		3			
Aug 25	G 1.0	FWS	200					
Aug 8-30		FWS	250		20			
Sept 10 1959	A lake	FWS	300		S0			
Aug 21 1960	A	FWS						No fish observed
July 31 1961	A mouth	ADF						No salmon observed
Aug 9	A	ADF						400 fish at mouth
Aug 17	A	ADF						Jumpers at mouth
1962								
Aug 7	A mouth	ADF						250 at mouth
Aug 15 1963	G to lake	ADF	12					S00 at mouth
Aug 4	G length	ADF	2					300 in intertidal zone; 1,000 fish at mouth
Aug 18	G length	ADF	700				100 reds	100 in intertidal zone
Aug 28	A mouth	ADF						300 at mouth

ADF STAT. No. WR 79A No previous No.

AVERAGE WIDTH/DEPTH 10'-15'/4".

AVERAGE WIDTH/DEPTH

144-22 56°21.3' N. 134'00.4' W

LENGTH

WRANGELL, SUMNER STRAITS, PORT BEAUCLERC, 2.5 miles S. of head of N. arm-

MAJOR SPECIES Pink.

ESCAPEMENT TIMING

SPAWNING FACILITIES Good spawning gravel above bedrock area around high tide.

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE 0. 12 square mile (Aerial).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES Small stream.

INTERTIDAL ZONE

GRADIENT AND VELOCITIES
BOTTOM Gravel fair in lower portion.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS Good spawning gravel above bedrock area around high tide.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED		PIN	K	C.H.U	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Aug 11		FRI						No fish observed
1960								A few chum jump in bay
	No survey	7 S						
1961								
	No survey	/S						

ADF STAT. No. WR 80 Previous No. 106

144-22 56°19.1' N. 134 01.4' W.

LENGTH 0.8 mile.

WRANGELL, SUMNER STRAIT, PORT BEAUCLERC, 4 miles S. of head of N. arm.

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle-late. SPAWNING FACILITIES Foir. STREAM TEMPERATURES VALLEY DESCRIPTION DRAINAGE 2 square miles (Aerial).

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 10'/3".

STREAM MOUTH IDENTIFICATION Stream enters behind unnamed island across from Walters Island. ANCHORAGE TRAILS AND SURVEY ROUTES None.

AERIAL SURVEY NOTES Poor due to small size and overstory.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 30'/24". GRADIENT AND VELOCITIES Moderate. BOTTOM Good gravel abundant. LOW TIDE LOCATION HIGH TIDE LOCATION Edge of timber. SCHOOLING AREAS Large pools in lower intertidal area; several small pools in the upper area. SPAWNING AREAS Little spawning area. GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES Sluggish. BOTTOM Fair gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS None. TRIBUTARIES None. SCHOOLING AREAS Many small pools. SPAWNING AREAS Riffles throughout stream. GENERAL NOTES

ESCAPEMENT RECORD

ADF STAT. No. WR 80

Previous No. 106

Date	SURVEYED Miles	Ву	PI Live	NK Dead	CHI Live	JM Dead	OTHER SPECIES Live	REMARKS
1051								
1951 Aug 11	G 0. 1	FRI	0	0	0	0		
Sept 18	G 0. 7	FWS	3,100	0	350	0		
1952								
Aug 28	A	FWS						100 in school at mouth
19 53 Aug 1	A	FWS						No fish seen. Water low
1954	-71	1 44 3						No fish seek. Water low
Aug 10		FWS						No fish seen. Water low
1955			10					
Sept 4 Sept 12	A length G 1.0	FWS	10 500		490			
1956	G 1.0	1.44.2	300		450			
Sept 10	A length	FWS						200 indefinite species
Sept 26	G 1.0	FWS	2,700		750			
1957 Aug 14	G 0, 2	FWS						No salmon observed
Aug 15	G 0. 2	FW5	25					No sumon observed
Aug 15	G 0. 2	FWS	25					20-30 at mouth
Aug 23	G 1.0	FWS	373		75			
1958	G 0.5	FWS	10		20			
Aug 15 Aug 25	A length		500		20			2,000 pinks at mouth
Aug 26	G 1. 0	FW5	250		200			z, ooo piino as mean
Aug 15-3		FWS	2,000		1,500			
Sept 10	A length	FWS	1,200		250			
Sept 17	G 0.5	FW5	150		280			
Sept 22 1959	A length	FWS	500		100			
Aug 21	A length	FWS	100					
1960								
July 31	A mouth	ADF						No fish observed
1961 Aug 9	A 0.3	ADF						500 fish at mouth
Aug 17	A	ADF						Several schools at mouth
Sept 4	G 0.5	ADF	800		3,000			Many dead. Good distribu-
1000								tion for a small stream
1962 Aug 7	A mouth	ADF						No fish observed
Aug 13	A 1.0	ADF						6,000 salmon at mouth
Aug 15	G 0.5	ADF	6		3			2,000 salmon at mouth
Aug 20	A	ADF						6,000-7,000 at mouth
Aug 22	G 0.7	ADF	900		85			15,000 in intertidal zone
Aug 29	A mouth	ADF						20,000 at mouth, 5,000 in intertidal zone
196 3								
July 21	G 0.5	ADF						No fish observed
July 29	A 1.0	ADF	1.0		10			No fish observed
Aug 18	G 0.5	ADF	10		10			250 mixed in intertidal zone
Aug 28	A length	ADF	few					

ADF STAT. No.

WR 8.1 Previous No. 107

144-22 56'14.4' N. 133°58.9 W.

WRANGELL, SUMNER STRAIT, PORT BEAUCLERC, head of S. arm.

MAJOR SPECIES Pink. OTHER SPECIES Chum. ESCAPEMENT TIMING Middle. Aug. - Sept. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Cold range. Observed temperatures: \$1° F., 9/5/50; 49° F., 9/15/50; 45.5° F., 9/28/S0; S0° F., 8/16/51; S1° F., 8/26/S1; 47° F., 10/15/51.

VALLEY DESCRIPTION Stream-cut.

DRAINAGE 1 square mile (polar planimeter).

STREAM MOUTH IDENTIFICATION Flows through grass flats in SE. corner of bay. ANCHORAGE Refer to WR 77.

TRAILS AND SURVEY ROUTES A bulldozed road follows the right bank for about three-fourths of a mile.

AERIAL SURVEY NOTES Aerial survey difficult due to small size of stream and brush.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 15'/9"

LENGTH 0.1 mile. GRADIENT AND VELOCITIES Moderate. BOTTOM Large gravel. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS No pools.

SPAWNING AREAS The gravel in this area is algae covered except in the upper 100 yards where there is good spawning gravel.

GENERAL NOTES

UPSTREAM

AVERAGE WIDTH/DEPTH 10'-12'/4"-6". LENGTH ACCESSIBLE 1 mile. GRADIENT AND VELOCITIES Moderate to steep. BOTTOM Fine gravel to large rocks. MARKER DISTANCE MARKER IDENTIFICATION

BARRIERS None. TRIBUTARIES None.

SCHOOLING AREAS Small pools at the head of tidewater.

SPAWNING AREAS The first half mile above the high tidemark has the best spawning facilities above this, there is a series of rapids, pools, and falls.

GENERAL NOTES Logging operations have been carried on here in past years.

	SURVEYE)	PII	νκ	СН	JM	OTHER SPECIES	REMARKS
Date	Mile	Ву	Live	Dead	Live	Dead	Live	
1949	20.6	rin v						
Sept 1 Sept 24 1950	G 0. 6 G 0. 6	FRI	0 1,700	0 44	0 454	0 90		One jump off mouth
Sept 4 1951		FW5	453		105			
Aug 16 1 953	G 0.5	FRI	0	0	0	0		
Aug 1 1954	A	FW5						Poor rating, water low
Aug 10 1955		FWS						No salmon, water low
Aug 24	A 0.5	FW5	0	0	0	0		
Sept 4	A 0.5	FWS	500	0	0	0		Plus 1,000 pinks off mouth
Sept 12	A 0.5	FW5	250	0	175	0		70 schooled at base of rapids
1956 Sept 10	A	FWS						300 indefinite species
Sept 13 1957	G 1.0		1,700		10			1,000 pinks in tideflats
Aug 14	G 0.5	FWS	20					
Aug 23 1958	G 0.5	FWS	53		57			
Aug 8-30		FW5			1,000			
Sept 9	A length	FWS	1,800		400			400 fish at mouth
Sept 17 1959	0.2	FWS	110		220			
Aug 1	G 0. 2	FWS	100					
Aug 21 1960	A	FWS	150					
July 31 1961	A mouth	ADF						No salmon observed
Aug 9	A mouth	ADF						Several hundred at mouth
Aug 17 Sept 4	A 0.3 G 0.5	ADF	few 1,300		2, 100			Several thousand at mouth Few dead pinks, many dead
1962	G 0. 5	AUF	1, 300		2, 100			chums
July 26	A mouth	ADF						No fish observed
Aug 13	A	ADF						8,000 salmon at mouth
Aug 20	A	ADF						15,000 at mouth
Aug 29	A	ADF						14,000 at mouth
Sept 5 1963	G 0.5	ADF	500		100			1,000 in intertidal zone
Aug 3	G 0. 2	ADF	4					50 pinks in intertidal zone
Aug 18 Aug 28	G 0.2 A mouth	ADF ADF	30					300 in intertidal zone 12,000 at mouth

ADF STAT. No.

WR 82

No previous No.

144-22 \$6°16.7' N. 133°\$6.3' W.

WRANGELL, SUMNER STRAIT, PORT BEAUCLERC, S. of SE. tip of Edwards I.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES
ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 201/2".

AVERAGE WIDTH/DEPTH 8'/3".

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel and mossy rock.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate.
BOTTOM Various sizes of broken rock.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED PINK		K	CHI	JM	OTHER SPECIES	REMARKS	
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949 Sept 1	G 0. 2	FRI						No fish observed
1960	No survey	rs						Few jumps at mouth
1961	No survey	rs						

ADF STAT. No. WR 83 Previous No. 108

144-21 56°12.5' N. 133°57.2' W.

WRANGELL, SUMNER STRAIT, LOUISE COVE, 2 miles W. of Pt. Amelius.

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug.-Sert. SPAWNING FACILITIES Fair.

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Normal range. Observed temperatures: 51.5° F., 8/12/52; 52° F., 8/22/52; 48.5° F., 9/6/52; 49° F., 9/17/52; 54.5° F., 8/11/53; 52.5° F., 8/22/53; 51.5° F., 9/9/53.

VALLEY DESCRIPTION

DRAINAGE 6 square miles (Aerial).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Anchor W. of the small island lying E. of the mouth.

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.7 mile.

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel and sand.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS Four-tenths mile of the upper part offer good spawning gravel. The area from the woods to the intertidal island has gravel mixed with sand.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

AVERAGE WIDTH/DEPTH 25'-30'/8"-12".

AVERAGE WIDTH/DEPTH 30'-50'/12".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Excellent gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Three-tenths mile upstream there is a bedrock constriction. Here the stream falls 15 feet in 100 yards. This could be a partial block to pink salmon.

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES Between the high tide mark and the bedrock constriction, the stream is a series of pools and riffles.

Previous No. 108

[Counts made by ground surveys are designated by 6, defial surveys by A]									
	SURVEYED PINK		NK	CHU	M	OTHER SPECIES	REMARKS		
Date	Miles	Ву	Live	Dead	Live	Dead	Live		
1951									
Sept 17	1.0	FWS	9,500		10				
1952									
Aug 12	G 0. 2	FRI	0	0	0	0		Water extra low	
Aug 22	G 0. 2	FRI	0	0	0	0			
Sept 6	G 0. 2	FRI	10	0	7	0		None off mouth	
Sept 17 1953	G 0. 2	FRI	10	0	7	0		None off mouth	
Aug 1	A 0.6	FWS	0	0	0	0		No fish observed	
Aug 11	A 0.6	FRI	0	0	0	0			
Aug 22	G 0.6	FRI	87	5	0	0			
Sept 6 1954	G 0.6	FRI	71	0	3	0		None entering	
Aug 24 1955	A 0.6	FRI	0	0	0	0		None observed in stream	
Aug 24	A 0.6	FWS	0	0	0	0			
1956									
Sept 10	A	FW5	600		600				
Sept 13 1957	G 0.7	FW5	600						
Aug 6	G 1.0	FWS	500						
Aug 11	G 1.0	FW5	1,500		200				
Aug 15	A 2.0	FWS	3,000						
Aug 17	G 1.0	FW5	2,000		500			5,000-8,000 at mouth	
Aug 24 1958	G 2.5	FW5	10,000		2, 500				
Aug 18	A length	FWS	30						
Sept 22	A length	FWS	250		50				
1959									
Aug 21 196 0	A	FWS						No fish observed	
Sept 7	A mouth	ADF						No salmon observed	
1961									
Aug 9	A 0.3	ADF						1,100 salmon schooled at mouth and in intertidal	
Sept 28	A 0. 1	ADF						5,000 carcasses in inter- tidal area and mouth	
1962									
Aug 1	A 1.0	ADF						No fish observed	
Aug 7	A	ADF						250 fish at mouth	

ADF STAT. No. WR 84 Previous No. 109

144-30 56°11.4' N. 134°00.5' W.

WRANGELL, SUMNER STRAIT, AFFLECK CANAL, 10.5 miles S. of head of Affleck Canal, E. shore.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 0.15 square mile (Aerial).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Small brushy stream.

OTHER SPECIES
ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM Good gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS No holes in stream.
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

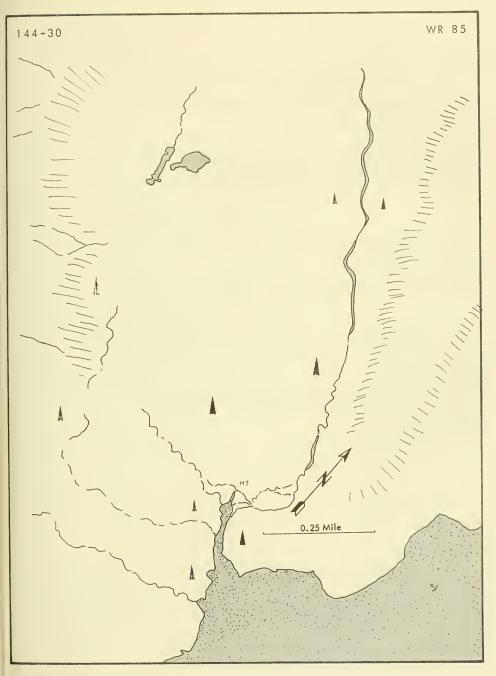
LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

WR 84 Previous No. 109

	SURVEYED		PINK		СНИ	IM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1951								
Sept 16	0.2	FWS	500		75			
Sept 16 19S3	A 0. 2	FRI	240	147	62	47		
Aug 1 1954	A 0.6	FWS	0	0	0	0		No fish observed
Aug 12-	30	FWS	9					
Aug 24	A 0.6	FWS	0	0	0	0		Very minor stream
Sept 4 1956	A 0. 6	FWS	0	0	0	0		
Sept 27 19 57	G 0. S	FWS	1,500					
Aug 15 1958	A 1.0	FWS						No fish observed
Sept 29 19 S 9	A length	FWS	SO					
	No record							
1960								
July 31	A length	ADF						Jumpers at mouth
Aug 30	G 0. 1	ADF						No fish observed
Sept 7 1961	A mouth	ADF						No fish observed
Aug 9 1962	A	ADF						S00 fish at mouth
Aug 1 1963	A 1.0	ADF						No fish observed
Aug 19	G 0.5	ADF	0		10			



ADF STAT. No. WR Previous No. 110

144-30 56°19' N 134 04.6' W.

WRANGELL, SUMNER STRAIT, AFFLECK CANAL, Head, NW. corner.

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug. - Sept. SPAWNING FACILITIES Fair. STREAM TEMPERATURES None observed. VALLEY DESCRIPTION

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 15'/4"

DRAINAGE 4 square miles (polar planimeter). STREAM MOUTH IDENTIFICATION Flows across long gravel beach on NW. corner of bay. ANCHORAGE Anchor in Bear Harbor and run to head with skiff. TRAILS AND SURVEY ROUTES No trails; stream easily wadeable. AERIAL SURVEY NOTES Poor for aerial survey due to small size.

INTERTIDAL ZONE

LENGTH 0.1 mile. AVERAGE WIDTH/DEPTH 201/6". GRADIENT AND VELOCITIES Moderate. BOTTOM Lower half mostly large rock. Upper half fair spawning gravel. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS Off stream mouth. SPAWNING AREAS Limited to upper one-half of intertidal area. GENERAL NOTES

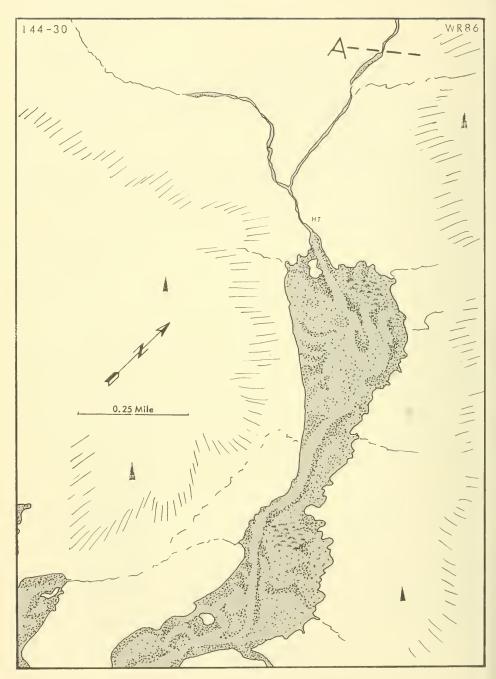
UPSTREAM

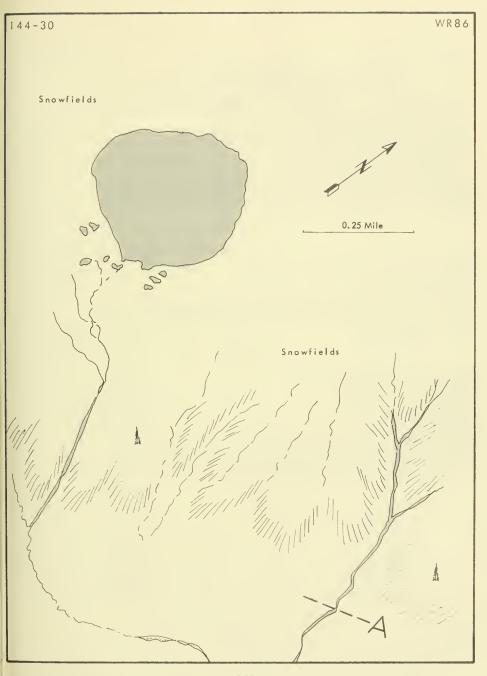
LENGTH ACCESSIBLE 1 mile. GRADIENT AND VELOCITIES Moderate. BOTTOM Good gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIFRS None. TRIBUTARIES One enters on right side about 200 yards above intertidal area. SCHOOLING AREAS Few small, scattered pools throughout. SPAWNING AREAS Good spawning.

GENERAL NOTES

144-30

	SURVEYED		PII		СНИ		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951	G 0.5	EMIC	2 750	0	430	0		
Sept 16 Sept 19 1953	0.5	FWS FWS	3,750 1,500					
Aug 1 Sept 6	A 0.6 G 0.2	FWS FWS	0 550	0	0 50	0		No fish observed, water low
Sept 18 1954	A 0. 6	FWS		0	30	0		Few dead fish at mouth
Sept 9 Sept 15 1955	A lgth 0.5	FWS FWS	400 8,000		6,000			
Aug 17	A 0.6	FWS	0	0	0	0		Good visibility
Aug 24 1956	A 0.6	FWS	0	0	0	0		Good visibility
Aug 21 Aug 31	A 0.7 G 1.0	FWS FWS	9,000		100			5,000 salmon
Sept 10	A	FW5	4,000		4,000			
Sept 27 1957	G 0.7	FWS	5,000		500			
Aug 3	G 0.5	FWS						None in stream
Aug 15 Aug 18 1958	A 2.0 G mouth	FWS FWS						No fish observed No fish observed
Aug 29	A	FWS	4,000					5,000 pinks at mouth
Sept 9	A	FWS	4,500		150			
Sept 12 Sept 18	A mouth G 0.7	FW5	2,000 1,900		210			1,000 dead, 60% pinks
1959	No record	ì						
1960 July 31	A mouth	ADF						Scattered jumps at mouth
Aug 24	A mouth	ADF						Scattered jumps at mouth
Aug 30	G 1.0	ADF	550	0	500	0		4,000 mixed at mouth 2,500 mixed fish in intertidal
Sept 7	A length	ADF	2,000					area and at mouth
1961	101	405						NT- Cal abanca d
July 28 Aug 9	A 0. 1 A 0. 1	ADF ADF						No fish observed 4,000 fish at mouth
Aug 14	G 0.5	ADF	1,700	0	few	0		Several schools off mouth
Aug 20	A	ADF	1 500		few			500 fish at mouth 1,000 chum in the inter-
Sept 9	A	ADF	1,500		iew			tidal area
1962 Aug 1	A 0.7	ADF						No fish observed
Aug 13	A mouth	ADF						300 at mouth
Aug 20	A	ADF						1,500 at mouth
Aug 29 1963	A mouth	ADF						4,000 at mouth
Aug 19	G 0.5	ADF	600		100			
Aug 28	A mouth	ADF						2,000 at mouth





ADF STAT. No.

144-30 S6°1S.6' N. 134°07.8' W.

WR 86 Previous No. 111

WRANGELL, SUMNER STRAIT, AFFLECK CANAL, BEAR HARBOR, head of N. arm

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho, red. ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle. Aug. -Sept.

SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES Cold range. Observed temperatures: 49.5° F., 9/6/50; 51.5° F., 9/16/50;

47.5° F., 9/29/50; 50° F., 9/16/51; 50° F., 8/27/51; 49° F., 9/11/51. VALLEY DESCRIPTION Glacial origin.

DRAINAGE 3 square miles (polar planimeter). Precipitation-fed. Fed by snowmelt from surrounding snowfields and surface runoff.

STREAM MOUTH IDENTIFICATION Stream flows through long grass flats at head of bay.

ANCHORAGE The middle and W. arms of this harbor are suitable for anchorage.

TRAILS AND SURVEY ROUTES Easily traveled up the streambed. Game trails along banks. AERIAL SURVEY NOTES Aerial visibility is fair.

INTERTIDAL ZONE

LENGTH 0.6 mile.

AVERAGE WIDTH/DEPTH 100'/10".

AVERAGE WIDTH/DEPTH 15'/6".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Fine gravel, sand, and mud.

LOW TIDE LOCATION

HIGH TIDE LOCATION Edge of woods on big tides.

SCHOOLING AREAS Two large holes in the lower and middle intertidal area.

SPAWNING AREAS The upper one-fourth mile has excellen* spawning gravel and is utilized to a large degree by pink salmon. Above and below this, the bottom is largely silt and sand. GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.8 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Clean, small gravel.

MARKER DISTANCE 0.7 mile.

MARKER IDENTIFICATION Orange circled aluminum square on undersurface of large uprooted tree. BARRIERS None.

TRIBUTARIES None. Stream branches considerably above 0.7 mile.

SCHOOLING AREAS One large pool at the head of tidewater; small pools throughout stream.

SPAWNING AREAS Nearly continuous spawning riffles are found throughout.

GENERAL NOTES This stream branches just before entering the long tideflats. The main stream enters in the extreme SW. corner of the tideflats. The other branch enters about the middle of the tideflats. Fish enter both forks when water conditions are favorable.

144-30

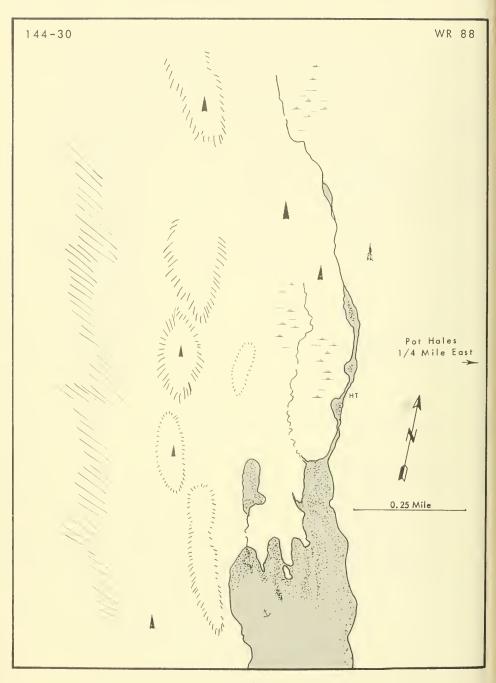
	SURVEYED		D13.1	v	CIII	IM.	OTHER SPECIES	DEMADES
ъ.			PIN		CHU			REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Sept 2	G 1.0	FRI	3,000	0	S 25	0		Schools off mouth and bay
19SO	0 1.0	1101	3,000	· ·	525	Ŭ		schools off modeli and bay
Sept 6	G 1.0	FRI	4,157	1	248	0		
Sept 16	G 0. S	FWS	5,626	105	700	23	3 cohos, 2 reds	
Sept 29	G 0.5	FRI	1,989	263	1,663	0	5 conce, =	
1951			_,		-,			
Aug 12	G 2.0	FRI	12	0	2	0		
Aug 27	G 0.5	FRI	5,002	0	27	0		S,000 in intertidal zone
Sept 11	G 1.0	FRI	7, 130	0	570	0		
1953								
Aug 1	A 0.7	FWS						No fish observed
Aug 24	G 1.0	FWS	1,000	0	0	0		
Aug 25	G 1.0	FWS	200	0	0	0		
Aug 29	G 1.0	FWS	150	0	2	0		
Aug 30	G 1.0	FWS	50	0	0	0		
Sept 6	G 1.0	FWS	0	0	0	0		Visibility poor. None observed
Sept 18	A 0.7	FWS						1,000 pinks in intertidal zone
1954								
Aug 16	Α	FWS	4,000					- 000 44
Aug 24	A 0.7	FRI	500	0	0	0		2,000 off mouth
Sept 10	A 0.7	FRI	3,000	0	0	0		500 pinks at mouth
Sept 15	G 0. S	FWS	10,000					Pink mature, water low
19SS Aug 19	A 0.7	FRI	12,000	0				Some live chum
Aug 21	A 0. /	FWS	1,800	U				30me live cham
Aug 21	A 0.7	FRI	12,000	0				Some chum
Aug 24	Α 0.7	FWS	23,000	Ů	2,000			some cham
Aug 28	A 0.7	FRI	14,000	0	0	0		1,000 at mouth, >6,000 in bay
Sept 4	Alength		150,000					-,,
Sept S	A 0. 7	FRI	60,000	0				Amazing for size of stream
Sept 16	A 0.7	FRI	70,000					Many dead pinks
Sept 22	A 0.7	FR1	60,000					, ,
1986								
Aug 9		FWS	100					
Aug 18	0.2	FWS	300					
Aug 21	A 0.7	FWS	7,000					
Aug 25	A marker	FRI	40,000					
Aug 26	A 0.7	FRI	40,000					10,000-20,000 at mouth
Aug 29	A	FWS	25,000					Chum present
Aug 31	G 0.5	FWS	20,000				150 cohos	Chum present
Aug 31	G 0.7	FWS	27,000					Fig. 1 46 6 41
Aug 31	A	FWS	20,000					First half of a mile
Sept 7	A 0.7	FR1	65,000					Some dead pinks
Sept 10	G 1.0	FWS FWS	15,000		100			Schools at bay entrance 100 at mouth
Sept 12 Sept 12	A 0.7	FRI	6, 200 25, 000		100			60,000 at mouth.
Sept 27	G 1. S	FWS	10,000		8,000			Chum first mile, pink after
Jept 17	3 1.3	1 ,,,,	10,000		0,000			

	SUR VEYED		PIN		CHU		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1007								
1957	A 0.7	FR1	12 000					Some live chums
Aug 2S	G 1.0	FWS	12,000	2,000	200			Some five chams
Sept 1	A 1.0	FR1	14,000	2,000	200			Some live chums
Sept 2		FR1		0	500			2,000 pinks at mouth
Sept S	A	FRI	5,000		300			Dead pinks, some live chums
Sept 12	A		12,000	0	1 700	0		>1,000 chums at mouth
Sept 16	G 1.0 FV	√2-FKI	20, 300	0	1,700	0		>1,000 chums at mouth
1958	G length	FWS	350					
Aug 7	G 0.7	FWS	8,000		8		1 red	4,800 in first half mile,
Aug 15	G 0. 7	LWS	0,000		0		1 reu	3, 200 in last quarter
Aug 1S	G 0.7	FWS	5,800		8			5, 200 in last quarter
Aug 25	A length	FWS	16,000		0			Some chums
Aug 25	G 0. 7	FWS	10,000		10		1 red	Some Chams
_	G 1. 0	FRI	49,870	22	350	1	1164	
Aug 26 Aug 13-2		FWS	16,000	22	100	1		
Sept 9	A length	FWS	42,000		500			
Sept 17	A marker	FWS	3,000	3,000	300			
Sept 18	0.7	FWS	7, 300	3,000	580			
Sept 20	G 1. 0	FWS	6, 500	3,410	1,000	500	S00 cohos	
Sept 22	A length	FWS	22,000	3, 410	800	300	300 001103	S,000 dead salmon
1959	A rengen	1 11 5	22,000		000			o, ooo acaa samon
Aug 8	G flats	FWS	7, 300					S00 off mouth
Aug 18	G 0. 2	FWS	5,700		1			15,000-20,000 off mouth
Aug 24	G marker	FWS	12,500		so			SS,000 pinks in salt water
Sept 3	A length	FWS	30,000					,
1960			,					
Jul 31	A 1.0	ADF						Several schools in bay
Aug 24	A 1.0	ADF			400			,
Aug 30	G 1.7	ADF	11,000		300			21,000 mixed off mouth
Sept 7	A 0.7	ADF	,					21, S00 in intertidal zone
Sept 12	A 1.7	ADF	many		many			30,000 in intertidal zone
1961			,		,			
Jul 28	A 0.7	ADF						700 mixed in bay
Aug 8	A	ADF						Water dark, good showing
Aug 9	A 1.0	ADF	1,000					2,000 mixed in intertidal
Aug 10	G 0. S	ADF						3, 200 mixed in intertidal,
								3,000 off mouth
Aug 14	G 0.8	ADF	4, SOO		few			Thousands off mouth,
								9,000 chums and pinks in
								intertidal
Aug 20	A	ADF	many					3,000 at mouth
Aug 25	A 0.7	ADF						15,000 in intertidal zone
Sept S	G 0.8	ADF	16,700	0	500	0		2,000 mixed chums, pinks,
								and cohos at mouth

ADF STAT. No.

WR 86
ESCAPEMENT RECORD - Continued Previous No. 111 144-30

	Da	te	SUR VEYED Miles	By	PIN Live	K Dead	CHU Live	M Dead	OTHER SPECIES	REMARKS
	190			-,	2110	2-000	20.00	Dead	DI VC	
I	uly		A	ADF						300 salmon at mouth
	ug		A flats	ADF						>20,000 salmon at mouth,
										2,000 in intertidal zone
A	ug	7	A	ADF						5,000 salmon at mouth,
										2,500 in intertidal zone
	ug		G	ADF						2,000 in intertidal zone
	ug		A bay	ADF						30,000 at mouth
	ug		G 1.0	ADF	16,000					8,000 in intertidal zone
А	ug	15	G 1.0	ADF	19,000					20,000 at mouth,
Δ	uq	20	A 0.5	ADF	10,000					12,000 in intertidal zone 15,000-20,000 at mouth,
- 1	ug		11 015	7101	10,000					25,000 in intertidal zone
A	uq	21	A 1.0	ADF	20,000					40,000 at mouth, 20,000
					,					in intertidal zone
А	ug	23	G 1.0	ADF	51,200		1			40,000-50,0000 in
										intertidal zone
A	ug	29	A length	ADF	many					60,000 at mouth,
		- 0								50,000 in intertidal zone
	196	-	0. 2	ADE	400					
A	ug	19	above flats	ADF	400					8,000 in intertidal zone
A	uq	28	A length	ADF						3,500 in intertidal zone
	ept		G length	ADF	1,030		150			600 mixed at mouth;
					_,					470 pinks, 325 chums in
										intertidal zone



ADF STAT. No. WR

Previous No. 113

144-30 56°11.4' N. 134°11.2' W.

WRANGELL, SUMNER STRAIT, AFFLECK CANAL, KELL BAY, head of N. arm.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho, red.

ESCAPEMENT TIMING Middle. Aug. -Sept.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Excellent in first mile becoming progressively worse above.

STREAM TEMPERATURES Normal range. Observed temperatures: 48°F., 9/7/50; 52.5°F., 9/16/50; 46°F., 9/29/50; 54°F., 8/16/51; 55°F., 8/26/51; 52°F., 9/10/51; 53°F., 8/22/52; 51°F., 9/5/52; 50°F., 9/18/52; 54°F., 9/9/53.

VALLEY DESCRIPTION

DRAINAGE 3.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Flows in across a short grass flat at head of bay.

ANCHORAGE Boat anchorage is available at the head of the bay.

TRAILS AND SURVEY ROUTES About 100 yards to the right of the stream there is an open muskeg area which can be easily followed downstream.

AERIAL SURVEY NOTES Aerial survey difficult due to small size, dark water and brush.

GENERAL NOTES A small stream.

INTERTIDAL ZONE

LENGTH 0.2 mile.

AVERAGE WIDTH/DEPTH 15'-90'/3"-12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Fine to large gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Several holes are found in this area. A large, deep hole near the upper end is utilized extensively.

SPAWNING AREAS The upper 200 yards has good gravel and spawning occurs in this area.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1.5 miles.

AVERAGE WIDTH/DEPTH 15'/6".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Good spawning gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Impassable falls 1.5 miles above tidewater.

TRIBUTARIES None.

SCHOOLING AREAS Many deep holes throughout.

SPAWNING AREAS The first mile of the stream has numerous good riffles. Above this, bedrock becomes more predominant, limiting the spawning area.

GENERAL NOTES Easy stream to survey by foot.

Data	SURVEYE		PIN			UM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Miles	
1949								
Sept 3	G 1.2	FRI	4,500	0	800	0		Scattered schools in bay
1950								
Sept 7	G 0.5	FWS	4,544	6	5 7 9	8	12 cohos, 2 reds	
Sept 16	G 0.5	FRI	3, 830	182	451	225	10 1	
Sept 29 1951	G 0.5	FRI	1,362	540	158	224	16 cohos	
Aug 16	G 1.0	FR1	0	0	0	0		
Aug 26	G 1.0	FRI	8, 100	0	170	0		8,000 in intertidal zone
Sept 10	G 1.0	FRI	7,620	3	1,425	75		
Sept 15 Oct S	1. 0 G 0. 7	FWS FRI	20,000	1 400	2,000	1,200		Posts most
1952				1, 400				Peak past
Aug 11	G 0.7	FRI	0	0	0	0		Water extra low
Aug 22	G 0.7	FRI	3,600	1	920	0		-D 000 (1.1
Aug 28 Sept 5	A G 0. 7	FWS FRI	3,310	50	1, 250	98		<2,000 fish
Sept 3	G 0.7	FRI	1,675	143	1,030	113	70 cohos	None off mouth
1953	0 0.7	1111	1,075	143	1,030	113	70 00105	None on mouth
Aug 1	A	FWS						No fish observed
Sept 6	A	FWS	200	0	0	0		
Sept 9	G 0.7	FRI	750	0	620	0		Good visibility. No fish
Sept 18 1954	A	FWS						Few live salmon. Some dead
Aug 16	A length	FWS	200					
Aug 24	A	FRI	400	0	400	0		Water very low
Sept 10 1955	A	FR1	1,500	0	1,500	0		Few fish at mouth
Aug 19	A	FRI	1,100	0		0		Some chums. Schools at
								mouth
Aug 28	A	FR1	4,000	0	0	0		5,000 at mouth
Sept 4	A length	FWS	30,000		_			
Sept 5	A	FRI	32,000	0	0	0		Schooled in pools
Sept 16 Sept 22	A A	FR1 FRI	20,000	0	0	0		Dead pinks, live chums
1986	Α	1.1/1	15,000	O	0	U		
Aug 13	G	FWS			30			
Aug 15	0.3	FWS			150			Above tidal zone,
								50 chums in tidal zone
Aug 19	G 0.7	FWS	1,000					
Aug 21	A	FWS	1,000					Tidal zone
Aug 23	G 0. 2	FWS	2,800					
Aug 26	G 0.2	FWS	7, 100					
Aug 26	A	FRI	10,000	0	0	0		Many jumps in bay
Aug 31	A 0.7	FWS	18,000	0	0	0		T1
Sept 7 Sept 10	A A	FRI FWS	50,000	0	0	0		Thousands in intertidal
Sept 10	G 1. 2	FWS	5,000 12,000		900			Some dead
Sept 12	A A	FRI	16,000		300			Some dead pinks
Sept 27	G 0.7	FWS	12,000		50			Several thousand dead
1			-,					

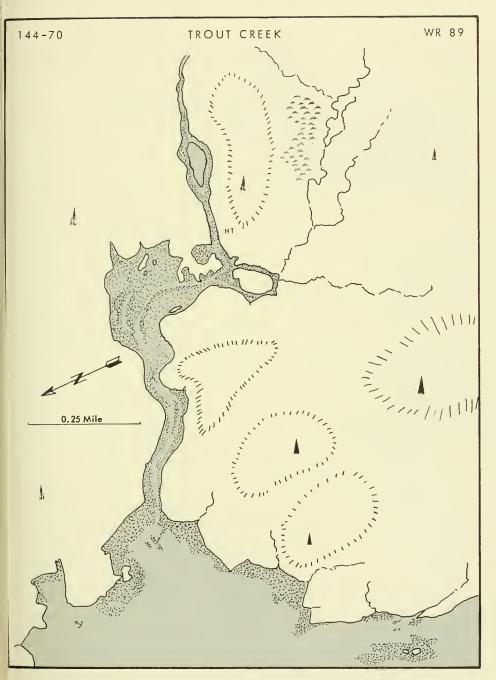
ESCAPEMENT RECORD - Continued Previous No. 113

Date	SUR VEYED Miles	Ву	PIN Live	K Dead	CHU Live	M Decd	OTHER SPECIES Live	REMARKS
1957 Aug 25 Sept 1 Sept 2 Sept 5 Sept 16 1958		FRI FWS FRI WS-FRI WS-FRI	6,000 11,000 8,000 6,000 10,000	0 500	450 1,500 350 4,000	0	20 cohos	Some live and dead chuns Few at mouth Some dead pinks and chums Excellent spawning area Excellent spawning area
Aug 7 Aug 13 Aug 15 Aug 16 Aug 24 Aug 25 Aug 25	A 0.5 G G 0.7 G 1.5 G 1.8 A marker G 1.8	FWS	7S 2,000 10,000 7,000 7,000 9,000 7,500		200 4 >300 300-400			Some chum
Aug 28 Aug 29 Aug 13-	G 1.0 G 1.5 29	FRI FWS	41,900 6,000	15	575 300	20		
Sept 17 Sept 17 Sept 20	A 9.0 A marker G 0.7 G 1.2	FWS FRI	8,500 19,000 2,000 9,700 4,000	3,100	400 500 1,600 1,300			500 dead salmon >5,000 dead S,000 dead
Sept 22 1959 Aug 3 Aug 9	A length A 2.0 G 0.2	FW5 FW5 FWS	5,000 100 150		200 10 2			Estimated 10,000 dead
Aug 17 Aug 20 Aug 23 1960	G 0.5 G 1.0 G marker	FWS FWS FWS	7,700 25,000 1S,200		200			2,000 off mouth
July 31 Aug 19 Aug 24 Aug 31	A A 0. 3 A 0. 3 G 1. 3	ADF ADF ADF ADF	7,000	0	2,500	0		Several schools at mouth Fish present. Poor visibility No fish observed 7,000 pinks and chums at mouth
Sept 7 1961 Aug 8	A 0.5	ADF ADF	10,000					7,000 in intertidal zone 10,000 in bay
Aug 9 Aug 10 Aug 13 Aug 25 Sept S	A G 0. 8 G 1. 0 A G 0. 8	ADF ADF ADF ADF ADF	4, 100 14, 500 33, 000	0 00 many	few few	0 0 many	2 reds 1 red	6,000 in bay 5,200 off stream mouth 4,000 in intertidal area Too rough to survey 6,500 in intertidal area
I962 July 26 Aug S Aug 7 Aug 13	A G A A O. S	ADF ADF ADF ADF						150 salmon at mouth 3,000 at mouth 8,000 at mouth 18,000 at mouth, 10,000 in intertidal
Aug 13	G 1.0	ADF	4,800		2			20,000 at mouth, S,000 in intertidal zone 8,000 at mouth,
Aug 20 Aug 21	A 1.0	ADF ADF	15,000					8,000 in intertidal zone 10,000 at mouth,
Aug 24	G 1.0	ADF	31,500		few			10,000 in intertidal zone 10,000 at mouth, 21,000 in intertidal zone
Aug 29	A 1.0	ADF	many			109		S,000 at mouth

109

ADF STAT. No. WR

144-30		ESCAPI	EMENT RECOR	Previous No.	
Date	SURVEYED Miles By	PINK Live Dead	CHUM Live Dead	OTHER SPECIES Live	REMAR KS
1963 Aug 9 Aug 19 Aug 28 Sept 3	A ADF G 0.7 ADF A mouthADF G lengthADF	2,500	1,670		l,000 in intertidal zone 500 in intertidal zone 2,000 in intertidal zone



ADF STAT. No.

WR 89 Previous No. 116

TROUT CREEK

144-70 56°03' N. 133 41.5' W.

WRANGELL, SUMNER STRAIT, 1.8 miles S. of Ruins Pt.

MAJOR SPECIES Pink.

SCAPEMENT TIMING Middle. Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES Normal range. No observed temperatures.
VALLEY DESCRIPTION Flot, large muskeg valley.

DRAINAGE 17 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION
ANCHORAGE Anchor in Shipley Bay and proceed in skiff.

TRAILS AND SURVEY ROUTES Fairly open banks.

AERIAL SURVEY NOTES Can be surveyed, but water is extremely dark.

INTERTIDAL ZONE

LENGTH 0.1 mile.

GRADIENT AND VELOCITIES Gradual.

BOTTOM
LOW FIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS Off mouth and in lagoon area.

SPAWNING AREAS Good gravel in upper area.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 5 miles.
GRADIENT AND VELOCITIES Slight.
BOTTOM Gravel and sand.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 75'/14".

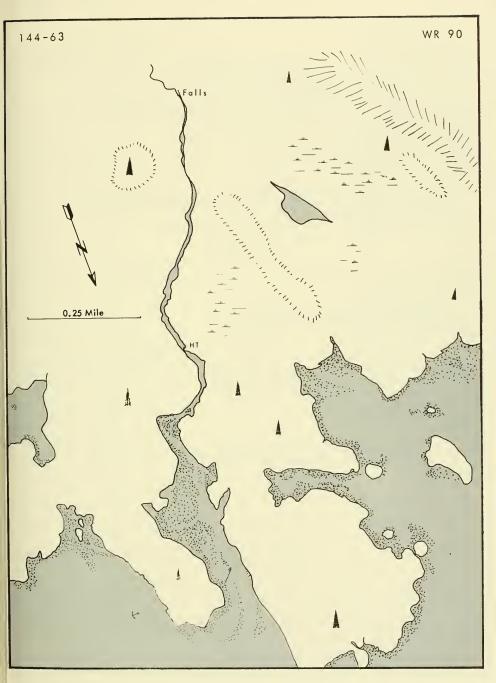
TROUT CREEK

${\tt ESCAPEMENT\ RECORD}$ [Counts made by ground surveys are designated by G; a derial surveys by A]

Date	SUR VEYEI Miles	D By	PIN Live	K Dead	CHU Live	JM Dead	OTHER SPECIFS Live	REMARKS
		-,						
1942 Sept 9 1943	G	FWS	15,000					Fair
Sept 15 1944	G	FWS	7 5,000					Fair
Sept20 1945	G	FWS	10,000					Poor
Sept 7 1950	G	FWS	20,000					Fair
July 28 1953		FWS	2,500					
Season 1954		FWS	3,000					
Sept 14 1955	G 1.0	FWS	15,000					
Aug 14 Aug 21	G 0. S G 0. S	FWS FWS						Some pinks 4 spawning - 1 dead
Aug 23	G 0.5	FWS	500					Jumpers off mouth
Aug 24	A	FWS	5,000	0	0	0		
Aug 25	G 0.5	FWS	4,000	0	0	0		
Sept S 1956	A 2.5	FWS	5,000	0	U	0		
Sept 4	A length	FWS	3,000					
Sept 10	A 4.0	FWS	3,000					
Sept 13	G 0.7	FWS	75				1 coho	
Sept 17 1957	A 1.0	1111	>15,000					
Aug 5	G 2.0	FWS	700					
Aug 8	G 0.7	FWS	1,100					
Aug 10	G 1.5	FWS	2,000					6 000 :
Aug 15 Aug 16	4.0 G 2.5	FWS FWS	7,000 6,000					6,000 in tidal zone
Aug 17	\$.0	FWS	6,500					
Aug 24	0. 1	FWS	600					
Sept 9	A 2.0	FRI	300					
Sept 22	A mkr	FRI	300					
Sept 27 1958	A 1.0	FWS	1, 200				S00 cohos	
Aug 9	G 0. S	FWS	30					
Aug 25	G 1.0	FWS	>2,000					
Aug 28	G 0.5	FWS	1,000					
Aug 29	G 1.0	FRI	10,020		200			
Sept 2	G 1.0	FWS	600					
Sept 7	G mkr	FWS	2,000		300			
Sept 10 Sept 18	A 1.0 G 1.0	FWS FWS	1, 400 1, 700	100	10		300 cohos	
1959	3 1.0	1 113	1,700	100	10		300 001103	
Aug 3	A 5.0	FWS	50					
Sept 3	A 2.0	FWS						No fish observed

ADF STAT. No. WR 89 Previous No. 116

	SUR VEYED		PIN	K	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1960 July 31 Aug 24	A length A mouth	ADF ADF						No fish observed 500 mixed chums and pinks at mouth
Sept 7 1961	A length	ADF	2,000					pinks de moden
July 28	A 1.0	ADF						3,000 pinks in schools
Aug 25	A 3.0	ADF						Fish present. Water too dark for estimate
1962								
July 26	A 1.0	ADF						No fish observed
Aug 7	A	ADF						800 salmon at mouth
Aug 13	A	ADF	200					25,000-30,000 salmon at mouth
Aug 16	A 6.0	ADF						Few pinks seen
Aug 21	A 3.0	ADF						10,000 at mouth
Aug 25 1963	A 1.5	ADF						Very few present
July 29		ADF	7,000					4,000-5,000 at mouth
Aug 7	A 1.0	ADF	3,000					2,000-3,000 at mouth
Aug 20	G 2. 2	ADF	45,000					50 in intertidal zone
Aug 28	A 2.0	ADF	32,000					500 in intertidal zone; 1,500 at mouth



ADF STAT. No. WR 90 Previous No. 117

144-63 56°04.4' N. 133'33' W.

WRANGELL, SUMNER STRAIT, SHIPLEY BAY, in cove 2 miles from head of Bay-

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle. Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION

DRAINAGE 3 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters on the E. side of the most prominent point on the S. shore.

ANCHORAGE Good anchorage at the head of the bay.

TRAILS AND SURVEY ROUTES It is preferable to enter at high tide and run to the upper end of the intertidal zone. From here, the stream is easily waded until the bedrock is reached and then travel becomes more difficult.

AERIAL SURVEY NOTES Aerial survey difficult due to heavy overstory of brush.

INTERTIDAL ZONE

LENGTH 0.5 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS Several large pools in upper half.
SPAWNING AREAS Upper half of this area has good gravel.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 30'/10".
GRADIENT AND VELOCITIES Moderate below, swift above
BOTTOM Gravel below, large rock, and bedrock.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES

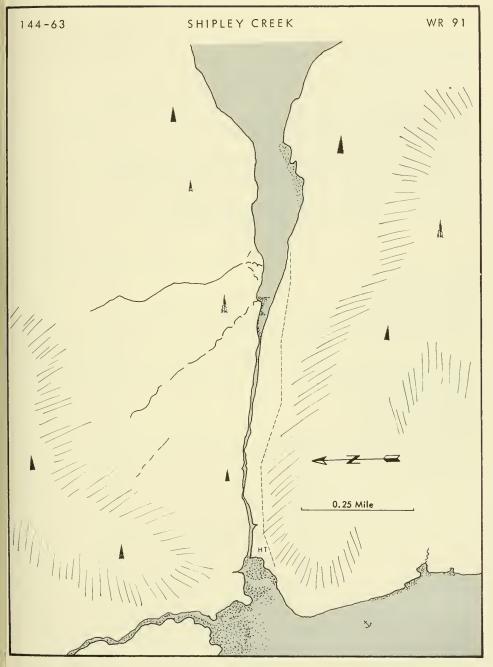
SCHOOLING AREAS Pools throughout area surveyed.

SPAWNING AREAS The lower 300 yards has the best spawning gravels; above this, the gradient increases and rubble begins to be the predominant bottom material.

GENERAL NOTES

(Counts indee by ground surveys the designated by G, derial surveys by A)										
	SURVEYE)	PIN	IK	СНІ	JM	OTHER SPECIES	REMARKS		
Date	Miles	Ву	Live	Dead	Live	Dead	Live			
		-,								
1943										
Sept 15	G 0.1	FWS	10,000					Fair		
1944										
Sept 19	G 0.1	FWS	30,000				8SO cohos	Excellent		
1945										
Sept 7	G 0. 1	FWS	20,000					Excellent		
1946										
Oct 2	G 0.1	FWS	4,000					Poor		
1950										
Aug 30		FWS						2,000 pinks and chums in		
								tidewater		
1953										
Season		FWS						Few fish		
1954										
Sept 9	1. S	FWS	20,000							
Sept 14	1.0	FWS	20,000							
1955		77110								
Aug 8	G 1.0	FWS	0	0	0	0		No fish noted in bay		
Aug 17	G 1.0	FWS			0	0		Few pinks noted in bay		
Aug 18	G 1.0	FWS						Big school of pinks		
Aug 19	G 1.0	FWS	10 000					Pinks started going up stream		
Aug 24	A	FWS	10,000					F 1/1		
Aug 25	G 1.0	FWS FWS	2,000					Few live chums About 300 off mouth		
Sept 4 Sept 11	A G 1.6	FWS	10,000		25	0		1,000 fish in intertidal zone		
19 5 6	G 1. 0	r w s	10,000		دے	O		1,000 fish in intertidat zone		
Aug 17	G	FWS			20					
Aug 18	G	FWS	100		20					
Aug 23	G	FWS	10,000					10,000 off mouth		
Sept 4	A length	FWS	,					100,000 salmon in bay		
Sept 10	A	FWS	3,000					,		
Sept 13	G S. 0	FWS	21,000		400					
1957										
Aug 13	G mouth	FWS	700		300					
Aug 14-2		FWS	100		50					
Aug 1S	A 3.0	FWS	600							
Aug 22	G 0. 2	FWS	S00							
Aug 23	G 0. S	FWS	500					400 chums off mouth		
Aug 24	G 0.7	FWS	800	0.5	25			600 off mouth		
Aug 26	G 1.0	FWS	3,000	25	0	0				
Sept 6	G 0.7	FRI	630		70			Fair to good		
Sept 17		RI-FWS			400			Fair to good		
Sept 26	G 0. S	FWS	1,800		130					
1958 Aug 14	G 1.0	FWS	1, 200		14					
Aug 21	G 0. 2	FWS	200		100					
Aug 22	G 1.0	FWS	700		100					
Aug 27	G 0. S	FWS	1,500		so					
Sept 10	A 2.0	FWS	3,000		50					
Sept 19	G 0. S	FWS	900		2					
Sept 19	A 1.0	FWS	500		200					
Septe	11.0	1 113	300		200					

Date	SUR VEYED Miles	B _V	PlN Live	IK Dead	CHUM Live Dead	OTHER SPECIES Live	REMARKS
Date	***************************************	Бу	LIVE	Dedd	Live Dead	DIVE	
1959							
Aug 3	A 2.0	FWS					10,000 fish schooled in
4 05	2.1.0	27.10					outer bay
Aug 27	G 1.0	FWS	5,300		SO		
Sept 3 1960	A 1.0	FWS					No fish observed
July 31	A mouth	ADF					500 fish at mouth
Aug 19	A 0.5	ADF					Poor visibility
Aug 24	A mouth						150 pinks at mouth
Sept 7	A mouth	ADF					5,000 pinks at mouth
Sept 15 1961	A length	ADF	present				5,000-6,000 at mouth
July 28	A	ADF					1,500 pinks off mouth
Aug 8	A	ADF					20,000 in bay off mouth
Aug 9	A 0.3	ADF					Several thousand off mouth
Aug 25	A 2.0	ADF					300 pinks in tidal area
							Good showing of fish
10.00							throughout stream
1962 July 30	A 1.0	ADF					No fish observed
Aug 7	A 0.5	ADF					1,700 salmon at mouth
Aug 13	A 0.5	ADF					10,000 salmon at mouth
Aug 16	G 1.0	ADF	2,000		few		5,000 in intertidal zone
Aug 21	A 1.0	ADF	2,000				2,000 at mouth
Aug 25	G 1.0	ADF	4,700				6,000 at mouth,
1963			,				4,000 in intertidal zone
July 29	A	ADF					6,000 at mouth
Aug 7	A 0.2	ADF					1,500 at mouth
Aug 20	G 1.0	ADF	6,500				4,000 mixed in intertidal;
							4,000-5,000 at mouth
Aug 29	A mouth	ADF					20,000 at mouth; 10,000
							in intertidal zone
Sept 5	G mouth	ADF					1,000 in intertidal zone



AVERAGE WIDTH/DEPTH 30'-40'/10"-12".

AVERAGE WIDTH/DEPTH 40'/12".

WRANGELL, SUMNER STRAIT, SHIPLEY BAY, NE. corner of Boy.

OTHER SPECIES Chum, coho, red. MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle, Aug. - Sept. (est.) ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Poor in the stream.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION A narrow stream-cut valley running between a lake and Shipley Bay. It is heavily wooded with dense underbrush in places.

DRAINAGE 8.9 square miles (polar planimeter). Drains a lake 2.2 miles long and 0.3 mile wide. Snowfields surround the upper valley and contribute snowmelt at certain times of the year.

STREAM MOUTH IDENTIFICATION A small, grassy tideflat can be seen just W. of the stream mouth and a prominent rock ledge is on the E. side of the mouth.

ANCHORAGE Refer to WR 90.

TRAILS AND SURVEY ROUTES The stream may be waded with some difficulty due to the brushy margins. A trail follows the left bank from the lake to the beach.

AERIAL SURVEY NOTES Too short and overgrown for adequate aerial survey.

INTERTIDAL ZONE

LENGTH 0.05 mile. GRADIENT AND VELOCITIES Moderate. BOTTOM Coarse rock. LOW TIDE LOCATION HIGH TIDE LOCATION

SCHOOLING AREAS Off the mouth and in a large pool near the high tidemark.

SPAWNING AREAS Some spawning may occur near the upper end.

GENERAL NOTES The stream is divided within this zone.

UPSTREAM

LENGTH ACCESSIBLE 2 miles. GRADIENT AND VELOCITIES Steep. BOTTOM Small rock and gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES None. SCHOOLING AREAS A few pools are present.

SPAWNING AREAS Very little spawning area is found in the stream, but there appears to be good spawning facilities in the lake.

GENERAL NOTES

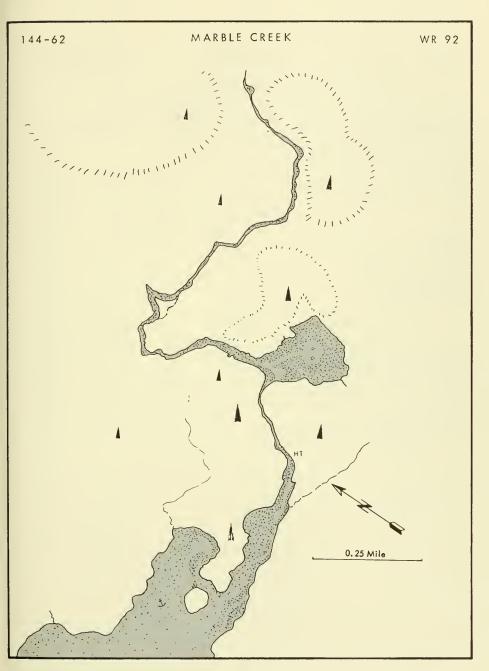
ESCAPEMENT RECORD

				-	·	_		
	SUR VEYED)	PIN	K	CH	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
		,						
1942								
Sept 9	G 0.7	FWS	30,000	0	1,000		1,000 reds	
1943			,		,		,	
Sept 15	G 0.7	FWS	150,000	0			1,000 cohos	Excellent
1944			,	_			2,000 00110-	DATE OF THE STATE
Sept19	G 0.7	FWS	186,000	0	8,500		6,500 cohos	Excellent
1945	0 0.7		100,000		0,500		0,300 conos	EXCERTENT
Sept 7	G 0.7	FWS	4,000	0	500			Excellent
1946	0 017		1,000		300			Excellent
Oct 12	G 0.7	FWS	10,000	0	2,000			Good
1950	0 0.7	1 443	10,000	U	. 2,000			Good
Aug 18		FWS	3,000					
1953		1 44 3	3,000					
	A	FWS						Na a day and to the same
Aug 7	А	r w S						No salmon in stream,
1054								3, S00 off mouth
1954		FTMC						
Sept 9	6 . 1 1	FWS	20, 000		600		100	3,000 jumpers off mouth
Sept 14	G to lake	FWS	20,000		600		400 cohos	
1955					_			
July 18	G 0.7	FWS	0	0	0	0		A few jumps off mouth
July 19	G 0.7	FWS	0	0	0	0	4 reds	
July 22	G 0.7	FWS	0	0	0	0	100 reds	Low water
July 24	G 0.7	FWS	0	Э	Э	0	1,000 reds	
July 26	G 0.7	FWS	0	0	Э	0	250 reds	Big school off mouth
July 28	G 0.7	FWS	0	0	0	0		3,000 reds schooled at mouth
Aug 5	G 0.7	FWS	0	0	0	0		Reds can't enter lake,
								water low
Aug 6	G 0.7	FWS	0	-O	0	0		2, S00 reds up with high tide
Aug 7	G 0.7	FWS	0	0	0	0		Most reds reached lake
Aug 24	G 0.7	FWS	0	0	0	0		Visibility poor
Sept 1	C 0.7	FWS	13,750	0	75	0	1 red	Small stream, good spawning
Sept 4	A	FWS	100	0	0	0		Visibility poor
Sept 10	G to lake	FWS	180				SO cohos	
1956								
July 27	G	FWS					3,000 reds	
July 28	G	FWS					3,000 reds	
July 30	G	FWS					6 reds	
Aug 6	G	FWS					4,000 reds	
Sept 12	A lake	FWS	5,000					20,000 at mouth
Sept 13	G	FWS	7,000		8,000		300 cohos	,
1987					<i>'</i>			
July 24	G mouth	FWS					2SO reds	
July 25	G mouth	FWS					150 reds	
July 28	G mouth	FWS					12S reds	
July 29	G mouth	FWS					SO reds	
Aug 6	G mouth	FWS					100 reds	
Aug 19	G mouth	FWS						3,000 salmon off mouth
Aug 22	G mouth	FWS	500					
Sept 26	3 1.00.011	FWS	18,000		400		2,500 reds	4,000 dead
- P0			20,000		100		2,000 100	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

SHIPLEY CREEK

ADF STAT. No. WR 91 Previous No. 118

	SUR VEYEI)	PI	NK	CHUM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	IVENIARKO
1958							
July 8	-13 G flats	FWS				SO reds	
July 14		FWS				200 reds	At mouth
July 17		FWS				200 reds	
July 22		FWS					At mouth
July 24		FWS				700-1,000 reds	
July 26		FWS				1,000 reds	A+ - +7
July 30	G flats	FWS				1,500 reds	At mouth
	G flats	FWS				150 reds	At mouth
Aug 2 Aug 4		FWS				200 reds	400 reds on flats
Aug 10		FWS				930-1, 400 reds	
Aug 10		FWS				500 reds 100 reds	
Aug 11		FWS					
_		FWS	50			8,000 reds	5 000 : 1- 400 3
Aug 13	G 1.0	1.44.2	30				5,000 pinks, 400 chums
A 10	C flata	FWS	0.000				on flats
Aug 18 Aug 19		FWS	9,000		300		
_			5,000		300		4 000 1 1 1
Aug 19	A lake	FWS					4,000 pinks at mouth
A 20	21 ((1-4-	EME	E 000		400		400 salmon in lake
Aug 20			5,000			1 1 .	
Aug 21	intertidal		40,000		400	1 cohe	
Aug 22		FWS	700		10	2,500 reds	055
Aug 22			25,000		500		Off mouth
Aug 29		FRI	550		28		50,000 pinks off mouth
Sept 10	entire		>20,000		2 000	12 000 10	S,000 pinks at mouth
Season Sept 18			39,000		3,000 800	12,000 reds	200 11 75% -1
			18,000		200		200 dead, 75% chuns
Sept 29	A tuke	1. 44.2	5,000		200		15,000 dead, 300 salmon
1959							at mouth
July 15	G flats	FWS					No fish observed
July 17		FWS				100 reds	110 Histi Observed
July 18		FWS				200 reds	
July 21	G flats	FWS				400 reds	
July 26		FWS				100 reds	
Aug 1		FWS	500			100 100	
Aug 4		FWS	1,500				
Aug 22		FWS	1,000				No fish observed
Aug 27	G lake	FWS	4,400				5,000 pinks off mouth
1960			,				-, 5
July 31	A 2.0	ADF					Jumpers at mouth
Aug 19	A mouth						400 pinks at mouth
Sept 7	A moutl						Fish present. Water dark
1961							
July 28	A	ADF	2,000				At mouth
Aug 8	A	ADF					20,000 in bay
Aug 9	A 2.0	ADF					1,000 at mouth
Aug 15	G 0.3	ADF					3,000 at mouth
Aug 25	A mouth	1 ADF					Water dark for survey
1962							•
Aug 16	G lake	ADF	500			500 reds	7,000 at mouth
Aug 21	A	ADF					1,500 at mouth
Aug 25	G lake	ADF	3,000				10,000 at mouth
1963							
July 31	G 0. 2	ADF					3,000-5,000 at mouth
Aug 29	A mouth	1 ADF					20,000 at mouth; 2,000
							in intertidal zone; 20,000
							schooled inside markers
					100)	



ADF STAT. No. WR

Previous No. 125

92

MARBLE CREEK

144-62 56°10.4' N. 133°27.7' W.

WRANGELL, SUMNER STRAIT, SHAKAN BAY, I.S miles N. of Dry Pass.

MAJOR SPECIES Pink.

SCAPEMENT TIMING Middle. Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES
STREAM TEMPERATURES Normal range. No observed temperatures.
VALLEY DESCRIPTION
DRAINAGE 7.3 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES Travel in woods several hundred feet above high tide, then upstream.
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 101/8".

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

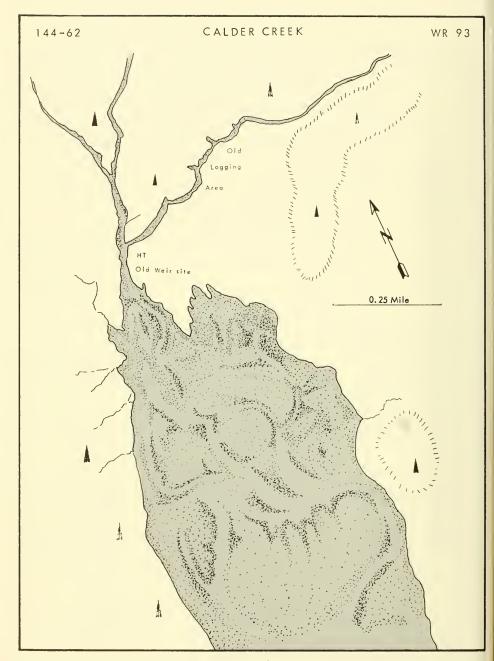
LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS No spawning area observed.
GENERAL NOTES

124

MARBLE CREEK

ESCAPEMENT RECORD

	SURVEYED		PINK		CHU		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1942								
Sept 10	G	FWS	10,000					Fair
1943	_							
Sept 21 1944	G	FWS	8,000					Fair
Sept 19	G	FWS	1,200					Fair
1945			-,					r dii
Sept 18	G	FWS	2,000					Fair
1946	1.0	T7110						
Oct 11 1951	1.0	FWS	4					Poor seeding
Sept 15	1.0	FWS	20,000		2,000			
1954			·		-,			
Sept 16		FWS	2,000					
1955 Sept 10	G 1.0	FWS	300					
19 5 6	G 1.0	1. 14.2	300					
Aug 12	G 0.5	FWS						No fish observed
Sept 12	G 1.0	FWS	300					
Sept 12 1957	A 0.5	FWS						No fish observed
July 26	G 0. 2	FWS						No fish observed
Aug 15	A 2.0	FWS	50					
Sept 25 1958	G 0. 7	FWS	350		90			75 dead
Aug 24	G 1.0	FWS	1		1			
Sept 19	0.05		2					
Sept 29 Sept 30	A length G mouth		150		200			No fish observed
19 5 9	G moden	1.44.2						NO IISh Observed
Aug 21	A	FWS						No fish observed
1960								
July 31	A mouth	ADF						SO pinks at mouth
1961 Aug 16	G 0. 3	ADF						1,500 pinks off mouth
Aug 25	A mouth							Water too dark for estimate
1962 Aug 13	A mouth	VDE.						F 1)
196 3	A mouth	ADF						Excellent show throughout
July 29	A mouth	ADF						Scattered jumps



144-62 56° 12.4' N. 133° 31.4' W.

WR 93 Previous No. 126

WRANGELL. SUMNER STRAIT, SHAKAN BAY, CALDER BAY, Head-

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug. -Sept.

OTHER SPECIES Chum, coho, red. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 25'-30'/6"-8".

AVERAGE WIDTH/DEPTH 40'/10".

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Cold range. Observed temperatures: 47°F., 8/14/51; 46°F., 8/25/51; 44°F., 9/10/S1; 48.5°F., 9/23/S1; 47°F., 8/16/S2; 46°F., 8/26/S2; 44°F., 9/7/S2; 44°F., 9/16/S2; 49°F., 8/16/S3; 4S°F., 8/24/S3; 48.5°F., 9/10/S3; 46.5°F., 9/20/S3.

VALLEY DESCRIPTION The E. fork flows through a flat valley with moderate gradient, timbered with tall spruce and cedar. The W. fork lies in a valley narrower than that of the E. fork, becoming steeper sided upstream.

DRAINAGE 14 square miles (polar planimeter). Precipitation-fed. Snowmelt from the snowfields at the headwaters and surface runoff are this stream's major water source.

STREAM MOUTH IDENTIFICATION Enters a tideflat 1 mile long and 0.5 mile wide. The stream enters the tideflat in the NW. corner and flows across the flat to the SE. corner.

ANCHORAGE Calder Bay dries to 0.4 mile from the bay entrance. Anchorage may be found near the entrance to the bay.

TRAILS AND SURVEY ROUTES Both forks are easily waded. The E. fork has numerous long gravel bars and a logging road is found a short distance above the forks which can be traveled. The E. fork has brushy banks.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 1 mile.

GRADIENT AND VELOCITIES Gentle.

BOTTOM Sand and gravel.

LOW TIDE LOCATION HIGH TIDE LOCATION

SCHOOLING AREAS A few moderately deep pools.

SPAWNING AREAS This zone is made up largely of riffles. Both chum and pink salmon spawn in this area.

UPSTREAM

LENGTH ACCESSIBLE > 0. S mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel below, larger rock above.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES A good sized tributary enters the W. fork 0.2 mile above the forks. Several other smaller tributaries enter both the E. and W. forks.

SCHOOLING AREAS Both forks have occasional pools.

SPAWNING AREAS The E. fork is the largest fork and has the most available spawning gravel.

Good gravels are also found in the lower one-fourth mile of the W. fork.

GENERAL NOTES

CALDER BAY

ESCAPEMENT RECORD

	SUR VEYER		PIN		СНИ		OTHER SPECIES	REMAR KS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
19 30 Sept 29	Weir	USBF	34,925		27,516		95 cohos	Final total. Weir installed July 15
19 3 1 Sept 23	Weir	USBF	31,959		17, 125		193 cohos	Final total. Weir installed August 10
1950 Sept 28 1951		FWS					1,000 cohos	18,000 salmon, mostly chum
Aug 14	G 1.0	FRI	120	0	20	0		All in intertidal zone
Aug 23 Sept 10	G 0.5 G 0.5	FRI FRI	8,500 13,200	0	300 510	1 3		
Sept 15	0.5	FWS	10,000	U	310	3		
Sept 17	1.0	FWS	48,000		2,000			
Sept 23 1952	G 0.5	FRI	12,700	725	20, 400	870	2 cohos	
Aug 16	G 0.5	FR1	1	0	2	0		Rain raising water
Aug 26	G 0.3	FR1	721	0	250	0		2,000 observed off mouth
Sept 7	G 0.3 G 0.3	FR I FR I	7,450	9	1,000	4	420 1	Few in bay
Sept 16 Sept 22	G 0. 3	FRI	5,980 5,000	76 >90	2, 2 7 0 1, 500	30 >13	420 cohos 100 cohos	Few off mouth
1953	0 0. 3		5,000	- 50	1,500	- 13	100 001103	
Aug 16	G 0.3	FRI	2,027	0	124	0		
Aug 20	A	FWS	6,500	0	0	0		2,000 at mouth. No spawning
Aug 23	G 0. 1	FWS	0	С	0	0		400 at mouth
Aug 24	G 0. 3	FRI	4,495	0	3 61	0		
Sept 8 Sept 10	A G 0, 3	FWS FRI	11 000	0	635	0	200 1 1	Many pink. Escapement good
Sept 10	G 0. 3	FRI	11,000 7,900	550	3, 100	200	300 cohos, 1 red 300 cohos	Good showing chums off mouth 5,000-6,000 schooled chums
19 5 4	0 0. 3	11(1	7,500	330	3, 100	2.00	300 Conos	3,000-0,000 schooled chains
Aug 24	A 0.7	FRI	500	0	0	0		Water low. Streams in bay
Sept 8	A 0.7	FRI	22,000	0	0	0		36,000 at mouth
Sept 9	G 0. 1	FWS	40,000					
Sept 10	A 0.7	FRI	15,000	0				6,000 chums at mouth
Sept 14 1955	G	FWS	30,000					
Aug 7	G 0. 3	FWS	400	0	0	0		
Aug 8 Aug 17	G 0. 3 G 0. 3	FWS FWS	1,000	0	0	0		
Aug 17 Aug 19	A 0.7	FRI	10,000 15,000	0	0	0		Some live chums observed
Aug 24	A 0.7	FWS	10,000	0	0	0		Estimated 15,000 in bay
Aug 26	G 0. 3	FWS	4,000	0	0	0		Some chums
Aug 26	G	FWS	15,000					7,000 in bay, 1,500 coming
Aug 26	G	FWS			650			Left fork
Aug 28	A mkr	FRI	26,000					
Sept 4	A length		40,000					
Sept 5	A mkr	FRI	46,000		500			
Sept 11 Sept 16	G 1.7 A mkr	FWS FRI	25,000 75,000		500			
Sept 23	A mkr	FRI	65,000					
Sept 28	A mkr	FRI	10,000					
•								

	SUR VEYED PINK		K	СН	TM	OTHER SPECIES	S REMARKS	
Date	Miles	By	Live	Dead	Live	Dead	Live	VENIAL K2
Dutt		2,	2110	Dega	Live	Dedd	DIVE	
1956								
Aug 9	G 1.0	FWS	50		50			
Aug 10	G 0. S	FWS	100					
Aug 12	G1.0	FWS	150		100			
Aug 14	G 1.0	FWS	350		100			
Aug 14	A 0.5	FWS	200					
Aug 18	Intertidal	FWS	3,000					
Aug 18	G 1.0	FWS	2,500		500			
Aug 20	G 1.0	FWS						S,000-7,500 pinks
Aug 25	A marker	FRI	6,000					
Aug 28	G 1.0	FWS	20,000					
Aug 29	G 1.0	FWS	10,000		800			
Aug 29	A	FWS	3,000					
Sept 4	A length		35,000		2,000			
Sept 7	A marker		45,000					
Sept 12	A marker	FR1	45,000					
Sept 12	A 1.0		20,000					
Sept 13	G 1.5		55,000		10,000			
Sept 17	A marker		55,000					
Sept 23	A 0.7		50,000					Many dead pinks. Some chums
Sept 28	A marker	FR1>	30, 900					
1957								
July 18	A 0. 2	FWS	30					
Aug 5	G 1.5	FWS	700		S5			
Aug S	G 1.0	FWS	1,000		100			
Aug 7	G 1.0	FWS	1,900		175			
Aug 8	G 0.5	FWS	500		20			
Aug 8	G 1.0	FWS	2,400		100			
Aug 10	G 1.0	FWS	2,500		200			
Aug 12	G 1.0	FWS	4,500		800			
Aug 13	G 1.0	FWS	5,000		900			
Aug 15	G 1.0	FWS	5,500		1,000			B 000 ft 1 .
Aug 15	A 2.0	FWS						5,000 fish in stream,
Aug. 10	G 0.5	ETATE	6 000		1 100			10,000 at mouth
Aug 19 Aug 23	G 1. 0	FWS FWS	6,000 6,700		1, 100			
Aug 23	A 0. 7		10,000		1,600			Hundreds of chums schooled
Aug 25	A 0. 7	FRI	6,000					
Aug 23	G 0. 3	FWS	5,000	0	200	0		Schooled in intertidal zone
Aug 31	G 0. S	FWS	2,800	U	200	U		Jumps in bay
Sept 2	A 0.7	FRI	8,000	0	200	0		>4,000 at mouth
Sept 9	A 0.7	FRI	10,000	0	0	0		>30,000 at mouth >30,000 chums in outer bay
Sept 17	G 2. S F			0	20,000	o	100 cohos	Fair
Sept 23	A 0. 7	FRI	3,000		15,000		200 00	Some dead
Sept 23	G 0.7	FWS	2,000		11,000		SO cohos	
Sept 24	G 0.7	FWS	2.000		19,000		SO cohos	
1988	_				,			
Aug 16	G 0.5	FWS	1,000		700			
Aug 17	G 1.0	FWS	1,500		500			
			,					

Date Miles By Live Dead Live Dead Live	
1958	
Aug 16 G 0.5 FWS 1,000 700 Aug 17 G 1.0 FWS 1,500 500	
Aug 17 G 1.0 FWS 1,500 500 Aug 20 G 1.0 FWS 3,200 800	
Aug 24 G 0. 7 FWS 8,000 1,700	
Aug 24 G 0.7 FWS 6,000 1,600	
Aug 25 A marker FWS 7,000	
Aug 27 G 0.7 FWS 3,500 1,000 1 coho Right fork	
Aug 27 G 2.5 FWS 3,000 1,250 1 coho	
	ks, 1,000 chums
Aug 30 G 1.0 FRI 25,400 1 500	
Sept 7 G marker FWS 8,000	
Sept 10 A FWS 16,000 500 4,000 salma	on on flots
Sept 17 G marker FWS 11,000	
Sept 19 G 0.7 FWS 2,600 1,800 20 conos 1,500 dead	
Sept 21 G 1.0 FR1 24,500 1,300 17,500 700 500 cohos	
Sept 22 A length FWS 16,000 S00 2,000 dead	
Sept 30 G mouth FWS 2,000	
July 22 A FWS No fish obse	erved
July 31 G 0. 2 FW5 400 100	
Aug 10 G 0.5 FWS 5,600 200	
Sept 2 A 0. 2 FWS 25,000	
1960 Iuly 24 A mouth ADF No fish obse	anus d
July 24A mouth ADFNo fish obseJuly 31A mouth ADFNo fish obse	
Aug 19 A mouth ADF No fish obse	
Aug 24 A mouth ADF One jump a	
1961	
July 28 A 0.5 ADF 3,000 mixe	
	000 at mouth
Aug 17 A 1.0 ADF 9,000 600 in inter	rtidal zone
Aug 25 A 1.0 ADF >30,000	
Sept 6 A 0.5 ADF 28,000	
Sept 7 G 1.0 ADF 20,000 many 2,000 many 5,500 chum 1962	ns at mouth
Aug 7 A 1.0 ADF No fish obse	
· · · · · · · · · · · · · · · · · · ·	on in intertidal
Aug 16 A 1.5 ADF 3,000 at mo	outh, 3,000 in
	mouth, 7,000
	mouth, 3,500
	ntertidal zone
	ntertidal zone
	ks, 200 chums in one

144-62

CALDER CREEK ADF STAT. No. WR WR 93 Previous No. 126

		SUR VEYED)	PII	٧K	CH	UM	OTHER SPECIES	REMARKS
Date	e	Miles	By	Live	Dead	Live	Dead	Live	
196									
July		G 1.0	ADF						20-30 in intertidal zone
July	29	A 0.2	ADF	S00					500 in intertidal zone
Aug	2	G to falls	ADF	8,000		100			1,000 in intertidal zone
Aug	7	A 0.2	ADF	10,000					All in first two holes
Aug	21	G 1.0	ADF	16,000					1,000-2,000 mixed in intertidal zone
Aug	28	A to falls	ADF	15,000					12,000 below forks
Sept	5	G	ADF						1,500 in intertidal zone 100 mixed in intertidal zone

U. S. Fish & Wildlife Service Weir Count

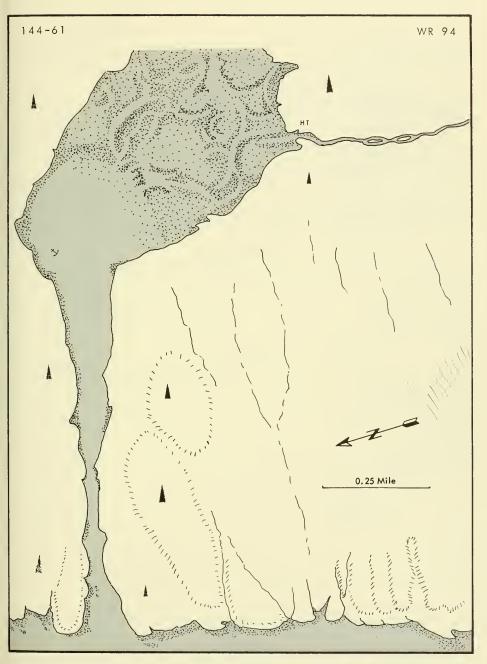
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1930 July 15 16 17 18 19 20 21 22 23 24 25 26		7 1 7 2 73 4 4 6						
27 28 29 30 31 Aug 1 2	5 4	9 13 11 18 30						
3 4 5 6	9	22 21 11 9						
7 8 9 10		5 10 10 14						
11 12 13 14	62 4 1	260 120						
15 16 17 18	14 7 4	69 21 12 41						
19 20 21 22	4 10 61 50	41 64 176 140						
23 24 25 26	80 9 72 12	175 56 361 86						
27 28 29 30	18 20 32 108	143 150 161 91						
31 Sept 1 2 3 4	91 210 258 90 450	89 115 249 70 100						
5 6	1,550 280	790 110			1.0			

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1930								
Sept 7	630	171						
8	2,005	417						
9	1,690	202						
10	650	88						
11	1,026	104						
12 13	2,880 3,751	372 369						
14	382	2, 287						
15	481	6,483						
16	207	1,011						
17	170	1, 238						
18 19	84 341	702 5, 202						
20	406	4, 389						
21	1,430	60						
22	880	40	9					
23	4,630	140	7					
24 25	3, 248 986	87	4					
26	2,747	4 6 7 1	16 11					
27	1,440	60	17					
28	877		22					
_ 29	431		9					
Total	34,925	27,516	95					
1931								
Aug 9								
10		15						
11 12		88						
13	27	00						
14								
15	36	136	_					
16 17	35 69	141	3					
18	22	136 86						
19	61	201						
20	31	81						
21	16	41						
22 23	3, 345 3, 576	1,491 2,244						
24	6,504	1,786						
25	1,084	776						
26	741	137						
27	2,048	1,406						
28 29	2,761 2,233	1,884 1,841						
30	683	641						
31	237	198						
Sept 1	318	97						
2	140 88	17 18	11 8					
4	84	9	4					
5	172	24	5					
6	83	12	4					

ADF STAT. No.

144-62 CALDER CREEK - Continued WR 93

Date	Pink	Chum	Coho	Red	King	Stream gag	ge Water temp.	Remarks
1931								
Sept 7	47	31	2					
8	600	427	23					
9	210	800	3					
10	167	1 5 9	18					
11	811	869	27					
12	204	177	4					
13	146	270	8 3					
14	37 1	95	3					
15	116	91	7					
16	471	84	6					
17	648	87	22					
18	1,456	173	7					
19	863	117	3					
20	638	104	11					
21	466	61	2 5 7					
22	167	31	5					
23	184	43	7					
24								
25								
26								Weir dismantled Sept 24
Total	31,959	17, 125	193					



ADF STAT. No. WR 94 Previous No. 128

144-61

S6°1S. 7' N. 133°38. S' W.

WRANGELL, SUMNER STRAIT, HOLE IN THE WALL.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho. ESCAPEMENT MAGNITUDE ESCAPEMENT TIMING Middle. Aug. - Sept.

SPAWNING FACILITIES

STREAM TEMPERATURES Cold range. Observed temperatures: 50.5°F., 8/16/52; 48°F., 8/25/52; 46.5°F., 9/6/52; 45°F., 9/17/52; 48°F., 8/15/53; 48.5°F., 8/24/53; 47.5°F., 9/10/53; 46°F., 9/19/53.

VALLEY DESCRIPTION Stream-cut. A high bluff outlines the W. side of the valley. The valley has a moderate gradient.

DRAINAGE 10 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION The stream enters the SF. corner of the tideflat and breaks into numerous channels.

ANCHORAGE This basin offers good anchorage for small craft in all weather. The bay dries to 0.5 mile from its head.

TRAILS AND SURVEY ROUTES Bordered by dense woods and underbrush.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 20'-40'/12". LENGTH 0.6 mile. GRADIENT AND VELOCITIES Gentle to moderate. BOTTOM Gravel. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

UPSTREAM

AVERAGE WIDTH/DEPTH 20'-40'/12"

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES Moderate. BOTTOM Sand and gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

ESCAPEMENT RECORD

		•		, -		•		
	SURVEYED		PINIL	PINK		JM	OTHER SPECIES	REMARKS
D		D					Live	KENAKKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1952						_		
Aug 16	G 0. 2	FRI	0	0	0	0		Many jumps in bay
Aug 25	G 0. 2	FRI	0	0	1	2		Several hundred off mouth
Sept 6	G 0.2	FRI	525	2	20	0		Few in bay
Sept 17	G 0.2	FRI	166	0	73	0	10 cohos	None off mouth
1953								
Aug 15	G 0.2	FRI	0	0	10	0		
Aug 24	G 0.2	FRI	1	0	1	0		
Sept 8	A	FWS						No fish observed in stream
Sept 10	G 0.2	FRI	167	0	140	0	2 cohos	Few chums off mouth
Sept 19	G 0.2	FRI	153	_	170	20		Few chums at mouth
1955	0 - 1 -	* * * * *						
Aug 15	G 0.2	FWS	0	0	0	0	Several cohos	2,000 pinks and cohos at mouth
	G 1.6	FWS	5,350	ő	o	ő	Several cones	Stream is fairly small
Sept 8	G 1. S	FWS		U	50	U		Suledin is latity small
Sept 8	G 1. 3	r vv 3	1,700		30			
1956		T711C						
Aug 24	A 0. S	FWS	5 500		S0			
Sept 11	A 0. S	FWS	2,500					
Sept 17	G C. 7	FWS	8,500		300			
1957								
July 24	G 0.5	FWS						No fish observed
Aug 15	A length	FWS						No fish observed
1958								
Aug 17	A 0. 5	FWS						No fish observed
Sept 19	G 0. 1	FWS	275					
Sept 29	A length	FWS	150		S0			
1959								
Aug 21	A	FWS	500					
1960								
	No surve	21/5						
1961	1.0 044 70	, -						
1501	No surve	316						
1967.	140 301 VE	y 5						
Aug 21	A mouth	ADE						4,000 salmon at mouth
Sept 4 1953	A mouth	ADr						3,000 salmon at mouth
Aug 22	G 0. 2	ADF			30			01.1
14 2Z	0 0. 2	ADI			30			S in intertidal zone; 2 small
A 20	4 .1	4 50 5						schools at mouth
Aug 28	A mouth							2,000 at mouth
Sept 6	Bay	ADF						1 jump at mouth

ADF STAT. No. WR 95 Previous No. 129

144-61 56°17.2' N. 133°35.2' W.

WRANGELL. SUMNER STRAIT, PORT PROTECTION, head of S. arm.

MAJOR SPECIES
ESCAPEMENT TIMING Middle. Aug. -Sept.
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE < 1.0 square mile (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AFRIAL SURVEY NOTES

OTHER SPECIES
ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES Very small stream.

AVERAGE WIDTH/DEPTH 41/81.

ESCAPEMENT RECORD

Date	SURVEYED Miles	Ву	PIN Live	K Dead	CHL Live	JM Dead	OTHER SPECIES Live	REMARKS
1951								
Aug 11	G 0.2	FWS	0	0				
Sept 16 1953	G 0.7	FWS	308	18	333	94		
Sept 20 1955		FWS	600					
Aug 24		FWS						No fish observed
1960								
	No surveys							
1961								
	No surveys							

144-30

56" I7. 3' N. 134° 04. 8' W.

WRANGELL, SUMNER STRAIT, AFFLECK CANAL, 2.5 miles from head on W. shore.

MAJOR SPECIES Chum.

OTHER SPECIES Pink.

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES No observed temperatures.

VALLEY DESCRIPTION

DRAINAGE 3.3 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Stream enters at head of only bight in the upper reaches of Affleck Canal.

ANCHORAGE Bear Harbor.

TRAILS AND SURVEY ROUTES None.

AERIAL SURVEY NOTES Poor for aerial survey.

INTERTIDAL ZONE

LENGTH 0.2 mile.

AVERAGE WIDTH/DEPTH 3S'/8".

AVERAGE WIDTH/DEPTH 25'/10".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel and sand.

LOW TIDE LOCATION Halfway out bay.

HIGH TIDE LOCATION Edge of timber.

SCHOOLING AREAS Off mouth and in two small pools at head of tidewater.

SPAWNING AREAS Upper intertidal area only.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.5 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel.

MARKER DISTANCE None. MARKER IDENTIFICATION

BARRIERS Barrier falls at 0.5 mile.

TRIBUTARIES None.

SCHOOLING AREAS Two small holes at head of tidewater.

SPAWNING AREAS Throughout first 0.5 mile of stream.

GENERAL NOTES

REGULATORY DISTRICT NO. 6



115-40 56°02.2' N. 132'22.4' W.

Previous No. 49

WRANGFLL. CLARENCE STRAIT, MCHENRY INLET, 0.2 mile from E. head of E. arm.

MAJOR SPECIES Pink,

OTHER SPECIES Chum.

FSCAPEMENT TIMING Middle. Aug.-Sept. ESCAPEMENT MAGNITUDE SPAWNING FACILITIES Good.

STREAM TEMPERATURES Cold range. Observed temperatures: 48° F., 9/22/52; 44° F., 10/4/52; 47.5° F., 9/16/53; 45° F., 9/29/53; 48° F., 10/5/53.

VALLEY DESCRIPTION Stream-cut. The valley is broad for 1.5 miles at this point it runs into the mountains and branches. Both branches are short and steep-sided.

DRAINAGE 6.6 square miles (polar planimeter). Precipitation-fed. Snowfields surround the upper valley. STREAM MOUTH IDENTIFICATION Lies in the SE. corner of the tideflat at the head of the bay. The mouth of this stream is the most prominent bight at the head of the bay.

ANCHORAGE Affords good anchorage. Consult U.S. Coast Pilot for details on entering.

TRAILS AND SURVEY ROUTES Easily wadeable.

AFRIAL SURVEY NOTES Impossible to aerial survey due to heavy overstory.

INTERTIDAL ZONE

LENGTH 0.3 mile.

AVERAGE WIDTH/DEPTH 30' -40' /8" -12".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING ARFAS Two pools are utilized for schooling. The largest is 200 yards below the high tide mark, while the other, a shallow pool, is found at the high tide mark.

SPAWNING AREAS Excellent spawning facilities in the upper half. This area is used extensively by

GENERAL NOTES Joins WR 37 at the lower end of the intertidal zone.

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile.

AVERAGE WIDTH/DEPTH 20'-40'/8"-12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Gravel, boulders, and bedrock.

MARKER DISTANCE 0.5 mile.

MARKER IDENTIFICATION Black circle on white plastic marker on spruce tree on left bank.

BARRIERS None.

TRIBUTARIES None.

SCHOOLING AREAS The riffles are broken by small pools. A pool just above the high tide used extensively.

SPAWNING AREAS Almost continuous riffies with excellent spawning graves.

GENERAL NOTES A small stream with almost continuous splits, windfalls and log tangles for 0.3 mile. Evidence of old logging operation along left bank-

		•	•	_			•	
S	URVEYE)	PINI	<	CHU	IM	OTHER SPECIES	RFMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		-,					2	
1950								
Sept 28		FWS						3, 200 pinks and chums
1951								, .
Sept 8-26	0.2 F	WS-FR	1 13,000		100			
Sept 26	G 0.2	FRI	12, 200	100	50	15		Half of pinks spawning
Oct 6	G 0.2	FRI	5,800	700	0	0		
1952								
Sept 22	G 0.5	FRI	2, 190	28	60	8		Most in intertidal
Oct 4	G 0.4	FRI	655	52	20	1		
1953								
July 29	G 0.4	FWS	75					3,000 at mouth
Aug 5	G 0.4	FWS						No fish observed
Sept 16	G 0.4	FRI	1,950	70	150	115		
Sept 25	G 0.2	FWS	400	0	4,000	0		
Sept 29	G 0.4	FRI	680	65	120	30		
Oct 5	G 0.4	FRI	290	145	30	90		
1954								
July 23	A	FWS			100			
Aug 2	A	FWS			1,000			
Aug 6	A	FWS			163			
Aug 18	A	FWS	50		500			
Aug 28	A	FWS	2 000		100			
Sept 8	А	FWS	3,000					
1955	C 0 1	FMC	500	0	0	0		
Aug 20	G 0. 1	FWS	500	0	0	0		Clark difficult about the
Aug 21	A 0. 4	FWS FWS	100	0	200	0		Shade, difficult observation
Aug 22	G 1. 0 G 1. 7	FWS	1,600 6,000	U	1,000	U		200 dead pinks and chums
Sept 12 Sept 16	A 0. 4	FRI	9,000	0	1,000	0		200 dedd pillks dia cildins
Sept 23	A 0. 4	FRI	15,000	U	J	U		Some dead pinks and chums
Sept 28	A 0. 4	FRI	15,000		0	0		Many dead pinks. Spawning
1956	A 0. 4	11/1	13,000		· ·	o		many acad pinks. spanning
Aug 8	G	FWS	12		29			
Aug 9	G	FWS	30		60			
Aug 11	G 2.0	FWS	40		508			
Aug 15	G 2.0	FWS	50		SSO			
Aug 16	A 2. S	FWS	175		800			
Aug 23		FWS	300		1,600			
Aug 29	G 2.0	FWS	2,000		2,000			
Aug 31	G 2.0	FWS	7,000		,			
Sept 9	A 0.4	FRI	2,000					
Sept 12	A 2.0	FWS	3,000					
Sept 17	A 2.0	FWS	2,000					
Sept 20	A 2.0	FWS	15,000					
Sept 23	A 0.4	FRI	20,000					Few dead pinks. Some chums
Sept 28	A 0.4	FRI	20,000					Some dead
1957								
July 12	G 0.2	FWS	50					
July 17	G mout	h FWS	300					
July24-27	G mork	er FWS	2,000		250			

ADF STAT. No. WR 36 ESCAPEMENT RECORD - Continued Previous No. 49

1	1	5	_	4	0

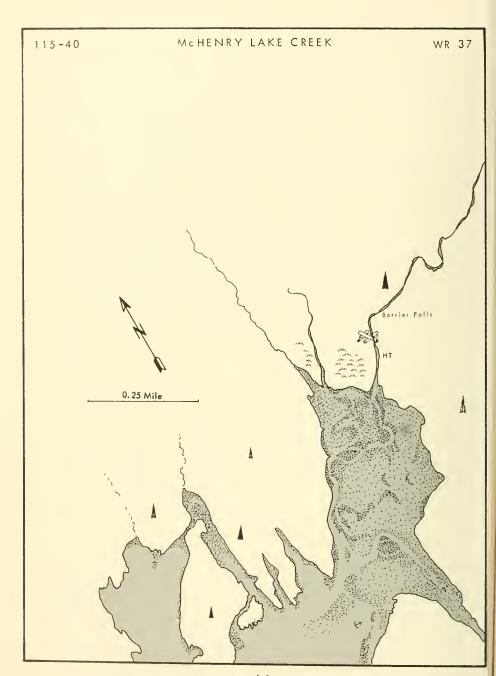
	_							
	SURVEYED		PIN	K	CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1957		FRANC	0.000					
July 29	G mouth		2,000		20			
July 30	G 0, 2	FWS	1 500		50 6 0			
July 31	G mouth G 0.7	FWS	1,500 450		45			
Aug 2 Aug 4	G mouth		1,600		1,000			
Aug 7	A 2. 0	FWS	1,000		1,500			
Aug 10	G mouth		500		700			
Aug 18	A mouth				300			
Aug 24	G mouth	rWS	300		500			
Sept 9	A mark	∂R1			300			
Sept 12	G 0.5 F				320			
Sept 22	A mark		400					
Sept 27	A mark		600		200			
Season	G Iength	1 FWS	7,500		8,000			
1958		CIAIC			202			
Jul 24	A 0.5 G 0.7	FWS FWS			200 75			
Jul 28 Aug 3	G 1. 0	FWS			400			500 chums at mouth
Aug 12	G 0. 2	FWS	350		350			300 Chams at moden
Aug 16	G 0. 2	FWS	400		200			
Aug 17	G 0. 7	FWS	100		1,000			200 pinks at mouth
Aug 17	G 0.2	FWS	400		600	19		•
Aug 26	G 1.0	FWS	600		300	31		
Sept 1	G 1.2	FRI	360	4	34	23		
Sept 7	A mark	FWS	400					
Sept 9	G 2.0	FWS	250		20			
Sept 18	G 1.5	FRI	1,710		71			
Sept 19	A 2.0	FWS	1,750					
Sept 27	G flats	FWS	2,000					
1959	G 0. 2	FWS	450					
July 22 July 30	G 0. 2	FWS	650		250			
July 30	G 0. 7	FWS	795		200			
Aug 1	G 1.0	FWS	900		250			
Aug 7	G 0. 7	FWS	1,000		350			
Aug 9	G 1.0	FWS	1,000		350			
Aug 10	G 1.0	FWS	1,000		350			
Aug 12	G 1.0	FWS	2,800		400			
Aug 16	G 1.0	FWS	3, 350		500			
Aug 19	A 1. 2	FWS	5,000		1,000			
Aug 27	G 2.0	FWS	4,000	400	700			
Sept 6	G 0. 3	ADF	850					
1960		ADE						600 pinks in intertidal
Aug 19		ADF						600 pinks in intertidal, chums present
1961								chans present
July 27	A 0.3	ADF						3,000 chums and pinks
,,,								at mouth
Aug 1	A 0.3	ADF						No fish observed
Aug 18	A 0.3	ADF						1,000 chums and pinks
								in intertidal zone

ADF STAT. No. WR 36 Previous No. 49

ESCAPEMENT RECORD - Continued

115-40

D	ate	SUR VEYED Miles	Ву	PIN Live	K Dead	CHU Live	M Dead	OTHER SPECIES Live	REMARKS
19	61								
Aug		G 0.8	ADF	1,500		400	200		Chum spawning 10,000-15,000 pinks and chums schooled at mouth
19	62								
Jul		A 0.5	ADF			200			500 at mouth
Jul	26	A	ADF			200			200 mixed fish at mouth
Jul	30	A 0.5	ADF			200			1,000 at mouth, 4,000
	2		400						in intertidal zone
Aug		A 2.0	ADF ADF						1,000 in intertidal zone 6,000 at mouth, 400
Aug	/	A 0.5	ADE						in intertidal zone
Aug	16	A mouth	h ADF						3,000 at mouth
	63	71 1110 000							o, 000 at 1110ati
Jul		Α	ADF						No fish observed
Jul		G 0.7	ADF	125		125			3 in intertidal zone
Jul		G 0. 2	ADF	150					200 pinks and 25 chums in intertidal zone
Auc	17	G 1.5	ADF	3,200		550			800 at mouth
Aug		A mout		,					2,000 at mouth



ADF STAT. No.

MCHENRY LAKE CREEK

115-40 56°02.3' N. 132°22.4' W.

WR 37 Previous No. SO

WRANGELL, CLARENCE STRAIT, McHENRY INLET, Head of E. arm.

MAJOR SPECIES Pink.

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Late.

SPAWNING FACILITIES Good. Extremely limited above the intertidal zone.

STREAM TEMPERATURES Normal range. Observed temperatures: 54°F., 9/12/50; 49°F., 10/2/50; 58°F., 9/15/51; 54°F., 9/26/51; 49°F., 10/6/51; 48°F., 9/22/52; 50.5°F., 10/4/52; 48.5°F., 9/16/53; 50°F., 9/29/53; 47°F., 10/5/53.

VALLEY DESCRIPTION Stream-cut.

DRAINAGE 16 square miles (polar planimeter). Drains McHenry Lake which is about 1 mile long and 0.5 mile wide.

STREAM MOUTH IDENTIFICATION Enters the same tideflat as WR 36. Lies in the NE. corner and runs through the W. side of the flat.

ANCHORAGE Refer to WR 36.

TRAILS AND SURVEY ROUTES Easily wadeable to falls.

AERIAL SURVEY NOTES Intertidal area good for aerial survey.

INTERTIDAL ZONE

LENGTH 0.6 mlle

AVERAGE WIDTH/DEPTH 50'-75'/3"-12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Good spawning gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A large pool about halfway up this zone is the major schooling area.

SPAWNING AREAS Spawning occurs throughout most of this zone. The upper part has a higher percentage of spawning gravel than the lower part, where large rock persists.

GENER AL NOTES The intertidal area makes up almost all the available spawning portions of this stream.

UPSTREAM

LENGTH ACCESSIBLE 0.2 mile to falls AVERAGE WIDTH/DEPTH 451/6".

GRADIENT AND VELOCITIES Moderate to steep.

BOTTOM Bedrock, large rock, and heavy gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A series of 2 falls 0. 2 mile above the high tidemark are impassable to salmon. The first falls is 30' high and the second is 20'.

TRIBUTARIES None.

SCHOOLING AREAS Two deep holes below the first falls.

SPAWNING AREAS The spawning facilities in this section are fair but limited.

GENERAL NOTES The stream splits just above the intertidal zone, but rejoins a short distance upstream. Both sections are utilized.

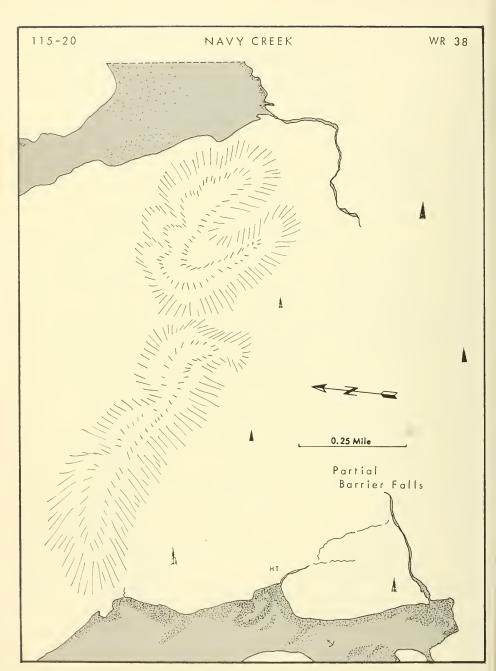
ESCAPEMENT RECORD

Date	SUR VEYED Miles	By	PI Live	NK Dead	CHI L ive	JM Dead	OTHER SPECIES	REMARKS
Date	MILIES	Бу	LIVE	Dedd	LIVE	rzeud	Live	
1949								
Sept 17	G 0. I	FRI	8,050	3	900	67		May be excessive
Sept 27	G 0. 1	FRI	19,000	600	2,600	350		
1950								
Sept 12	G 0. I	FRI	904	6	1,607	349		
Sept 25	G 0. 1	FRI	1,743	0	1,628	688		
Oct 2	G 0. 1	FRI	3,515	344	972	1,360		
1951 Aug 31		FRI	880	12	120	15	10 cohos	
Sept 15	G 0. 1	FRI	10,400	35	2, 400	60	15 cohos	
Sept 25			5 24, 100	200	2,430	500	10 cohos	
Oct 6	G 0. 1	FRI	12,700	2, 200	1,000	1,380		
1952			,	-,	-,	-,		
Sept 22	G 0. I	FRI	900	40	3,060	120		
Oct 2	G 0. I	FRI	300	85	1,600	900	50 cohos	
1953								
Jul 29	G 0. 1	FWS	75					3,000 at mouth
Aug S	G 0. I	FWS						Few fish observed, water low
Sept 5	G 0. I	FWS		70	= 000	200	7 1	4,000 pinks and chums at falls
Sept 16	G 0. 1	FRI	3,500	70	7,000	500	5 cohos	Many chuns jumping in bay
Sept 23	G 0. 5 G	FWS FWS	4,000	0	200	10	*	4,000 pinks in intertidal zone
Sept 25 Sept 29	G 0. 1	FRI	1,700	6S 500	7,400	3, 200	70 cohos	4,000 pinks in intertidal zone
Oct 5	G 0. 1	FRI	250	150	1,750	3, 200	70 001100	
1954	0 0. 1		200	100	1,700	5, 200		
Aug 13	A lengtl	h FWS			100			
Sept 8		FWS			1,000			
Sept 15		FRI	400	0	1,500	1,100		16,000 off mouth, 90% pink
Sept 22		FWS			1,000			
Sept 24		FRI	9,700	300	600			
1955								2.000.65
Aug 20		FWS	400					3,000 off mouth
Sept 16		FR I FR I	10,000		5,000			Schools in bay
Sept 23 Sept 28		FRI	25,000 30,000		5,000			
1986		11/1	30,000		3,000			
Aug 15	G falls	FWS	25		250			
Aug 22	G falls	FWS	100					
Aug 26	G falls	FWS	100		100			600 in intertidal zone
Aug 29	G falls	FWS	200		001			
Aug 31	G falls	FWS	1,000		500			
Sept 9		FRI	6,000					30,000 off mouth
Sept 12	A falls	FWS	5,000					
Sept 20	A falls	FWS	10,000		10.000			
Sept 23	Λ	FRI	20,000		10,000			
Sept 28	A mark	FRI	40,000		20,000			

115-40

ESCAPEMENT RECORD - Continued

	SURVEYED	PINI		СН		OTHER SPECIES	REMARKS
Date	Miles By	Live	Dead	Live	Dead	Live	
1957							
July 29	G to fallsFWS			180			
July 30	G to fallsFWS	300		50			
Aug 2-7		300		20			
Aug 7	G 4.0 FWS	30		200			
Aug 18	A mouth FWS	200		200			
Sept 9	A mark FRI	200		>1,000			No dead
Sept 12	FRI	630	0	3 20	0		110 dedd
Sept 12	G to fallsFWS	200	•	6,000	·		
Sept 22	A mark FRI	300		5,000			
Sept 27	FR1	2,000	100	6,000	1,000		
1958	****	_,	100	0,000	-,		
Aug 26	G to fallsFWS	600		300			
Aug 27	G to fallsFWS	1, 200		200			
Aug 30	G FWS	3,000		100			
Sept 7	A mark FWS	6,000					Some chums
Sept 9	G falls FWS	700		1,800			
Sept 19	A mouth FWS	5,000		1,000			
Sept 26	Alength FWS	3,000		500			
Sept 27	G flats FWS	2,000					
1959		,					
Aug 12	G falls FWS			200			
Aug 16	G falls FWS	50		200			
Aug 19	A falls FWS			300			
Aug 28	G falls FWS	125		250			
Sept 6	G falls FWS	3,000		350			
Sept 14	G falls FWS	650		30			
1960							
	No surveys						
1961							
July 27	A 0. 1 ADF						Refer to No. 36
Aug 1	A 0. 1 ADF						Few hundred at mouth
Aug 18	A 0. 1 ADF						8,000 pinks and chums
					0		at mouth
Aug 29	G 0. 1 ADF	4,000	0	500	0		Refer to No. 36
1962							
July 12	A mouth ADF						No fish observed
July 26	A falls ADF						200 in intertidal zone
July 30	A ADF						1,000 at mouth
Aug 3	A ADF						1,000 in intertidal
Aug 7	A falls ADF						500 in intertidal zone
Aug 16	A ADF						3,000 at mouth
1963	G falls ADF	100		100			250 in intertidal zone
July 28	G falls ADF G falls ADF	4, 200		50			800 at mouth
Aug 17	G Idits ADF	4, 200		30			ooo at moath



115-20 56°03.7' N. 132°27' W.

WR 38 Previous No. S2

WRANGELL, CLARENCE STRAIT, BURNETT INLET, 2 miles NE. of Isle Pt.

OTHER SPECIES Chum, coho, red. MAIOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug. - Sept. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Good. Very extensive for the size of the stream.

STREAM TEMPERATURES Observed temperatures: 53° F., 9/17/49; 47° F., 9/28/53.

VALLEY DESCRIPTION A primitive coniferous basin approximately 6 miles long and 0.5 mile wide situated between precipitous peaks. Slopes toward the SW. Rugged terrain along creek except near the mouth.

DRAINAGE 8 square miles (aerial). Drains Navy Lake which is a collecting basin for rainfall, surface runoff and snowmelt.

STREAM MOUTH IDENTIFICATION Enters a small bight SE. of the first wooded island up the E. shore from Isle Point. Rocky beaches border the mouth, especially the W. side.

ANCHORAGE The inlet is too deep for good anchorage. Anchor inshore off old Burnett Cannery. TRAILS AND SURVEY ROUTES Bear trails afford fairly easy access up either side of the stream. The left side is the most favorable for upstream travel near the mouth.

AERIAL SURVEY NOTES Too brushy for survey above intertidal zone.

INTERTIDAL ZONE

LENGTH 0.05 mile. AVERAGE WIDTH/DEPTH 301/9". GRADIENT AND VELOCITIES Moderate to steep.

BOTTOM Large boulders.

LOW TIDE LOCATION Mudflats.

HIGH TIDE LOCATION

SCHOOLING AREAS A deep pool below the falls offers good protection for schooling salmon.

SPAWNING AREAS Extensive.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE I.5 miles to falls. AVERAGE WIDTH/DEPTH 15'/4". GRADIENT AND VELOCITIES Moderate to steep.

BOTTOM Bedrock, boulders, and rubble.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS At approximately 1.5 miles a falls presents a total block to pinks and chums.

TRIBUTARIES The only significant tributary is found on the right bank just above the lower end of the area in which the stream splits into many channels.

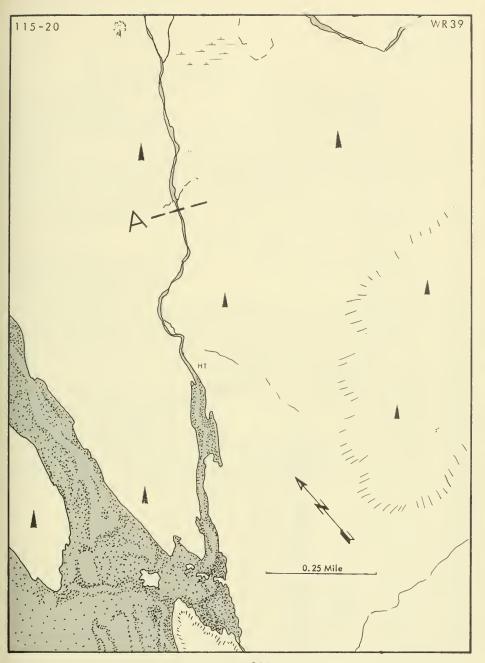
SCHOOLING AREAS Pools of assorted sizes are found from the intertidal zone to the falls. SPAWNING AREAS Except for a short rapids above the 8' falls, there are excellent spawning gravels.

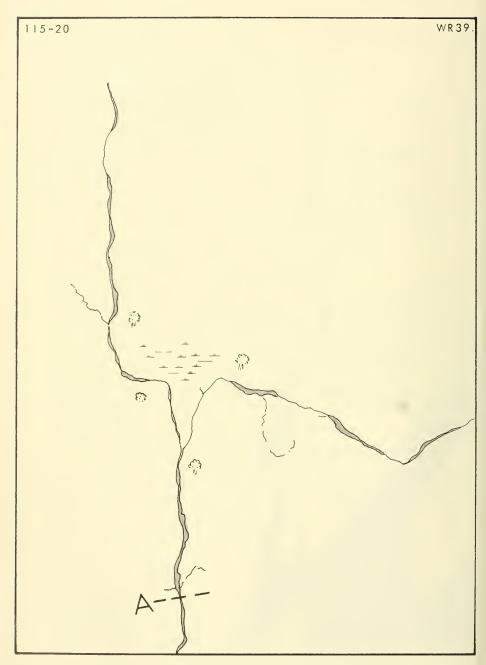
GENERAL NOTES The small falls at tidewater may delay pinks at certain water stages but does not

appear to interfere generally. The lake is blocked by two falls.

ESCAPEMENT RECORD

	SURVEYED		PIN	K	CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Sept 17	G 0.5	FRI	1,025	23	0	0		Fair showing. 20' falls
								at half-mile point
1953								
July 29	A 0. 2	FW5						No fish observed
Sept 5	A 0. 2	FW5	3,500	0	0	0		
5ept 23	A 0, 2	FWS						Few pinks at mouth
Sept 25	A 0. 2	FW5						100 pinks at mouth
1954								
Sept 22		FWS	50					
1955								
Aug 24		FW5	200	0.0				
Sept 12	G 0. 1	FW5	2,500	30				
1956	-	FILLE	200					
Sept 11	G	FWS	300		200			
Sept 17	A 0.5	FW5	200		200			
Sept 20	A 1.0	FW5	400					
1957 July 28	G mouth	ETATE						No fish observed
Aug 7	A 1.5	FW5	50					140 11311 00351 454
Sept12	G 0. 5	FW5	550		100			
1958								
Aug 26	G 0.7	FWS						No fish observed
Sept 26	A 1.0	FW5						No fish observed
1959								
July 21	G 0. 1	FWS	35					
July 31	G 0, 2	FW5	500					300 pinks at mouth
Aug 12	G 0. 2	FWS	3,000					400 pinks in tidal zone
Aug 19	G 0. 2	FWS	2,500					
Aug 24	G 0. 2	FW5	3,000					
Sept 6	G to fall:	s FW5	2,300					
Sept 13	G 0.5	FW5	2,500					
	G	ADF	2, 300					Area for a much larger
								run
1960								
Aug 2	A mouth							Few jumps at mouth
Aug 19	A mouth							Few jumps at mouth
Aug 24	A mouth	ADF						Few jumps at mouth
1961		AINE						000 %
July 27	A 0. 1	ADF						800 off mouth
Aug 1	A 0. 1	ADF						No fish observed
Aug 18	A	ADF						No fish observed
Aug 28	G 0.3	ADF	7,000-8,0	300				Several hundred off mouth
1962	A	ADE						No fish observed
July 25 Aug 7	A mouth A mouth							No fish observed One jump
Aug 16	A mouth	ADF						No fish observed
1963		ADT						140 11911 ODSELVED
July 24	A mouth	ADF						4,000-5,000 at mouth
July 28	G 1.0	ADF	22,500					3,000 in intertidal zone;
								l, 000-2, 000 at mouth
July 29	G 0.5	ADF	15, 700					900 pinks at mouth; 2,600
Aug 10	C f-11	ADE	56.000					pinks in intertidal zone
Aug 18	G falls	ADF	56,000		few			1,500 at mouth





ADF STAT. No.
WR 39
Previous No. 53

115-20 56°09.2' N. 132°34.9' W.

WRANGELL, CLARENCE STRAIT, MOSMAN INLET, 1 mile from E. head.

MAJOR SPECIES Pink.

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Normal range. Observed temperature: 50° F., 9/16/53.

VALLEY DESCRIPTION Glacial origin. Flows through a broad flat with numerous scattered muskeg areas.

DRAINAGE 8 square miles (Aerial). Precipitation-fed. Drains a large muskeg area.

STREAM MOUTH IDENTIFICATION Enters a small bight SE. of the wooded island near the head of the inlet. The tideflat extends S. of the stream into a small bay.

ANCHORAGE NW. corner at head in 10 to 12 fathoms close to shore.

TRAILS AND SURVEY ROUTES The lower 0.4 mile contains large gravel bars which are easy to hike during normal water stages.

AERIAL SURVEY NOTES Poor stream for aerial survey due to dark water and heavy overstory.

INTERTIDAL ZONE

LENGTH 0.4 mile.

AVERAGE WIDTH/DEPTH SO'/3".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel and small boulders.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A long narrow pool near the middle of the zone and a deep hole in the lower portion are the major schooling areas.

SPAWNING AREAS Nearly a continuous shallow riffle at low tide with good spawning facilities in the upper 200 yards.

GENERAL NOTES A bedrock constriction is found near the lower limit of this zone.

UPSTREAM

LENGTH ACCESSIBLE 3 miles.

AVERAGE WIDTH/DEPTH 30'-40'/6"-12"

GRADIENT AND VELOCITIES Moderate.

BOTTOM Excellent gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES A small stream joins WR 39 in the lower part of the intertidal zone.

SCHOOLING AREAS Spawning riffles are broken by pools and deep holes.

SPAWNING AREAS Nearly continuous spawning riffles in the distance surveyed.

GENERAL NOTES

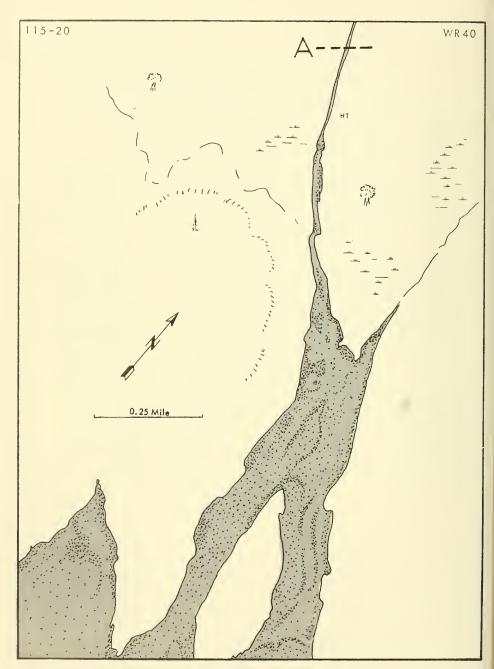
WR 39 Previous No. 53

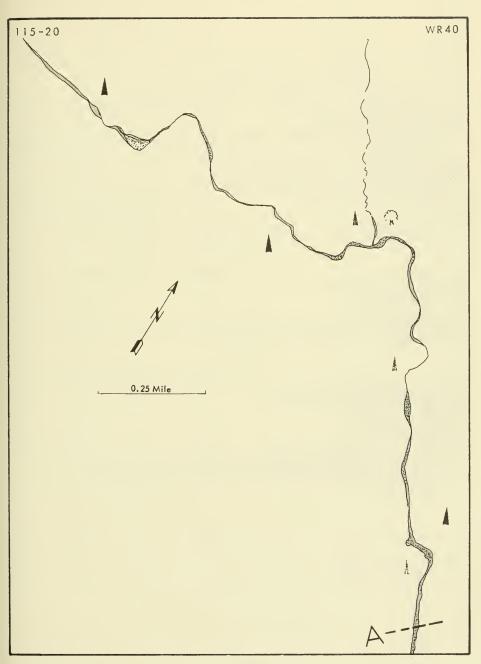
	SURVEYED			NK	СН		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1950								
Sept 28		FWS			133			
1951								
Sept 9 1953	0.5	FWS	250		50			
July 29	A 0. 2	FWS	300	0	0	0		
Sept 6	A 0. 2	FWS				0.0		Few salmon observed
Sept 16	A 0.5	FRI FWS	160	10	40	22		Exploratory survey No salmon observed
Sept 23 Sept 25	A 0. 2 A 0. 2	FWS						No salmon observed
1954	A 0. 2	L W J						ivo satinon observed
Aug 5	0.5	FWS			30			
Aug 19	A	FWS			20			
Sept 8		FWS						Good showing in stream
•								and off mouth
1955								
Sept 23	A 0. 2	FRI	10,000					Jumps in inlet. Some dead pink
Sept 28	A 0. 2	FRI	9,000					Some dead chums
1956								
Aug 2	G 1, 6	ADF			18			
Aug 4	G 2. 6	ADF			177			
Aug 7	G falls	FWS			23 717			
Aug 9	G 2. 6 G falls	ADF FW5			33			
Aug 11 Aug 14	G 2. 6	ADF	28		1, 109			
Aug 14 Aug 16	G falls	FWS	95		45			
Aug 18	G 2, 6	ADF	54		1, 198			
Aug 23	0 2. 0	ADF			5,000			Tidal zone
Aug 23	G	ADF			1,000			
Aug 27	G falls	FWS	4,670		1,080	60		
Sept 12	A 2.0	ADF	5,000					
Sept 20	A 2.0	ADF	35,000					
Sept 20	A 4.0	FWS	80,000					
Sept 23	A mark	FRI	20,000					Some dead
Sept 28 1957	A 0. 2	FRI	37,000					
Aug 15	G 3.0	FWS			>1,050			
Aug 28	G 3.0	FWS			4,500	300		
Sept 9	A mark				300			
Sept 12	G 1.5	FWS	91		80			
5ept 22	A mark		1,000		1,000			S dd
Sept 27 1958	A mark		200					Some dead
Aug 26	G 1.5	FWS	300		200			
Aug 27	A	FWS	2,500		50			
Aug 28	A length		500		300			
Aug 30	G 2. 0	FWS	1,000		500		10 cohos, 50 red	ls
Aug 30	G 2.0	FWS	814		133		6 reds	

ADF STAT. No. WR 39 Previous No. 53

115-20 ESCAPEMENT RECORD - Continued

Date	SUR VEYED Miles	By	PII Live	NK Dead	CHUM Live Dea	d	OTHER SPECIES	REMARKS
		,						
1959 Aug 12	G 0.7	FWS			200			
Aug 19	A 2. 0	FWS			800			
Aug 23	G 1.4	FWS	180		360			
Sept 13	G 0.7	FWS	4,500		6			
1960								
Aug 2	A mouth	ADF						School of 2,000 pinks
								between 39 and 40
1961								200
July 27	A 0.5	ADF ADF						200 pinks off mouth 20,000 chums and pinks
Aug 18	A	ADF						off mouth
Aug 28	G 0.5	ADF	>10,000	0	0	0		on moun
1962	0 0.0		,					
July 30	A 0.5	ADF						300 in intertidal zone
Aug 7	A 1.0	ADF						3,000 in intertidal zone
								15,000 at mouth
Aug 16	A 2.0	ADF	7 000		2 500			3,000 at mouth
Aug 21	G 1.0	ADF	7,000		2,500			2,000 at mouth
10.00								700 in intertidal zone
1963								
Aug 17	G 2.0	ADF	1,700		525			300 pinks in intertidal
								zone





115-20 56°09.8' N. 132°35.4' W

WRANGELL, CLARENCE STRAIT, MOSMAN INLET, Head.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle. Aug. Sept.

OTHER SPECIES Chum, coho, red
ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Cold range. Observed temperatures: S2° F., 9/13/50; 43° F., 10/2/50; S2° F., 9/15/51; 46° F., 9/25/51; 48° F., 10/5/51; S3° F., 9/21/52; 49° F., 10/3/52; 49° F., 9/16/53;

46° F., 9/28/53.
VALLEY DESCRIPTION Glacial. Drains a large muskeg area.

DRAINAGE 8. 2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Lies at the head of Mosman Inlet behind the wooded island.

Enters on the W. side of the small, double point.

ANCHORAGE Refer to WR 39.

LENGTH 0.6 mile.

TRAILS AND SURVEY ROUTES Enter the channel on the W. side of the wooded island and secure boat to the W. bank.

AERIAL SURVEY NOTES Poor for aerial survey due to overstory and dark water.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 60'/6".

AVERAGE WIDTH/DEPTH 50'/6"-10".

GRADIENT AND VELOCITIES Gentle
BOTTOM Fine broken gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS No real pools are found within this zone.
SPAWNING AREAS The upper one-third is a continuous riffle with excellent spawning facilities.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 3 miles.
GRADIENT AND VELOCITIES Gentle.
BOTTOM Fine broken gravel, boulders, and slate.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS None reported.
TRIBUTARIES None reported.

SCHOOLING AREAS Very few resting holes.

SPAWNING AREAS The lower three-fourths mile has excellent spawning riffles. Above this, boulders, and outcroppings become more common and the spawning is limited to small pockets.

GENERAL NOTES A large stream of gentle gradient with a long intertidal zone and almost continuous fine broken gravel.

	SURVEYED)	PIN	ıĸ	СН	UM	OTHER SPECIES	RFMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1949								
Sept 17	G 0.7	FRI	3, 370	6	162	4		Many fish off mouth
Sept 27	G 0.7	FRI	15,000	1,313	15	12		
1950	C 0 7	Em t	200		100	1.07	1 1	
Sept 13	G 0.7 G 0.7	FR I FR I	356 1,696	3 17	100 46	17 3	1 red	
Sept 26 Sept 28	G U . 7	FWS	1,090	17	505	3		
Oct 2	G 0.7	FRI	541	239	0	0		
1951								
Sept 9-2	6 0.7F	RI-FW:	S 5,300		500			
Sept 15	G 0.7	FRI	4,700	25	495	10	25 cohos, 3 reds	Some pinks spawning
Sept 25	G 0.7	FRI	10,300	100	737	120	27 cohos	65 percent pinks spawning
Oct 5	G 0.7	FRI	9,300	570	16	210	40 cohos	
1952								
Sept 21	G 0. 7	FRI	1,030	65	105	63		Spawning in intertidal
Oct 3	G 0.7	FRI	36	4	17	3		Pink run over
19 53 Sept 16	G 0.7	FRI	270	0	240	1		
Sept 25	A 0. 7	FWS	270	Ü	240	1		No salmon observed
Sept 28	G 0. 7	FRI	280	22	70	4		no samon ooservea
1954								
Sept 15	A 0.7	FRI	1,400	0	0	0		14,000 off mouth
Sept 27	A 0 _e 7	FRI	9,000					Many dead pinks
1955								
Sept 13	G 1.2	FWS	5,000		100			
Sept 16	A 0.7	FRI	1,000	0	0	0		Schools in bay
Sept 23 Sept 28	A 0.7 A 0.7	FRI FRI	14,000	0				Some live chums
1956	A 0. 7	rivi	20,000					5,000 above marker
Aug 7	G falls	ADF	23					
Aug 11	G falls	ADF			33			
Aug 16	G falls	ADF	95		45			
Aug 27	G 1.6	ADF	4,670		1,080			
Sept 9	A 0.7	FRI	20,000	0				Many live and dead chums
								20,000 at mouth, 40,000
0 . 00		4.0.5	00.000					in bay
Sept 20 Sept 23	A 4.0 A 0.7	ADF FRI	80,000	0				Manuficer and dead above a
Sept 28	A 0. 7		30,000 37,000	U				Many live and dead chums
1957	A mark	1111	37,000					
Aug 29	G 1,6	FW5	500					
Sept 9	A 0. 7	FR1		0	200			Few live pinks. Few dead chums
Sept12	A 0.7	FWS	267	0	880	0		
Sept 22	A 0.7	FRI	2,000					Some live and dead pinks
								Several thousand pinks and
								chums above marker
Sept 27	A 0.7	FRI	100		100	1,000		None observed off mouth

ADF STAT. No.

WR 40 ESCAPEMENT RECORD - Continued Previous No. 54

115-20

	-							
:	SURVEYED		PIN	ΙK	СН	UM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1958								
Aug 11		FWS						20 pinks off mouth
Aug 31	to dam	FRI	940		120	3		
Sept 7	A 0.7	FRI	0		200			Few pinks. None at mouth
Sept 18	to dam	FRI	380					
Sept 26 1959	A 1.0	FWS	150					
Aug 12	G 0.4	FWS			20			
Aug 15	G to falls	FWS			2,000			
Aug 23	G 1.0	FWS	30		25			
Sept 13 1960	G 1.5	FW5	2,000		15			
Aug 2	A mouth	ADF						Refer to stream #39 on August 2
Aug 24 1961	A 0.3	ADF	150	0	•50	0		-
July 27	A 3.0	ADF						No fish observed
Aug 18	A 3.0	ADF						Refer to stream #39 on August 18
1962								
July 30	A 1.0	ADF						2,000 schooled at mouth
Aug 16	A 2.0	ADF						No fish observed
Aug 21	G 2.0	ADF	7,650		600			20,000 at mouth, 2,500
1963								in intertidal zone
July 29	G 1.2	ADF						No fish observed
Aug 17	G 2.0	ADF	2,300		600			200 pinks at mouth

WR 41 Previous No. SS

WRANGELL, CLARENCE STRAIT, ROCKY BAY, Head.

MAJOR SPECIES Red. ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES OTHER SPECIES Pink, chum. ESCAPEMENT MAGNITUDE

VALLEY DESCRIPTION A short stream-cut valley running between Streets Lake and Rocky Bay.
DRAINAGE 2.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters Rocky Bay through a long, narrow intertidal area.

The bank on the NE, side of the stream rises sharply for the entire length of the intertidal zone and for a short distance upstream.

ANCHORAGE The entrance to Rocky Bay is bare in spots and is only suitable for boats drawing 2' or 3' of water. Small craft may anchor just eastward of Three Way Passage.

TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

WR 41 Previous No. S5

ESCAPEMENT RECORD

	SURVEYED		PI	NK	CHU	M	OTHER SPECIES	R E.M.AR KS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1953 Sept 6	А	FWS						A few salmon at mouth,
Sept 23 Sept 25 1954	A A	FWS FWS	25					Few salmon observed 25 dead salmon at mouth
Season 1955		FWS	2,000					
Aug 21 Sept 13	A length G 0. S	FWS FWS						No fish observed 18,000 salmon at head of ba y
1956 Sept 20 1957	A length	FWS	20,000					Fish in bay, some dead
Aug 7 1958	A 2.0	FWS	50					
Aug 26 Sept 19 1959	G 0. S A length	FWS FWS	3,500				40 reds	At mouth 100 dead fish
Aug 12 Sept 13	G 0, 2	FWS FWS	20					In tidal zone 40 chums in tidal zone. Stream too hard to reach
1960								
1961	No surve							

ADF STAT. No.

PORCUPINE CREEK

56°07.9' N. 132°39.5' W.

WR 42 Previous No. 56

WRANGELL, CLARENCE STRAIT, STEAMER BAY, Head.

MAJOR SPECIES Pink.

142-40

OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle. Aug. -Sept.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Observed temperatures: 49° F., 9/20/49; 58° F., 9/4/51.

VALLEY DESCRIPTION Stream-cut.

DRAINAGE 2.4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Meanders through a narrow, grassy flat.

ANCHORAGE Good anchorage is afforded at the head of Steamer Bay, but the holding ground is not good and S.E. winds draw with considerable force through the creek.

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.6 mile

AVERAGE WIDTH/DEPTH 201/5".

AVERAGE WIDTH/DEPTH 201/8"-12".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Fine gravel and coarse sand.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A deep pool 100 yards below the high tide mark.

SPAWNING AREAS The upper half is composed of fine gravel and coarse sand. Spawning facilities here are good except for limited water flow.

GENERAL NOTES

UPSTREAM

GRADIENT AND VELOCITIES Gentle.
BOTTOM Sand and fine gravel.
MARKER DISTANCE 0.2 mile.
MARKER IDENTIFICATION
BARRIERS

TRIBUTARIES
SCHOOLING AREAS

LENGTH ACCESSIBLE

SPAWNING AREAS

GENERAL NOTES A small stream gently winding through the first one-fourth mile.

ESCAPEMENT RECORD

	SURVEYED		PINK		сни	ЈМ	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949	0.0.0	170.1	1 000			0		2 000
Sept 20 1950	G 0. 2	FRI	1,900	2	3	0		3,000 at mouth
Sept 26 1951		FWS			630			
Sept 4	G 0. 2	FRI						Saw 5 chums in one pool Stream so low fish cannot enter
July 30	G 1.0	FWS						No salmon observed
Sept 6	G 1.0	FWS						No salmon observed
Sept 23	G 1.0	FWS						Poor escapement
1954								•
Sept 16 1955	А	FWS	15,000					
Aug 21 1956	A length	FWS						No fish observed
Sept 12	A length	FWS	300					
Sept 17	A length	FWS	3,000					Three large schools in bay
Sept 20 1957	A length	FWS	20,000					Intertidal spawning good
1958	Not surv	eyed						
Sept12	G 0.5	FWS	150		50			
Sept19	A length		4,500					
Sept 26 1959	A 2.0	FWS	1,500					100 dead
Aug 30	G 0.5	FWS						No fish observed
Sept 11	G 0. 2	FWS	3		2			650 pinks, 20 chums in tidal zone
1960								
1961	Not surv	eyed						
July 27	A 0.6	ADF						No fish observed
Aug 18 1962	A 1.0	ADF						3,000 pinks at mouth
July 25	A length	ADF						No fish observed

ADF STAT. No. WR 46 Previous No. 60

142-30 \$6° 15.5' N. 132° 54.3' W.

WRANGELL, CLARENCE STRAIT, SNOW PASSAGE, 2.5 miles NW. of Pt. Nesbitt.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURE

near the mouth.

OTHER SPECIES
ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION The stream flows through nearly flat muskeg terrain. Sparsely wooded except

DRAINAGE 30 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters the head of a small lagoon which dries at low tide.

The tidal flat of this stream projects 0.5 mile out from shore at low tide. A prominent bluff is just W. of the mouth.

ANCHORAGE Excellent anchorage may be had W. of Bushy Island. The anchorage is protected from all but NW. winds.

TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

AVERAGE WIDTH/DEPTH S0'/18"

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Good gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES A large, swift stream.

	SURVEYED		PII	ΝK	СНИМ	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	
1950							
Sept 1		FWS	\$6				
1981							
Sept 10	0.5		1,500	10			
Sept 10	1.0	FWS	2, 103				
1956	4 1 0	FILLS					N7- C'-1 -7 1
Sept 11	A 1.0	FWS					No fish observed
Sept 17 1957	G 0.5	FWS	1,000				
Aug 15 19 5 8	A 1.0	FWS					No fish observed
Aug 25	A length	FWS					No fish observed
Sept 10	A length	FWS	150				150 pinks at mouth
Sept 22	A length		50				
1959	71 10119011	. ,,,,	00				
Sept 7	G 0.2	FWS	60				
1960							
	No surve	ys					
1961							
	No surve	ys					

ADF STAT. No. WR 47 Previous No. 61

142-30 56° 17.8' N. 132° 57.5' W.

WRANGELL, CLARENCE STRAIT, SNOW PASSAGE, NE. of Bushy Island.

MAJOR SPECIES ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES VALLEY DESCRIPTION The valley slopes towards the S and is steep-sided. Appears to be a stream-cut

OTHER SPECIES ESCAPEMENT MAGNITUDE

valley. DRAINAGE 8.4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION A bluff rising to 1,000 outlines the shoreline E. of the mouth and runs N. as the E. side of the valley in which WR 47 runs.

ANCHORAGE Refer to WR 46. TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES BOTTOM LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

AVERAGE WIDTH/DEPTH 50'/8".

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES BOTTOM Excellent gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES A fairly large stream.

ESCAPEMENT RECORD

142-30

	SURVEYED		PINK		CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1950								
Sept 1		FWS	205		13			
1951								
Sept10 1953	0. 2	FWS	4,000		50			
Sept 5	A 0.5	FWS						No fish observed
Sept10	A 0.5	FWS						No fish observed
1956								
Aug 15	A 0. 2	FWS						No fish observed
Sept 11	A 1.0	FWS	5,000					
1957			,					
Aug 15	A 1.0	FWS						No fish observed
1958								
Aug 25	A 0. 2	FWS	350					
Sept 10	A length	FWS	800					
Sept 22	A length		200					
1959								
Sept 7	G 0.2	FWS	1,050					
1960								
	No surveys							
1961								
	No surve	ys						

ADF STAT. No. WR 48 Previous No. 62

142-20 \$6°20.7' N. 133°03.9' W.

WRANGELL, CLARENCE STRAIT, I mile N. of Macnamara Pt.

MAIOR SPECIES ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES VALLEY DESCRIPTION DRAINAGE 2.4 square miles (polar planimeter). OTHER SPECIES ESCAPEMENT MAGNITUDE

STREAM MOUTH IDENTIFICATION

ANCHORAGE This shore affords only temporary anchorage during good weather. TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES BOTTOM Good clean gravel. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

AVERAGE WIDTH/DEPTH 251/8".

UPSTREAM

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES BOTTOM MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

AVERAGE WIDTH/DEPTH

	SUR VEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1950								
Sept 1 1981		FW5	390		S7			
Sept 10 1953	0.7	FWS	360					
Aug S	A 0.5	FWS						No salmon observed
Sept 10 1986	A 0. S	FWS						A few salmon observed
Aug 1S	A 0.7	FWS						No salmon observed
Sept 11 1957	A 0.5	FWS						No salmon observed
Aug 15 1988	A 3.0	FWS						No salmon observed
Sept 20 1959	A length	FWS	25					
Sept 7 1960	G 0.5	FWS	5					
1961	No survey	7S						
	No survey	/S						

ADF STAT. No. WR 49

ST. JOHN CREEK

142-20 \$5° 25.4' N. 132° 58.2' W.

Previous No. 64

WRANGELL, SUMNER STRAIT, PT. ST. JOHN, Head.

MAJOR SPECIES ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES OTHER SPECIES ESCAPEMENT MAGNITUDE

the valley slopes are heavily forested. DRAINAGE 2.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Lies at the SW. corner of the bay, immediately behind the wooded peninsula. The course of the stream nearly parallels the beach for one-fourth mile.

VALLEY DESCRIPTION A wide valley with a slight gradient. The valley floor is largely muskeg, and

ANCHORAGE St. John Harbor affords good protection from all but N. winds. Enter midway between Northerly Island and Low Point.

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

GENERAL NOTES A small stream of little importance as a salmon producer.

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES BOTTOM LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE GRADIENT AND VELOCITIES BOTTOM Gravel. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES The stream forks 0.8 mile above the mouth.

ST. JOHN CREEK

WR 49 Previous No. 64

ESCAPEMENT RECORD

SUR VEYED		PINK		сни	JM	OTHER SPECIES	REMARKS	
Date	Miles	By	Li ve	Dead	Live	Dead	Live	
1950								
Sept 19 1953		FWS	500		100			
Aug 5	A 1.5	FWS						No salmon observed
Aug 23	G 1.5	FWS						20 dead salmon
Sept 6	A 0.5	FWS						2 dead
1954								
Aug 19	A length	FWS			50			
1955	,							
Oct 7	G 0.2							No salmon observed
1956								
Sept 11	A 1.0	FWS	2,500					
Sept 24	G 0. S	FWS						No salmon observed
1957								
Aug 15	A 2.0	FWS	75					
Aug 23	A 1. 0	FWS			S00	100		
Aug 26	G 1.5	FWS	210		550			
1958								
Aug 17	A 0. S	FWS	800					
Sept 2	A length	FWS	800		800			
1989								
Aug 11	G 1.0	FWS	1,100		140			
1960								
	No surve	ys						
1961								
	No surve	ys						

ADF STAT. No.

OTHER SPECIES Pink, chum, red.

AVERAGE WIDTH/DEPTH 401/24".

AVERAGE WIDTH/DEPTH

ESCAPEMENT MAGNITUDE

142-10 56°40.8' N. 132°SS.4' W. FALL CREEK

WR 55 Previous No. 78

WRANGELL, WRANGELL NARROWS, 1 mile N. of Rock Pt.

MAJOR SPECIES Coho.
ESCAPEMENT TIMING Middle.
SPAWNING FACILITIES Limited.
STREAM TEMPERATURES
VALLEY DESCRIPTION Flot, muskeg volley.
DRAINAGE 17.4 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE

TRAILS AND SURVEY ROUTES Can be reached by road from Petersburg. AERIAL SURVEY NOTES Too dark for survey.

INTERTIDAL ZONE

LENGTH 0.5 mile.
GRADIENT AND VELOCITIES Slight.
BOTTOM Mud, rocks.
LOW TIDE LOCATION Extended flats.
HIGH TIDE LOCATION Falls.
SCHOOLING AREAS At base of falls and off flats.
SPAWNING AREAS Very few.
GENERAL NOTES No observed spawning.

UPSTREAM

LENGTH ACCESSIBLE 7 miles.
GRADIENT AND VELOCITIES Gentle.
BOTTOM Sand and fine gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
SPAWNING AREAS

GENERAL NOTES Fall creek, flowing into Wrangell Narrows on the W. coast of Mitkof I., has an estimated total length of 7 miles. A partial block at tidewater has been laddered with a poorly designed FWS facility.

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SURVEYED			CHU	M	OTHER SPECIES	REMARKS	
Date	Miles	Ву	Live	Dead	L ve	Dead	Live	
1950		F71.10			1 200		000 1 -	
Sept 17		FWS			1, 200		900 cohos	
1951				10				
Sept 1			68	10	20	S	5 cohos	
1953								D
Season	A length	1 FWS						Poor
1954					220		1 050 1 -	
Season		FWS	1, 298		330		1,956 cohos	
1955								
	See wei	Г						
1956			4 040		207			
Season	G length	FWS	1,019		587			
1957							100 1 -	
Aug 6	G mouth	1 FWS					100 cohos	
1988								
July 22	G falls	FWS			1			
Aug 5	G falls	FWS			25		400	
Aug 14	G falls	FWS			20		100 cohos	
Aug 17	G falls	FWS			10		SO cohos	
1959								N 1 - 1 - 1 1
July 22	A 1.0	FWS						No salmon observed
Aug 9	at falls	FWS					cohos present	No salmon observed
Aug 21	A 1.0	FWS					1 coho	No salmon observed
Oct 5	G falls	FWS						No salmon observed
1960								
	No surve	eys						
1961								
	No surve	eys						

U.S. Bureau of Fisheries Weir Counts

		,	J. J. D.	areau .	01 1 1311	CIICS WCII	Councs	
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1953								
July 15	0	0	1	0				
16-21		0	0	0				
22	- 2	o	0	0				
23	1	o	Ö	0				
24	3	0	ō	0				
25	0	2	0	0				
26	1	2	0	0				
27	0	1	0	0				
28	3	2	0	0				
29	2	0	0	0				
30	0	1	0	0				
31	0	0	0	0				
Aug 1	0	0	0	0				
2	0	0	0	0				
3-7	0	0	0	0				
8 9	0 5	27	0 7	0				
10	5 58	1 7 1 0 6	147	0				
11	31	20	13	0				
12	184	34	32	0				
13	26	11	19	0				
14	14	11	10	0				
15	71	54	371	0				
16	22	19	92	0				
17	11	1	17	0				
18	7	10	11	0				
19	1	4	3	0				
20	11	14	8	0				
21	22	18	65	0				
22	9	12	14	0				
23	13	6	21	0				
24	19	7 7	60 72	0				
25 26	5 0	3	59	0				
27	2	0	31	0				
28	3	5	25	0				
29	ō	3	42	0				
30	9	22	123	0				
31	0	16	92	0				
Sept 1	7	11	63	0				
2	5	3	27	0				
3	10	2	15	0				
4	2	3	16	0				
5	7	3	3	0				
6	9	2	47	0				
7	14	0	3	0				
8 9	26 0	0	5 77	0				
10	0	0	77 16	0				
10	U	U	10	U				

Date 1953	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
Sept 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 Total	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	24 19 31 19 12 5 3 16 4 1 3 10 3 5 2 2	0 0 0 0 0 0 0 0 0 0				
1954 July 1-1: 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Aug 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 1 0 1 0 1 2 2 2 3 3 7 11 12 17 9 10 8 10 14 8 18 23 9 11 18 5 19 19 19 19 19 19 19 19 19 19 19 19 19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1954 Aug 19 20 21 22 23 24 25 26 27 28 30 31 Sept 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 Totol	16 11 3 7 6 2 11 21 17 3 3 19 138 57 87 39 46 11 23 127 110 176 185 26 21 7 9 13 0 0 1, 298	19 3 2 3 1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	161 61 18 9 11 3 2 3 211 5 1 287 208 9 11 0 0 0 1 229 137 119 27 9 9 17 6 9 9 17 6 9 9 17 9 9 17 9 9 17 9 9 17 9 9 17 9 9 17 9 9 17 9 9 17 9 9 17 9 17 9 17 9 17 9 17 9 17 9 17 9 17 9 17 17 17 17 17 17 17 17 17 17 17 17 17					
1955 July 1 2 3 4 5 6 7 8 9 10 0 11 12 13 14 15 16 17 18	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0		1-10 1-10 1-8 1-7 1-3 1-2 1-2 1-0 1-0 0-9 1-6 1-6 1-4 1-0 0-9 0-8 0-7.5 1-2	56 56 56 57 56 56 54 54 55 54 52 54 52 54 56 56	

ADF STAT. No. WR 55 Previous No. 78

FALL CREEK - Continued

142-10

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1955 Sept 10 11 12 13 14 15 16 17 18	0 0 0 0 8 5 11 3 0	0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0		0-9 1-0 0-8 1-8 2-6 2-9 2-9 2-9 2-8 3-4	53 54 42 52 52 51 51 50	
1956 July 8-1 12 13	0	0 3 1	0 0 0	0 0 0			55	
14 15-1 17 18 19	0 6 0 3 0	0 0 0 2 0	0 0 0 0	0 0 0 0			56	
20 21 22 23 24 25	1 0 0 1 2 8	0 0 0 0	0 2 2 0 1 11	0 7 3 1			53	
26 27 28 29 30 31 Aug 1	4 5 1 0 5 1 7	0 0 2 0 3 2 2	5 3 0 0 0 0 0	0 0 0 0 0			52	
2 3 4 5 6 7 8	58 34 46 11 57 40	35 24 27 7 32 25	21 23 25 6 14 18 21	0 0 0 0 0			52	
9 10 11 12 13 14	14 2 5 3 0 2	17 5 4 0 1 1	62 49 14 0 0	0 0 0 0 0 0 0 0			55	
16 17 18 19	33 16 47 84	10 8 19 3 6	8 9 3 12	0 0 0			53	

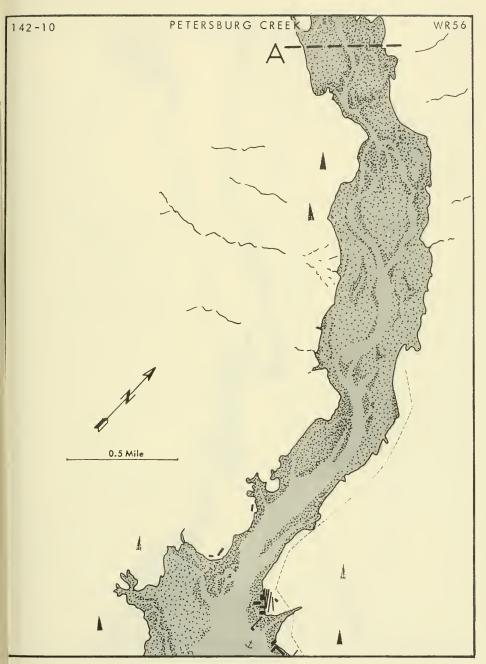
ADF STAT. No.

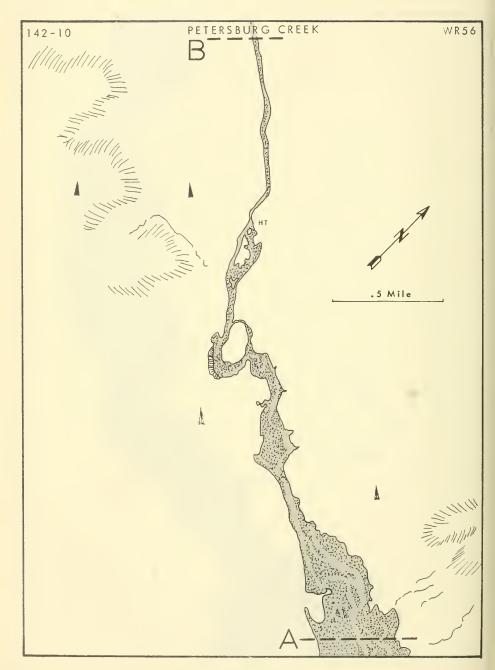
WR 55

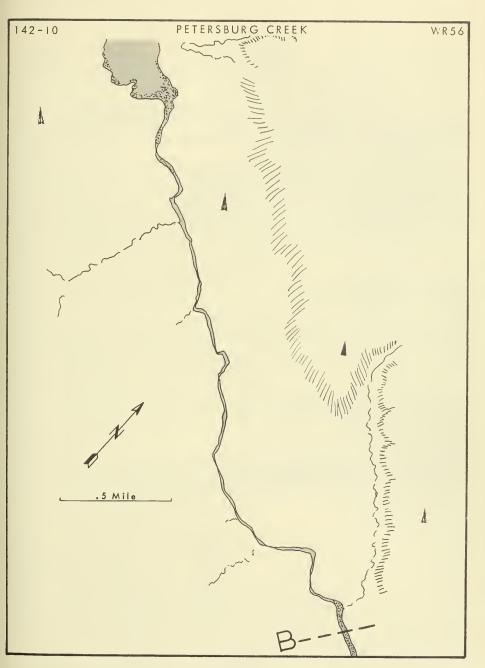
FALL CREEK - Continued Previous No. 78

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1956								
Aug 20	58	31	35	0				
21	120	41	54	0				
22	47	17	19	0				
23	33	16	18	0				
24	25	9	10	0				
25	51	13	8	0				
26	13	11	18	0			52	
27	25	12	7	0				
28	17	1	4	0				
29	15	0	3	0				
30	5	0	2	0				
31	11	5	6	0				
Sept 1	15	3	27	0				
2	32	3	9	0			50	
3	9	1	6	0				
4	4	0	11	0				
5	7	3	14	0				
6	5	2	11	0				
7	11	0	3	0				
8	3	0	4	0				
9-		0	0	0				
Total	1,019	438	587	28				

142-10







ADF STAT. No.

PETERSBURG CREEK

142-10 56°50.2' N. 133°01.6' W.

WR 56 Previous No. 79

WRANGELL, WRANGELL NARROWS, NW. of Bayou Pt.

MAIOR SPECIES Pink.

OTHER SPECIES Chum, coho, red. ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle. Aug. - Sept.

SPAWNING FACILITIES Excellent. STREAM TEMPERATURES Normal range. Observed temperatures: 52° F., 9/5/52; 48.5° F.,

9/16/52; 55.5° F., 9/4/53; 52° F., 9/11/53. VALLEY DESCRIPTION Glacial origin.

DRAINAGE 36 square miles (polar planimeter). Drains Petersburg Lake, about 3.5 miles in length and 0.5 mile wide. The stream is fed by snowmelt and surface runoff.

STREAM MOUTH IDENTIFICATION Enters the N. end of the Wrangell Narrows opposite the town of Petersburg. A long, grass-bordered tidal flat is found at the mouth.

ANCHORAGE Boats may moor or anchor in the harbor at Petersburg.

TRAILS AND SURVEY ROUTES A forest service trail follows the left bank up to the lake. The intertidal area is very long and a survey should begin on a floodtide to enable boats to pass through this zone. Stream margins are brushy, but at normal water levels the stream can be waded.

INTERTIDAL ZONE

LENGTH 4.5 miles.

AVERAGE WIDTH/DEPTH 200'/6".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Gravel with sand in the lower part.

LOW TIDE LOCATION

HIGH TIDE LOCATION Above cabins - "mud banks".

SCHOOLING AREAS Some deep areas occur throughout.

SPAWNING AREAS The upper 2 miles offer excellent spawning facilities. The lower reaches have not been adequately surveyed.

GENERAL NOTES In this zone the stream splits and rejoins many times. Numerous grassy places.

UPSTREAM

LENGTH ACCESSIBLE 4 miles to lake.

AVERAGE WIDTH/DEPTH 501/101.

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Gravel and sand, shale boulders 4 miles upstream.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES One tributary flows from W. near Lake outlet.

SCHOOLING AREAS A few deep holes and resting areas.

SPAWNING AREAS Almost a continuous riffle area with excellent spawning facilities.

GENERAL NOTES Fair stream for aerial survey. Water has slight muskeg color during normal flow.

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SUR VEYED Miles	Ву	PIN Live	K Dead	CHU Live	JM Dead	OTHER SPECIES Live	REMARKS
1950		FWS			3,000		4,000 reds	
Sept 17 1951		1 113			3,000		4,000 1843	
July 24	A 8.0	FWS	1,000		2,000			Fish around estuory
Aug 25	A 6.0	FRI						Present in pools, some spawning
1952	007	ETD.T	2 100	1.4	10	0		37' 11'11' 6 ' 1 4 5 1 1 1 1
Sept 5 Sept 16	G 0.7 G 0.7	FRI FRI	3, 100 2, 760	14 83	10	0		Visibility fair to poor Peak of spawning over
Sept 19	G 4.0	FWS	2,000	2,000	0	50	150 dead cohos	real of spanning over
1953			-,	-,				
July 19	G 0.5	FWS	0	0	1,000	0		Fish observed at mouth
Aug 18	G 0.5	FWS	0	0	0	0	40 1	Good seeding
Sept 4	G 0. 7 G 0. 7	FRI FRI	420 210	50 0	20	0	45 cohos	Spawning peak well past Visibility poor
Sept 11 1954	G 0. 7	FIXI	210	U	U	U		Visititity pool
Aug 16	A	FWS	500		15,000			
Aug 24	A 0.5	FRI	2,500	0			Many reds	Some live chums, many dead
Sept 10 1955	A 0.5	FRI	4,900			0		2,000 above marker
June 24	G 0.7	FWS					1,000 reds	At mouth
July 1	G 0. 7	FWS						Few chums
July 6 July 13	G 0. 7 G 0. 7	FW5						Reds still going up creek Many chums on flats
July 15	G 0. 7	FWS	1				2 reds	Some chums
July 16	G 0. 7	FWS	-					Some pinks and chums
July 20	G 0.7	FWS					8 cohos	
July 29	A 0.5	FRI	500					None observed off mouth
Aug 22	A 0.5	FWS						New fish showing
Sept 4 1956	A 0.5	FWS						500 salmon observed, flood condition
Aug 12	G 1.0	FWS	100		100		5 cohos	Pinks and chums present
Aug 18 Aug 27	A length A 0.5	FRI	>10,000	0	0	0		Fresh
Sept 2	A 0.5	FRI	12,000	0	0	0		5,000-10,000 pinks and
Sept 9	A 0.5	FRI	20,000			0		cohos at mouth Few dead pinks, some live
			·			Ť		chums
Sept 12 1957	A to lak		15,000					
July 9-1		FWS	96 3		371 500			
July 16-2 July 24	G 1. 5	FWS	3		2,000			
July 24	G 2.5	FWS			2,000			
July 29	A 0.5	FRI	. 1,000		,		3,000 reds below lake	
July 31	G 3.0	FWS			1,000			
Aug 6	G 2.0	FWS	1,000				. 2 000	
Aug 7	A 0.5	FRI	2,000				>2,000 reds	

	SUR VEYED		PIN	K	СНГ	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1957								
1957 Aug 9	G 2, 0	FWS			2,000			
Aug 20	A lake	FWS			2,000			7,500 fish, 500 dead
Aug 23	G 2. 5	FWS	200		300			7,500 Hsh, 550 dedd
Aug 26	A 0.5	FRI	500		500			
Sept 10	A 0.5	FRI	1,000					
Season		FWS	5,000		20,000		30,000 reds	
							3,000 cohos	
1958		771.10						
July 17	G 3.5	FWS			150			
Aug 11	A 0.5 G 3.0	FRI FWS	3,000					None observed
Aug 14 Aug 26	A 0. 5	FRI	3,000					No salmon observed
Aug 27	G 4.5	FWS	600					ivo satilloli observed
Aug 29	A to lake	FWS	1,500		400			
Sept 8	A 0.5	FRI	1,500					Some chum
Sept10	A to lake	FWS	1,200		200			
Season		FWS	3,000		400			Estimate
1959								
July 18	G dam	FWS			100			
July 22	A	FWS			10		250 reds	
Aug 2	G barn	FWS FWS	2		300			
Aug 9 Aug 12	G bank G lake	FWS	200 6,750		750			1 000 :
Aug 12	Gitake	1. 44.2	0,730		/30			1,000 in school above begver dam
1960								bedyer ddir
June23	A 4.0	ADF						No fish observed
July 21	A 4.0	ADF						Fish present. Water dark
July 30	G	ADF	300					Water too dark for
								estimate
Aug 7	G	ADF	5					Water too dark for
1061								estimate
1961 July 23	A 4.0	ADF	1,000	0	0	0		
July 26	A 4. 0	ADF	50	0	0	0		8,000 pinks off mouth
Aug 1	G		10,000	0	0	0		3,000 in intertidal zone
Aug 20	A 4.0		25,000	0	0	0	150 reds	Many carcasses
1962			,					,
July 31	A length	ADF	2,000					
Aug 1	A length							Pinks present
Aug 11	G length	ADF	3,000				200 cohos	
1963	611	ADE	0 200				10	705 1 1
Aug 31	G lake	ADF	2,300		6		10 reds	735 dead

OHMER CREEK

ADF STAT. No. WR S7 Previous No. 80

AVERAGE WIDTH/DEPTH 25'/S".

56°44.1' N. 133°12.7' W.

142-10

WRANGELL, DUNCAN CANAL, OHMER SLOUGH, Head.

MAJOR SPECIES Pink, coho. OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle. Aug. -Sept.

SPAWNING FACILITIES Very limited.

STREAM TEMPERATURES Normal range. Observed temperatures: 51° F., 9/10/49; 51° 4., 9/26/49.

VALLEY DESCRIPTION A narrow valley.

DRAINAGE 18 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Extensive grass flats are found at the mouth.

ANCHORAGE Most of the inshore waters in Duncan Canal are foul. Anchorage may be had in Little Duncan Bay, but travel in other areas is unsafe without local knowledge. Temporary anchorage is found just S. of the slough.

TRAILS AND SURVEY ROUTES When surveying at low tide, leave the skiff on the beach S. of of the mouth. Wadeable in only a few places.

AERIAL SURVEY NOTES Muskeg-colored water makes survey difficult.

INTERTIDAL ZONE

LENGTH 1 mile. AVERAGE WIDTH/DEPTH 30'/S".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Fine gravel and larger rock.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS SPAWNING AREAS One-half mile of fine gravel appearing to be well suited for spawning is found at the upper end of this zone.

GENERAL NOTES

HPSTREAM

LENGTH ACCESSIBLE 2.4 miles.

GRADIENT AND VELOCITIES Gradual.

BOTTOM Gravel, small rock, bedrock, and sand.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS The gravel areas are limited between the sections of bedrock and large rock. Only one good riffle occurs in the first quarter mile.

GENERAL NOTES

ADF STAT. No. WR 57 Previous No. 80

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by C; aerial surveys by A]

5	UR VEYE	D	PIN	K	СН	JM	OTHER SPECIES	REMARKS
Date	Live	Ву	Live	Dead	Live		Live	
		- /						
1949								
Sept 10	G 0.2	FRI	250	45	1	8		
Sept 26	G 0.2	FRI	8	6	0	0		Run over, surveys too late
1951								
Aug 29	1.5	FWS	1,136		137			
1955								
Aug 10-24		FWS	59					
Aug 17	A 1.5	FWS						No salmon observed
Sept 4	A 1.5	FWS						None observed
1956	4 0 7	E2110						
Aug 21 1957	A 0.7	FWS						None observed
1957 Aug 20	A 2.0	FWS						None observed
1958	A 2. U	rvvs						None observed
Aug 11	A 0. 2	FWS						None observed
Sept 9	A 0. 5	FWS						None observed
1959	21 0. 5	1 113						None observed
July 18	G	FWS					2 cohos	Tidal zone
July 25	G	FWS					5 cohos	Tidal zone
Aug 10	G	FWS					20 cohos	Tidal zone
Aug 26	G	FWS					20 cohos	Tidal zone
1960								
	No surv	eys						
1960		,						
	No surve	eys						

ADF STAT. No. WR 58

142-10 DUNCAN CREEK

\$6°45.8' N. 133°14.8' W.

Previous No. 81

WRANGELL. DUNCAN CANAL. 2.5 miles NW. of Ohmer Slough

MAJOR SPECIES Pink, chum. ESCAPEMENT TIMING Early. Aug. OTHER SPECIES

ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 401/24".

AVERAGE WIDTH/DEPTH 301/18".

SPAWNING FACILITIES Not great but size of stream is good.

STREAM TEMPERATURES

VALLEY DESCRIPTION Steep-sided.

DRAINAGE 18.1 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION A mudflat extends for 0.25 mile from the mouth.

ANCHORAGE Anchor just S. of island opposite Indian Pt.

TRAILS AND SURVEY ROUTES Stream has only one serious falls which is passable on left bank going downstream.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES Moderate. BOTTOM First 0. 25 mile bedrock and rapids. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS

SPAWNING AREAS Fair.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1.3 miles. GRADIENT AND VELOCITIES Slow. BOTTOM Mostly boulders and bedrock. MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS

SPAWNING AREAS Extensive spawning 1. S miles upstream.

GENERAL NOTES Stream mostly pools connected by short riffles.

Previous No. 81

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SUR VEYER)	PIN	K	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951	015	FILE	1 400	108	89	87		
Aug 29 1953	G 1.5	FWS	1,400	108	09	07		
Season		FWS						No salmon observed
1954								
Aug 24	G 1.5	FWS	8		59			
1955		F71.10						No salmon observed
Aug 24 1956		FWS						No samon ooserved
Aug 21	A 0. 7	FWS						No salmon observed
1957								
Au g 20	A 2.0	FWS						No salmon observed
1958								
Aug 20	A 0.5	FWS						No salmon observed
Sept 9	A 0.5	FWS						No salmon observed
1959								m
July 10	G	FWS					12 cohos	Tidal zone
July 21	G	FWS					18 cohos	Tidal zone
July 29	G	FWS					30 cohos	Tidal zone
Aug 10	G 0.5	FWS					40 cohos	
Aug 18	G 0.5	FWS					50 cohos	
1960								
	No surv	eys						
1961								
	No surv	eys						

ADF STAT. No. WR 59 Previous No. 83

142-10 56°50.7' N. 133°21.9' W.

WRANGELL, DUNCAN CANAL, TOWERS BAY, Head.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES Excellent 1.93 miles.
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 20.5 square miles (polar planimeter).

OTHER SPECIES Coho . ESCAPEMENT MAGNITUDE

STREAM MOUTH IDENTIFICATION Huge tideflat at entrance.
ANCHORAGE

TRAILS AND SURVEY ROUTES Banks difficult to hike because of heavy brush and steep contour.

AERIAL SURVEY NOTES Aerial survey reveals good spawning area above falls. Two falls—first passable and second impassable.

INTERTIDAL ZONE

LENGTH AVERAGE
GRADIENT AND VELOCITIES Moderate.
BOTTOM Good gravel in first mile.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES First mile with low banks and many gravel bars.

AVERAGE WIDTH/DEPTH 701/10".

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Boulders on bedrock.
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 601/2".

Previous No. 83

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SUR VEYED Miles	Ву	PINI Live	₹ Dead	CHU Live	M Dead	OTHER SPECIES	REMARKS
Date	Iviites	Бу	Live	Dedd	LIVE	Deda	Dive	
1947								
Jun 12 1954	A 2.0	FWS					Many cohos	Below falls
Aug 16		FWS			4,000	800		
1955								
Aug 17 1986	A length	FWS						No salmon observed
Sept 13	A 2.0	FWS	12					
1957								
Aug 20 1958	A 2.0	FWS						2,000 fish in stream
Aug 11	A 1.0	FWS						No salmon observed
1959								N 1 -11
Aug 11	A 1.0	FWS						No salmon observed
Aug 21 1960	A	FWS						No salmon observed
_500	No surve	vs						
1961		,						
	No surve	ys						

ADF STAT. WR 60 Previous No. 84

142-10 56°45.7' N. 133°20.8' W.

WRANGELL, DUNCAN CANAL, 3. S miles NW. of Indian Pt.

MAJOR SPECIES Coho.
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 24.5 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION Tideflats.
ANCHORAGE N. of Indian Pt.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 301/8".

AVERAGE WIDTH/DEPTH 801/6".

LENGTH
GRADIENT AND VELOCITIES Gentle.
BOTTOM Gravel, sand, clay, and silt.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS Little, if any, spawning facilities.
GENERAL NOTES Continuous riffles with occasional pool.

UPSTREAM

LENGTH ACCESSIBLE 4.6 miles.
GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel--some boulders.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS Stream appears to have go

SPAWNING AREAS Stream appears to have good spawning riffles.

GENERAL NOTES A wide stream with gradient flow. There are no impassable falls.

195

142-10

[Counts made by ground surveys are designated by C; aerial surveys by A]

	SURVEYED)	PIN	ľK	CHUM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	
1953							
Sept 13	G 0.7	FR1	0	0			Few live chum, many dead Exploratory survey. Stream flooding
Season 1954		FWS	5,000				nooding
Aug 16 1955		FWS	1,000				
Sept 4 1956	A 1.5	FWS					No salmon observed
Aug 21	A 1.0	FWS					7S-100 seen in upper intertidal zone
Sept 12 1957	A 2.0	FWS					No salmon observed
Aug 20 1958	A falls	FWS					No salmon observed
Aug 11	A 1.0	FWS					No salmon observed
Sept 9 1959	A 0.5	FWS					No salmon observed
Aug 11 1960	A 1. U	FWS					No salmon observed
1961	No surve	eys					
	No surve	eys					

ADF STAT. No.

142-10 CASTLE RIVER

56°40.1' N. 133°15.7' W.

WR 61 Previous No. 85

WRANGELL, DUNCAN CANAL, 3. S miles W. of N. tip of Big Castle I.

MAJOR SPECIES Pink, coho.

OTHER SPECIES Chum.

AVERAGE WIDTH/DEPTH 60'/3"-12".

AVERAGE WIDTH/DEPTH 1001/2"-12".

ESCAPEMENT TIMING Middle. Aug. - Sept. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Very limited in first half mile.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Wide, flat muskeg valley.

DRAINAGE 25 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters the head of the bay behind Costle Islands on the N. side of the large tideflat.

ANCHORAGE Anchor in the lee of Castle Islands.

TRAILS AND SURVEY ROUTES This is a hard stream to survey without stranding the skiff. A maintained trail follows the right bank from the high tidemark. Shelter cobin at high tidemark.

AERIAL SURVEY NOTES Almost always muskeg colored; impossible to survey.

INTERTIDAL ZONE

LENGTH 1.5 miles.
GRADIENT AND VELOCITIES Moderate.
BOTTOM Mostly small gravel.
LOW TIDE LOCATION Extensive flots.
HIGH TIDE LOCATION Falls; shelter cabin.
SCHOOLING AREAS Below falls.
SPAWNING AREAS Very few.
GENERAL NOTES

UPSTREAM

GRADIENT AND VELOCITIES Very gentle.
BOTTOM Sand and fine gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES

SCHOOLING AREAS Many pools.

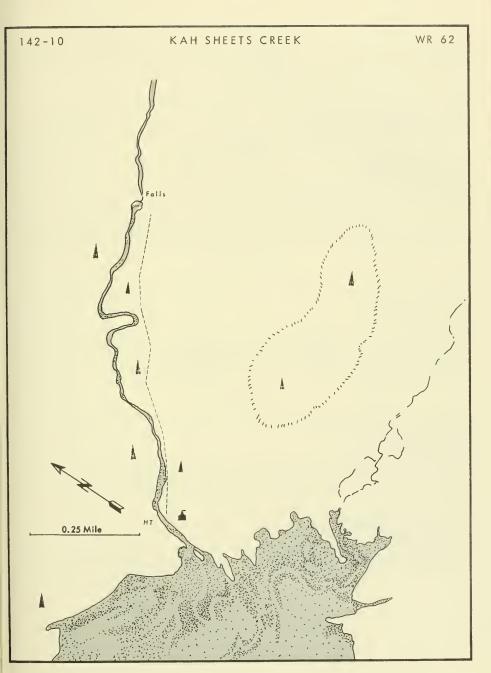
LENGTH ACCESSIBLE

SPAWNING AREAS Gravel riffles throughout.

GENERAL NOTES A large river which has a bedrock rapids for the first 500 yards. Cohos appear to be major species in recent years. Good surveys are lacking due to aerial survey conditions.

[Counts made by ground surveys are designated by G; derial surveys by A]

	SURVEYED		PIN	PINK CHU			OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949		En t	1.0	1.1		^		
Sept 10	G 0. S	FRI	18	11	3	0		
1981	1 0	FWS	12S		\$8			
Aug 28 19 5 3	1.5	LVVS	123		30			
July 30	A 1.5	FWS						No fish observed
Sept 13	G 0. S	FRI	0	0	0	0		Few dead chum. Explor-
1								atory survey. Stream
								flooding
1954								
Aug 10		FWS			300			Intertidal
Aug 16	G falls	FWS	1,000		8,000		1,000 cohos	
Aug 16	A	FWS	0.000		10,000			
Aug 20	A 4.0	FWS FRI	2,000	0	8,000			Some live chum
Aug 24 Aug 25	mouth	FWS	U	U			S,000 cohos	some tive chum
Season	шошш	FWS	2,000				3,000 CONO	
1955		1 110	2,000					
Aug 17	A length	FWS						No fish observed
Aug 24	A 2.0	FWS						No fish observed
Sept 22	A 2.0	FWS						No fish observed
1956								
Aug 16	G	FWS						S,000 off mouth
Sept 12	A 0.8	FWS	300					
1957	G 1 0	23446			20			
Aug 4	G 1.0 A 10.0	FWS FWS			25			32,000 in stream
Aug 20	A 10.0	L W 2						S00 dead
1958								ooo acaa
Aug 9	G 1.0	FWS						Schools at mouth
Sept 9	A 2.0	FWS						400 salmon in stream
1989								
July 23	G to falls	FWS			2			
July 30	G to falls	FWS			3			
Aug 2	G to falls	FWS			8			
Aug 9	G to falls	FWS FWS			150 200			
Aug 10 Aug 15	G to falls	FWS			50			
Aug 19	G to falls	FWS			25			
Aug 21	A	FWS			23			No salmon observed
Aug 25	G to falls				100			
1960								
Aug 19	A	ADF						Too dark for estimating
1961								
Aug 20	A 2.0	ADF						No fish observed



ADF STAT. No.

142-10 56°31.8' N. 133°08.6' W. KAH SHEETS CREEK

WR 62 Previous No. 86

WRANGELL, SUMNER STRAIT, KAH SHEETS BAY, Head-

MAIOR SPECIES Pink.

OTHER SPECIES Chum, coho, red-

ESCAPEMENT TIMING Middle. Aug. -Sept.

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. Observed temperatures: 62°F., 8/12/50; S6°F., 9/8/50; S3°F., 9/23/51; 49°F., 10/3/51; S6.5°F., 8/15/52; S8°F., 8/24/52; S1°F., 9/6/S2; S1°F., 9/18/S2; S8°F., 8/14/S3; S6°F., 9/5/S3; S2.5°F., 9/13/S3.

VALLEY DESCRIPTION The stream winds through a bedrock canyon, heavily wooded along the stream.

A few soft musked areas.

DRAINAGE 18 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters the NW. corner of the bay. Heavily wooded near the mouth. Grass flats can be seen on both sides of the mouth.

ANCHORAGE Small craft may anchor in midchannel off the FWS stream guard camp which is on the N. end of the island nearest the mainland at the bay entrance. Care must be taken in entering.

TRAILS AND SURVEY ROUTES If unfamiliar with the bay, go upstream at or near high tide because the bay dries almost entirely at low water. A trail follows the left bank. Wadeable at most water levels.

AERIAL SURVEY NOTES Water usually musked colored.

INTERTIDAL ZONE

LENGTH 1 mile.

AVERAGE WIDTH/DEPTH 60'/10".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Clean gravel.
LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A large pool is the main schooling area lying a short distance below the high tide mark and along the wooded point on the W. side of the stream.

 ${\tt SPAWNING} \ \ \, {\tt AREAS} \ \ \, {\tt Spawning} \ \, {\tt occurs} \ \, {\tt throughout} \ \, {\tt the} \ \, {\tt upper} \ \, {\tt half} \ \, {\tt of} \ \, {\tt this} \ \, {\tt zone}. \ \, {\tt The} \ \, {\tt upper} \ \, {\tt 200} \ \, {\tt yards} \ \, {\tt furnishes} \ \, {\tt an} \ \, {\tt extensive} \ \, {\tt spawning} \ \, {\tt orea} \ \, {\tt that} \ \, {\tt is} \ \, {\tt heavily} \ \, {\tt used} \ \, {\tt by} \ \, {\tt both} \ \, {\tt pinks} \ \, {\tt and} \ \, {\tt chums}.$

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2.3 miles to lake . AVERAGE WIDTH/DEPTH 25'/8".

GRADIENT AND VELOCITIES Moderate to steep.

BOTTOM Clean gravel and bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A 20' falls three-fourths of a mile upstream is a block to pinks and chums. Cohos and reds ascend with some difficulty. About 0.2 mile above first falls, another falls is possible barrier at high water.

TRIBUTARIES One-half mile upstream the stream splits into numerous channels, but rejoins further upstream.

SCHOOLING AREAS The major schooling area is the pool below the falls. Smaller pools are scattered through the area below.

SPAWNING AREAS Spawning areas are limited by bedrock outcrops. The best area is found in the first ISO yards above the intertidal zone.

GENERAL NOTES There is a good cabin with bunks just behind the edge of the timber on the E. side of the mouth. This marks the beginning of the trail. Cabin also at end of trail on lake shore. Skiff available also. Preliminary engineering survey of two falls completed in 1963 by Gil Tiemer.

142-10

WR 62 Previous No. 86

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SUR VEYED		PINK		СНИМ		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
40.40								
1949	C 0 7	CD I	7 000	0.0	D 200	401		17
Sept 9	G 0. 7	FRI	7,900	82	2, 300	481		Very good escapement
Sept2S 19S0	G 0.7	FRI	8,900	824	406	162		Very good escapement
Jul 8		FWS					3,500 reds	
Sept 8		FWS	411		4,300		3,000 1003	
1951			***		1,000			
Aug 16		FWS			300			4,500 at mouth
Aug 31	1.0 FW	S-FRI	14,000		500		S cohos, 2 reds	
Sept 13	G 0.7	FRI	13,300	0	4,700	0		1 dead red. Stream high
Sept23	G 0.7	FRI	11,700	600	890		SO cohos	1 dead red. 95% spawning
Oct 3	G 0.7	FRI	S, S00		80			Many hundred dead
1952								
Aug 1S	G 0.7	FRI		0	0	0	SSO reds	Some live pinks. 100 dead reds
Aug 24	G 0.7	FRI	1,100	1	3, 400	70	Few cohos	Some dead cohos
Sept 9	G 0. 7	FRI FRI	400 660	6	1,500 540	72 203		Visibility poor
Sept 18 1983	G 0.7	rkı	000	210	540	203		Spawning peak past
Aug 14	G 1.0	FRI	0	0	0	0	2,000-5,000 reds	
Sept S	G 0. 7	FRI	180	0	2,880	205	30 cohos, 2 reds	
Sept 13		FRI	1	0	3,800	119	1 reds	3S dead reds. Stream high
1954					,			The state of the s
Aug 24	A 0.7	FRI	1,300	0	1,300	0		Cohos and reds present
Sept 7	A 0.7	FRI	250	0	2, 100			Some dead chums. Visi-
								bility poor
1955	4.0.7	THATC	0	0	0	0		1 6'-1 1 1-
Aug 1S	A 0.7 A 0.7	FWS FWS	0	0	0	0		1 fish at rapids
Aug 17 Aug 19	A 0.7	FRI	>100	U	U	U		Flooded. Poor visibility
Aug 22	mark	FWS	1,000		>300			
Aug 24	A 2. 0	FWS	0	0	0	0		No salmon observed
Aug 26	A 0. 7	FRI	3,000	0	Ü	Ü		Chums, cohos, reds present
Sept S	A 0. 7	FRI	>5,000	0				Cohos and reds present
Sept 6	A length	FWS	5,000		1,000		S00 cohos	·
Sept 7	G 1. 2	FWS	500		1,800		100 reds	
Sept 1S	G 2.5	ADF	1,500		400			
1956								
Aug 21	A to lake	FWS						200 schooled in tide
								channels
Aug 26	A 0. 7	FRI	3,000	0	0	0		None observed at mouth
Sept 4	A length	FWS	11 000					Pinks and chums present
Sept 7	A mark	FRI	11,000					None observed at mouth Some dead pinks
Sept 17	A 0.7 G tidal zone	FRI	9,000		12,400		15,500 reds	Some dead pinks
Jeason	and bay	rws	10, 200		12,400		12,700 cohos	
	and bay						12, 700 conto	

	SURVEYED		PIN		СН		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1957								
July 1	G falls	FWS					380 reds	
July 9	G 0.2	FWS					3SO reds	
July 19	G 0. 2	FWS					1,000 reds	In bay
Aug 1	G to falls	FWS					200 reds	
Aug S	G to falls	FWS					100 reds	
Aug 14	G 0.5	FWS	20		2			
Aug 17	G falls	FWS	SO		50		10 cohos	
Aug 20	A lake	FWS						4,800 in stream, 500
							70 1 10 1	at mouth
Aug 21	G 1.0	FWS	300		550		50 cohos, 10 reds	
Aug 23	G 0. S	FWS	350		750		200 cohos, 30 reds	
Aug 24	G 1.5	FWS	450		6,000		SOO cohos 2SO cohos	
Aug 25	G 1.0	FWS	300		4,000 >200		250 conos	
Aug 2S	A mkr G 2. S	FRI FWS	1,000 S00		7,000		20,000 cohos	
Aug 26 Aug 27	G 0.5	FWS	250		2,000		20,000 00100	
Aug 28	G 0. 7	FWS	280	74	750			Coho above falls
Aug 28	G falls	1 113	200	, .	, , ,			Estimated 20,000 coho
Sept 1	G 1. 2 FV	NS-FR1	15		600			,
Sept 2	Amkr	FRI	700		1,100			
Sept 18	G 0.5 F	NS-FRI	20		600			
Season	G length	FWS					1,000 reds	
1958								
July 28	G 1.5	FWS			800		6 reds	
Aug 11	G 0.1	FWS			400			
Aug 17	G lst falls	FWS			500			
Aug 25	A 0.7	FWS	0		200			None observed off mouth
Aug 28	G lst falls	FWS	0.10		10,000	70		
Aug 28	G to falls	FRI	840		950	50		
Sept 2	A lake	FWS	200		5,000	250 200	200 cohos, 25 reds	
Sept 14	G 1.5	FWS	1,100	0	100	200	200 Collos, 25 Teas	Some dead pinks
Sept 17	A 0.7 A lake	FWS FWS	500	U	4,000	U		Joine dedd pinks
Sept 18 1989	Alake	F W 3			4,000			
July 1	G 0.5	FWS						No salmon observed
July 21	G mouth	FWS						Two schools on grass flats
July 27	G to falls	FWS			3		1,000 reds	
Aug 3	G up falls	FWS						
Aug 7	G flats	FWS						Small schools in riffles
Aug 10	G 0.5	FWS			4			
Aug 16	G to falls	FWS					650 reds and col	nos
Aug 18	G 0. 2	FWS	6		600			
Aug 21	A	FWS	1,500					
1960				-		0		Co. II and to make
June 4	G 0.7	ADF	0	0	0	0		Steelhead in pools
July 31	A 2.3	ADF	6					No fish observed Jumps in lake
Aug 19	A 2. 3	ADF	few					30 chums at mouth
Aug 24	A 0.3	ADF						Jo chans at mouth

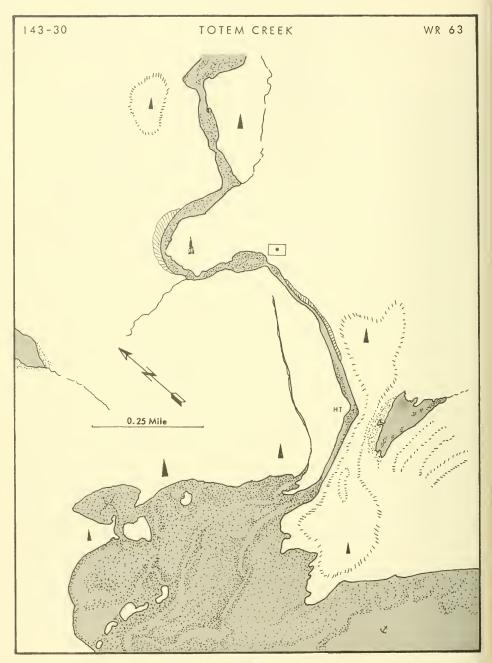
ADF STAT. No. WR 62

142-10

WR 62 KAH SHEETS CREEK - Continued Previous No. 86

ESCAPEMENT RECORD

	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Mile	By	Live	Dead	Live	Dead	Live	
1960								
Sept 1	G 0.7	ADF	25	0	few	0	75 cohos	150 cohos at mouth
Sept 12	A 2.3	ADF	few	0	200	0		
1961								
July 4	A 2.3	ADF						1 jump off mouth, possibly red
Aug 20 1962	A 2.3	ADF	1,000					400 fish in intertidal zone
July 26	A 0.5	ADF						200 in intertidal zone
Aug 1	A 1.0	ADF						No fish observed
Aug 29 1963	A	ADF						5,000 in intertidal zone
Aug 22	G lake to falls	ADF	50		150		2 reds, 300 cohos	4,000 in intertidal zone



ADF STAT. No. WR 63

Previous No. 88

TOTEM CREEK

143-10 56° 29.8' N. 133° 23' W.

MAIOR SPECIES Pink.

56° 29.8' N. 133° 23' W.

OTHER SPECIES Chum, coho-ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle. Aug. -Sept.

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. Observed temperatures: 50°F., 9/25/49; 60°F., 8/11/50; 42.5°F., 9/30/50; 54°F., 8/14/51; 56°F., 8/24/51; 52°F., 9/23/51; 61°F., 8/14/52; 52°F., 8/25/52, 49°F., 9/8/52; 51°F., 9/18/52; 54°F., 8/15/53; 55°F., 9/5/53.

VALLEY DESCRIPTION

DRAINAGE 28 square miles (polar planimeter).

WRANGELL, SUMNER STRAIT, TOTEM BAY, 3 miles E. of head.

STREAM MOUTH IDENTIFICATION Enters Totem Bay on the W. side of a sandspit near the middle of the bay. The mouth is a prominent cut in the beach.

ANCHORAGE The bay affords protection from all except S. winds. Favor the E. shore when entering. TRAILS AND SURVEY ROUTES Long gravel bars follow the stream in most areas making travel fairly easy. Surveyors may hike over the sandspit near its middle and survey the intertidal zone on way down. The skiff should be pulled up on the beach E. of the mouth.

AERIAL SURVEY NOTES Appears to be open enough in most areas for satisfactory aerial observation.

INTERTIDAL ZONE

LENGTH 0.8 mile.

AVERAGE WIDTH/DEPTH 60'-75'/10"-16".

AVERAGE WIDTH/DEPTH 301/10".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Clean gravel over entire area.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Two large pools in the upper 200 yards and a deep hole opposite the tip of the spit are the main schooling areas.

SPAWNING AREAS The gravel bottom in the upper half is extensively used by both pink and chum salmon. The bottom appears to be suited for spawning between the lower pool and the upper pools.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1.5 miles.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel and broken rock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES None reported.

SCHOOLING AREAS Holes are interspersed throughout the distance surveyed.

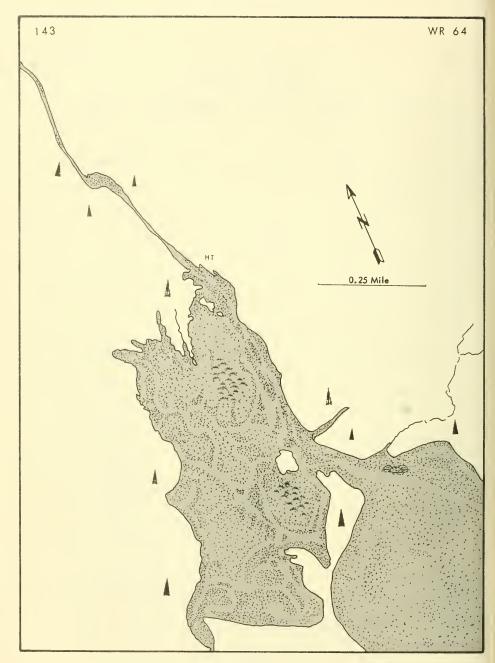
SPAWNING AREAS Spawning takes place in all riffle areas. Some areas of large broken rock and bedrock occur in the lower half mile.

GENERAL NOTES

[Counts made by ground surveys are designated by G; derial surveys by A]

	SUR VEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
		- /						
1949								
Aug 11	G 1.0	FRI	3,025	0	25	0		
Aug 22		FWS	1,422		59			
Sept 9	G 1.2	FRI	17, 800	231	53	92		
Sept 25	G 1.0	FRI	9,800	2, 100	0	1		Good escapement
1950								
Aug 11	G 1.0	FRI	372	0	82	0		
Sept 7	G 1.0	FRI	1,420	2	46	0		
Sept 30	G 1.0	FRI	17	9	0	0		
1951								
Aug 14	G 1.5	FRI	500	3	0	0		300 in intertidal zone
Aug 18-								
Sept 23	1.5	FWS	19,000		1,000		11 cohos, 2 reds	
Aug 24	G 1.0	FRI	24,000	3	200	6		
Sept 23	G 1.5	FRI	6,900		8	0	2 cohos	All spawning. Peak past
1952								
Aug 6	1.0	FW5						100 in stream, 400 at
_								mouth
Aug 14	G 1.0	FRI	502	0	433	0		Extra Iow water
Aug 25	G 1.0	FRI	1,730	0	550	21		Chum spawning
Sept 8	G 0.2	FRI	610	9	20	6		Stream flooding
Sept 18	G 0.2	FRI	305	12	4	0		Run over. Stream high
1953								
July 30	G 0. 2	FWS						Low water
Aug 15	G 0.5	FRI	0	0	0	0		Extremely high water
Aug 19	G 0. 2	FWS						No fish observed
Sept 5	G 0.2	FRI	70	0	20	0		
Season		FW5	2,000					
1954								
Aug 15	A 0.5	FRI	1,000	0	200	0		AlI intertidaI and fresh
Aug 16	G 1.0	FWS	267		179			
Aug 24	A 0.5	FRI	3,500	0	500	0		Water low. Chums upstream
Aug 24	G 1.5	FWS	702		135			
Aug 25	G 1.7	FWS	1,498		172		52 cohos	
Sept 9	A 0.5	FRI	1,400	0	0	0		High flood
Season		FWS	1,498					
1955								
Aug 19	A 0.5	FRI	>400	0	0	0		17: 11:11:
Aug 26	A 0.5	FRI	>3,000	0	0	0		Visibility poor
Sept 6	A 0.5	FWS	10,000	0	0	0		Some chums and cohos
5ept 15	A 0.5	FRI	>2,500	0	0	0		All spawning
1956								N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Aug 26	A 0.5	FRI	3,000	0	0	0		None observed at mouth
5ept 7	A 0.5	FRI	9,000	>200		0		Some chums present
Sept 10	A	FWS	300			0		None observed at mouth
Sept 17	A 0.5	FRI	12,000	>200	0	0		None observed at mouth

	SUR VEY	ED	PIN	٧K	СН	UM	OTHER SPECIES	REMARKS
Date	Mil	es By	Live	Dead	Live	Dead	Live	
1957								
Aug 25	A 0. S	FRI	500	0	100			Several hundred above
11119				-				marker
Aug 29	G 0.5	FWS	750	100	300	100		None observed off mouth
Aug 30	G 1.5	FWS	1,450		150			
Sept 2	A 0. S G 0. S	FRI FRI	300 9		600			
Sept 2 Sept 13	G 0.3	FWS-FR		0	0	0		Stream too low for fish
1958	0.0.5				Ŭ	Ŭ		Stream too low for fish
Aug 16	G 1.0	FWS	2, 261		132			
Aug 23	G 0.5	FWS	1,277		36			
Aug 25	A 1.0	FWS	600		400			P .
Aug 4-27 Aug 25	G A mark	FWS FWS	2,500		250			Estimate Some live chums
Aug 29	A mark	FRI	1,210	3	70	42		Some live chams
Sept 2	G 2. S	FWS	2,650		68			
Sept 17	A mark		500					Few chum. Poor visibility
Sept 18	A 2.0	FWS	1,000			1,000		
1959	No гесо	- 1-						
1960	No reco	ras						
July 31	A 1.0	ADF						500 fish in intertidal zone
Aug 24	A 0.7	ADF	2,000	0	500	0		Visibility poor
Aug 30	A 0.3	ADF	1,000					Water very dark
1961					0			
Aug 9 Aug 20	A 1.5 A 1.5	ADF ADF	2,000 4,500	0	0	0		1,500 fish in intertidal Stream almost dry
1962	A 1.5	ADI	4,300	O	U	U		Stream atmost dry
July 26	A 1.0	ADF						1SO in intertidal zone
July 30	A 1.0	ADF						1,500 at mouth, 500 in
								intertidal zone
Aug 13	A 2.0 A 1.0	ADF	6,000					300 salmon at mouth
Aug 20	A 1.0	ADF						Few fish in stream, water dark for count
Aug 29	A 2.0	ADF						25,000 mixed fish in
								stream
1963								
Aug 8	A 1.0	ADF	1,800					400 in intertidal zone
Aug 23	G 1.0	ADF	5,300					



ADF STAT. No. WR 64 Previous No. 89

143-10 56°30.2' N. 133°25.8' W.

WRANGELL, SUMNER STRAIT, TOTEM BAY, Head.

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug. - Sept. SPAWNING FACILITIES Good.

OTHER SPECIES Chum, coho. ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Normal range. Observed temperatures: 55 F., 5/30/57; 52° F., 5/23/58. VALLEY DESCRIPTION Wooded with open muskeg areas away from the banks. Mountainous to the W. DRAINAGE 17.5 square miles (polar planimeter). Numerous scattered ponds are found within this

drainage system. Drains a large muskeg area. STREAM MOUTH IDENTIFICATION The mouth is constricted about halfway up the extensive

intertidal zone. A large grass flat is found above the constriction. ANCHORAGE Refer to WR 63.

TRAILS AND SURVEY ROUTES Survey at high tide to avoid walking across the tideflats. Above the constriction the stream flows along the E. side of the grass flat. Easily waded. Fair game

trails.

AFRIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 1.6 miles

AVFRAGE WIDTH/DEPTH 901/12".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Sand and gravel. LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS School in the bay and in a hole at the constriction.

SPAWNING AREAS The upper half has a fine gravel bottom which looks suitable for spawning. Spawning has not been reported to take place here.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 6 miles.

AVERAGE WIDTH/DEPTH 50'/6".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Small gravel and bedrock in certain greas.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES None reported.

SCHOOLING AREAS Very few holes are found in this section of the stream. A few holes have been formed by log jams and offer excellent schooling facilities.

SPAWNING AREAS The lower 1.2 miles is made up of nearly continuous good spawning riffles.

GENERAL NOTES

[Counts made by ground surveys are designated by G; aerial surveys by A]

	· ·							
	SUR VEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1949						_		
Aug 11	G 1.2	FR1	4,515	0	502	0		
1950			10.		2 200		C	
Aug 22		FWS	134		3, 280		5 cohos	
1951								
Aug 18 -		FWS	25,000		1,000		7 cohos	
Sept 7 1952	1.5	LWS	23,000		1,000		7 COHOS	
Aug 6	A 1.0	FWS						4,000 fish, 400 at
Aug 0	A 1.0	1 113						mouth
Aug 28	A 3.0	FWS						<3,000 fish
1953	71 01 0							•
July 30	A 0.7	FWS	0	0	0	0		No fish observed
Aug 17	G 0.5	FWS	2,000	0	3,000	0	500 cohos	
Sept 18	A 0.7	FWS	0	0	0	0		300 salmon observed
Season	A 3.0	FWS	2,000					
1954								
July 28	G 1.5	FW5	45		218			
Aug 14	G 1.0	FWS			1,090			
Aug 15	A 0.7	FRI	5,000	0	0	0		
Aug 16	G 1.0	FW5	2		571		2 0001	
Aug 26	G 1.5	FWS	2,897	0	965	0	2,800 cohos	
Sept 10	A 0.7	FRI	2,500	0	0	0		
1955	A 0.7	FRI	>200	0	1,500	0		
Aug 19 Aug 26	A 0. 7	FR1	>5,000	0	0	0		Visibility poor
Sept 5	A 0.7	FRI	6,000	0	Ü	Ö		Some chum present
Sept 16	A 0. 7	FRI	6,000	0	0	0		Visibility poor
1956			-,					
Aug 15	G 2.0	FWS	375					
Aug 17	G 3.0	FWS	600					
Aug 21	A 1.5	FWS						800-1,000 one quarter
								mile upstream
Aug 26	G 0.7	FRI	2,000	0	0	0		3,000 at mouth
Sept 7	G 4.0	FR1	13,000		0	0		Few dead pinks
Sept 10	A 5.0	FWS						5,000-10,000 pinks
Sept 17	G 0.5	FR1	8,000		0	0		Some dead pinks
1957		PID 4	200		500	0		Pink fresh
Aug 25	A 0.7	FR1	200	150	500	0		Jumps off mouth
Aug 28	G 0.5 G 0.7	FRI FRI	300 1, 100	150	600 500	U		Some dead
Sept 2 Sept 2	G 1.0	FRI	470		350		80 cohos	Some dedd
Sept 4	A 1.5	FW5	3,000		1,000		80 001103	
Sept 13	G 0.5	FRI	300	0	220	0		
1958	0 0.3	11/1	300	· ·	220	J		
July 29	A 2.0	FWS	250					
Aug 17	G 1.0	FWS	1,545		1,039	3		
Aug 23		FWS	1, 225		1,085	6		
Aug 25		FWS	1,000					
Aug 28	G	FRI	1, 240		220			

zone

ADF STAT. No. WR 64 ESCAPEMENT RECORD - Continued Previous No. 89

143-10

	SURVEYED		PIN	١K	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1958								
Aug 29	G 2.0	FWS	4,000		800			
Sept 2	A 2. 0	FWS	1,400		400			
Sept 8	G 0.5	FWS	600			2		
Sept 10	A 2.0	FWS	1,500					
Sept 15	G 2.0	FWS	1,000		80		20 cohos	
Sept 17 1959	A mark	FWS	350					
Aug 1 1960	A 2.0	FWS	50		100			
July 31	A 1.5	ADF						No fish observed
Aug 19	A 2.0	ADF						Fish present
Aug 30	A 1.0	ADF	3,000	0	300	0		Water too dark for estimate
1961	0							
Aug 9	A 2.0	ADF	2,500	0	0	0		2,500 fish in inter- tidal area
Aug 20	A 0.5	ADF	4,000	0	0	0		1,000 fish in inter- tidal area
Aug 25	A length	ADF	many					Stream too dark for
								estimate. Good distri- bution on all riffles
1962								button on all riffles
July 26	A 1.0	ADF						No fish observed
July 30	A 1.0	ADF						1,000 at mouth, 200
Aug 7	A mouth	ADF						in intertidal area Too rough for survey
Aug 13	A 2.0	ADF	1,000					100 rough for sarvey
Aug 20	A 1.0	ADF	-,					Few pinks seen
Aug 29	A 3.0	ADF	31,000					2,000 salmon in intertidal area
1963								intertidat area
Aug 7	A	ADF						6.000:
Aug 9	A 1.0	ADF	2,000					6,000 in intertidal zone 200 at mouth; 5,000 in
	2							intertidal zone
Aug 23	G 1.0	ADF	4,000					200-300 in intertidal

143 56°20.7' N. 133°31.8' W. FLICKER CREEK

WR 96 Previous No. 130

WRANGELL, SUMNER STRAIT, 3.8 miles E. of Point Baker, S. fork.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 8.2 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES Easy travel.
AERIAL SURVEY NOTES

OTHER SPECIES ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM Extensive bedrock.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

ADF STAT. No.

WR 96
FLICKER CREEK Previous No. 130

ESCAPEMENT RECORD

	SUR VEYED		PINK		CHUM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	
1951							
Aug 10 1954	G 1.0	FW5	0	0			No fish observed
Sept 18 19SS	G 1.0	FWS	1		0		
Sept 2 19S6	G 1.5	FWS					No fish observed
Aug 15	A 1.0	FWS					No fish observed
Sept 11 1957	G 0.7	FW5					No fish observed
Aug 15 1958	A 1.0	FW5					No fish observed
Aug 19	A 1.0	FWS					No fish observed
Sept 22 1959	A length	FWS					No fish observed
Aug 21 1960	A	FWS					No fish observed
	No survey	'S					
1961							
	No survey	s					

143 56°20.7' N. 133°31.8' W. ALDER CREEK

WR 97 Previous No. 131

WRANGELL, SUMNER STRAIT, 4.8 miles E. of Point Baker, E. fork.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING Middle. Sept.

OTHER SPECIES
ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle Sept. ESCAPEMENT MAGNI'
SPAWNING FACILITIES

STREAM TEMPERATURES Normal range. Observed temperatures: S6° F., 8/14/53; 46.5° F., 9/10/53. VALLEY DESCRIPTION A wide, generally flat valley running in a SE. direction. Scattered muskeg areas are found throughout.

DRAINAGE 11 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters a tidal area common to it and WR 96. The tideflat narrows a short distance up the intertidal zone and remains this way for 0.6 mile. WR 97 enter the extreme SE. corner of the flat.

ANCHORAGE Point Baker offers good protection near its head, 3.5 miles W. of the creek mouth.

A float has been anchored in this bay in past years and was used as a moorage. A temporary anchorage is found near the point on the left side of the mouth of the creek.

TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.3 mile.
GRADIENT AND VELOCITIES Gentle.
BOTTOM Gravel, slate, and shale.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Excellent spawning gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 201/14".

AVERAGE WIDTH/DEPTH 40'-80'/6"-8".

WR 97 Previous No. 131

ESCAPEMENT RECORD

	SURVEYED	PINK		CHU	IM	OTHER SPECIES	REMARKS	
Date	Miles	$B_{\rm V}$	Live	Dead	Live	Dead	Live	1,21,11,11,12
1951		ĺ						
Aug 10	G 0.7	FWS	1	0	1	0		
Sept 15	G 1. 2	FWS	475	2	4	0		
1953	0 1. 2	1 11 5	4/3	-	7	· ·		
Aug 14	G 1.2	FRI	0	0	0	0		Initial survey
Sept 10	G 0.3	FR1	0	0	0	0		None entering
Sept 15 1954	1. 2	FWS	500		25			J
Season		FWS						No fish observed
1955		1 110						140 11211 ODSELVED
Sept 2	G 1.7	FWS						Count not possible
Sept 8 1956	G 1.0	FWS	600					Water low. Tide out
Aug 15	G 1.0	FWS						No fish observed
Sept 11 1957	G 1.5	FWS	1,200					
Aug 15 1958	A 3.0	FWS						No fish observed
Aug 19	A 1.0	FWS	25					
Sept 9	A 1.0	FWS	150					
Sept22 1959	A length	FWS						No fish observed
Aug 21 1960	A	FWS						No fish observed
1961	No survey	S						
	No survey	s						

BUSTER CREEK

143 56°19.7' N. 133°26.2' W. WR 98 Previous No. 132

WRANGELL, SUMNER STRAIT, 5 miles W. of entrance to Red Bay.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES Good for size of stream.

STREAM TEMPERATURES

VALLEY DESCRIPTION Heavily wooded.

DRAINAGE 11.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Logging area at mouth.

ANCHORAGE Tie skiff to rocky point at stream mouth at low tide.

TRAILS AND SÜRVEY ROUTES Wide gravel bars make easy travel.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 101/14".

LENGTH 0.5 mile.
GRADIENT AND VELOCITIES Moderate.
BOTTOM Rubble.
LOW TIDE LOCATION
HIGH TIDE LOCATION Edge of woods.
SCHOOLING AREAS Large pool at edge of woods.
SPAWNING AREAS Limited.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate.
BOTTOM Excellent gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS Several deep pools.
SPAWNING AREAS
GENERAL NOTES

BUSTER CREEK ADF STAT. No. WR 98
ESCAPEMENT RECORD Previous No. 132

143

	SUR VEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1951								
Aug 10	G 1.0	FW5	0	0	0	0		
Sept 15	G 0.7	FW5	945	3	119	4		
1954								
Sept 18	G 0. 2	FW5	60					
1955								
Sept 8	3 G 1.0	FW5	150					
1956								
Aug 15		FWS						No fish observed
Sept 4		FWS			2			
Sept 1		FWS	1,000		200			
Sept 1		FWS	300					
1957								
Aug 15		FWS						No fish observed
1958								
Aug 19		FWS	25					150 pinks at mouth
Sept 9		FWS	150					100 pinks at mouth
Sept 2		FWS						No live fish, 600 dead
1959								
	No record							
1960								
	No survey	S						
1961								
	No survey	'S						

ADF STAT. No. WR 99 Previous No. 133

143 56°19.6' N. 133°24.7' W.

WRANGELL, SUMNER STRAIT, 4 miles W. of entrance to Red Bay.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 2.5 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE Anchor in cove.
TRAILS AND SURVEY ROUTES Travel easy.
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

ESCAPEMENT MAGNITUDE

OTHER SPECIES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 8'/4".

	SURVEYED		PIN	К	CH	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1951								
Aug 10	G 0.3	FWS	0	0	0	0		
1954								
Aug 19	A 0. 2	FWS						No fish observed
Sept 18	G length	FWS						No fish observed
1955								
Sept 8	G 0.7	FWS	1					
1956								
Sept 4	A 1.0	FWS			2			
Sept 11	G 0.7	FWS	1,000		200			
Sept 11	A 3.0	FWS	300					
1957								
Aug 1S	A 2.0	FWS						No fish observed
1958								
Sept 10	A 0. 2	FWS	25					
1959								
Aug 21	A	FWS						No fish observed
1960								
	No survey	S						
1961								
	No survey	S						

ADF STAT. No. WR 100 Previous No. 134

143 56°16' N. 133°21.3' W.

WRANGELL, SUMNER STRAIT, RED BAY, SW. corner.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Late.

SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES

VALLEY DESCRIPTION Heavily timbered.

DRAINAGE 1.7 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters on common grass flats with WR 101.

ANCHORAGE Good anchorage just inside bay.

TRAILS AND SURVEY ROUTES Stream easily waded.

AERIAL SURVEY NOTES A small stream, brushy, and difficult to survey.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 30'/18".

GRADIENT AND VELOCITIES Moderate to swift.

BOTTOM Excellent grovel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

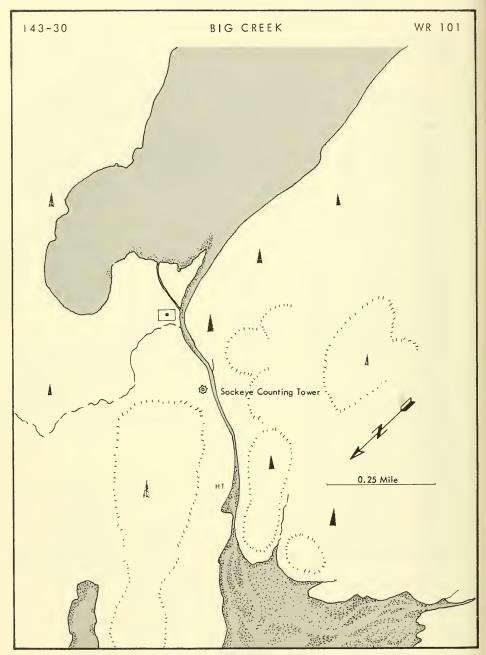
TRIBUTARIES

SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ADF STAT. No. WR 100 Previous No. 134

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date Miles By Live Dead Live Dead Live		SURVEYED		PIN	к	СНИ	M	OTHER SPECIES	REMARKS
Sept 3	Date	Miles	By	Live	Dead	Live	Dead	Live	
Sept 3									
1951 Sept 14 G 1. 0 FWS 223 1 940 276 S cohos			FILLS	0.00		2 000		2 000 1	
Sept 19			FWS	550		3,000		2,000 reas	
Sept 19		C 1 0	EMC	222	1	940	276	Scohoo	
Aug 1				223	7	340	270	3 conos	500 pinks and chums
Aug 1		0.7	1 113						500 pinks and onesis
Sept 8		Α	FWS						No fish, dark water
1954 Aug 12									
Aug 29 G 0. 2 FWS									·
Aug 29 G 0. 2 FWS FWS 150 150 No fish observed	Aug 12	A length	FWS						No fish observed
July 13		G 0. 2	FWS						1,000 pinks off mouth
1936	1988								
Aug S C length FWS 150 400 Aug 14 C length FWS 1,000 1,000 Aug 22 C length FWS 1,300 1,300 Aug 27 C length FWS 1,300 1,300 Aug 27 C length FWS 1,200 2,800 400 cohos Sert 4 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 4 C 1.0 FWS 2,400 4,400 2,500 cohos Sert 11 C 0.5 FWS 30 500 Sert 11 A 1.5 FWS 1,000 Sert 14 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 14 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 14 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 14 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 15 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 16 C 1.0 FWS 2,000 4,000 2,000 cohos Sert 17 C 1.0 FWS 100 100 Sert S C 1.0 FWS 100 100 Sert S C 1.0 FWS 100 100 Sert S C 1.0 FWS 100 100 Aug 1 C 1.0 FWS 100 50 Sert 1 C 1.0 FWS 57 7 Sert 9 A 1.0 FWS 150 50 Sert 20 C flots FWS 150 50 Sert 30 C flots FWS 150 50 Sert 4 C 1.0 FWS 70 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	July 13	G mouth	FWS						No fish observed
Aug 14									
Aug 22 G length									
Aug 24 G length									
Aug 27 G length									
Aug 28 G length FWS 1,200								400 coho-	
Sept 4 G 1.0 FWS 2,000 4,000 2,000 cohos Sept 8 G 1.0 FWS 2,400 4,400 2,500 cohos Sept 11 G 0.5 FWS 30 500 Sept 11 A 1.5 FWS 1,000 Sept 14 G 1.0 FWS 2,000 4,000 2,000 cohos 1957 Aug 5 G 1.0 FWS 400 200 Aug 24 G FWS 25 25 Aug 31 G 1.0 FWS 100 100 Sept 5 G 1.0 FWS 400 200 1958 July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 200 Sept 6 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 57 7 Sept 9 A 1.0 FWS 57 50 Light 1 G 1.0 FWS 50 50 Sept 2 G 1.0 FWS 50 50 Sept 3 G 1.0 FWS 50 50 Sept 3 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Light 1 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Light 1 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 2 G 1.0 ADF 20 FWS 50 50 Sept 3 G 1.0 ADF 20 FWS 50									
Sept 8 G 1.0 FWS 2,400 4,400 2,500 cohos Sept 11 G 0.5 FWS 30 500 Sept 11 A 1.5 FWS 1,000 Sept 14 G 1.0 FWS 2,000 4,000 2,000 cohos 1957 Aug S G 1.0 FWS 400 200 Aug 24 G FWS 25 25 Aug 31 G 1.0 FWS 100 100 Sept 6 G 1.0 FWS 400 200 1958 July 28 G 1.0 FWS 400 200 Aug 1 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 100 Aug 11-24 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 50 50 Sept 20 G flats FWS 1959 Aug 21 A FWS 1960 July 12 G 1.0 ADF Aug 2 A mouth ADF Aug 2 A mouth ADF Sept 2 G 0.5 ADF 500 0 200 0 Fish jumping at mouth									
Sept 11 G 0.5 FWS 30 500 Sept 11 A 1.5 FWS 1,000 2,000 cohos 1957 FWS 2,000 4,000 2,000 cohos 1957 FWS 25 25 Aug 24 G FWS 25 25 Aug 31 G 1.0 FWS 100 100 Sept 5 G 1.0 FWS 100 100 Sept 6 G 1.0 FWS 400 200 1958 July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 100 Aug 11-24 G 1.0 FWS 100 200 Sept 2 G flats FWS 150 50 Sept 3 G flats FWS No fish observed 1959 Aug 21 A FWS You reds 700 reds at mouth Aug 2 A mouth ADF 20 reds Chum jumping at mouth Sept 2 G 0.5								,	
Sept 11 A 1.5 FWS 1,000 2,000 cohos								2,000 00.100	
Sept 14						-			
1957 Aug S G 1.0 FWS 400 200 Aug 24 G FWS 25 25 Aug 31 G 1.0 FWS 100 100 Sept S G 1.0 FWS 100 100 Sept 6 G 1.0 FWS 400 200 1958 July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 100 200 Sept 20 G flats FWS 150 50 Sept 20 G flats FWS 150 50 July 12 G 1.0 ADF 20 FWS 100 July 12 G 1.0 ADF 20 FWS 100 Aug 24 A mouth ADF Sept 2 G 0.5 ADF 500 0 200 0 Fish jumping at mouth 1961	-					4,000		2,000 cohos	
Aug 24 G FWS 25				•		·			
Aug 31	Aug S	G 1.0	FWS	400		200			
Sept S G 1.0 FWS 100 100 Sept 6 G 1.0 FWS 400 200 1958 July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 150 50 Sept 20 G flats FWS 150 50 Sept 20 G flats FWS 150 50 July 12 G 1.0 ADF 20 FWS 150 20 FWS 150 July 12 G 1.0 ADF 20 FWS 150 20 FWS 150 July 12 G 1.0 ADF 20 FWS 150 20 FWS 150 Sept 20 G flats FWS 150 50 50 Chum jumping at mouth 25 FWS 150 50 50 50 50 50 50 50 50 50 50 50 50 5	Aug 24	G	FWS	25		25			
Sept 6 G 1.0 FWS 400 200 1958 July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 150 50 Sept 20 G flats FWS 150 50 July 12 G 1.0 ADF 20 FWS 190 200 July 12 G 1.0 ADF 20 FWS 190 200 July 12 G 1.0 ADF 20 FWS 200 July 12 G 1.0 ADF 20 FWS 200 Aug 24 A mouth ADF 29 reds Chum jumping at mouth 1961 Sept 2 G 0.5 ADF 500 0 200 0 Fish jumping at mouth 1961	Aug 31	G 1.0							
1988 July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 150 50 Sept 20 G flats FWS 1959 No fish observed Aug 21 A FWS Yes No fish observed 1960 1960 Yes 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Chum jumping at mouth Sept 20 G 0.5 ADF S00 0 200 0 Fish jumping at mouth									
July 28 G 1.0 FWS 100 100 Aug 1 G 1.0 FWS 100 100 Aug 11-24 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 57 7 Sept 20 G flats FWS 150 50 Sept 20 G flats FWS No fish observed 1959 Aug 21 A FWS No fish observed July 12 G 1.0 ADF 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Chum jumping at mouth Sept 2 G 0.5 ADF 500 0 0 Fish jumping at mouth 1961		G 1.0	FWS	400		200			
Aug 1 G 1.0 FWS 100 100 Aug 11-24 G 1.0 FWS 100 200 Sept 1 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 150 50 Sept 20 G flats FWS 150 50 Sept 20 G flats FWS 1959 Aug 21 A FWS 1960 July 12 G 1.0 ADF 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF 29 reds Chum jumping at mouth Sept 2 G 0.5 ADF 500 0 200 0 Fish jumping at mouth 1961			******	400		100			
Aug 11-24 G 1. 0 FWS 100 200 Sept 1 G 1. 0 FWS 57 7 Sept 9 A 1. 0 FWS 150 50 Sept 20 G flats FWS 150 50 Aug 21 A FWS 1960 July 12 G 1. 0 ADF 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF 29 reds Chum jumping at mouth Sept 2 G 0. S ADF 500 0 200 0 Fish jumping at mouth 1961									
Sept 1 G 1.0 FWS 57 7 Sept 9 A 1.0 FWS 1S0 50 Sept 20 G flats FWS No fish observed 1959 No fish observed Aug 21 A FWS Voreds 700 reds at mouth Aug 2 A mouth ADF 29 reds Chum jumping at mouth Aug 24 A mouth ADF Chum jumping at mouth Fish jumping at mouth 1961 1961 Test purping at mouth									
Sept 9 A 1.0 FWS 150 50 Sept 20 G flats FWS No fish observed 1959 No fish observed Aug 21 A FWS No fish observed 1960 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF Chum jumping at mouth Sept 2 G 0.5 ADF 500 0 0 Fish jumping at mouth 1961 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Sept 20 In 1959 G flats FWS No fish observed Aug 21 A FWS In 1960 PWS In 1960 No fish observed July 12 G 1.0 ADF Aug 2 A mouth ADF Aug 2 A mouth ADF Aug 24 A mouth ADF Sept 2 G 0.S ADF S00 0 200 0 Fish jumping at mouth Fish jumping at mouth 1961 Chum jumping at mouth Fish jumping Aug Fish jumping									
1959 Aug 21 A FWS 1960 July 12 G 1.0 ADF Aug 2 A mouth ADF Aug 24 A mouth ADF Sept 2 G 0.5 ADF 500 0 200 0 Fish jumping at mouth 1961 1961				130		30			No fish observed
Aug 21 A FWS No fish observed 1960 July 12 G 1. 0 ADF 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF Chum jumping at mouth Sept 2 G 0. S ADF S00 0 0 Fish jumping at mouth 1961		Gildts	1 113						110 11011 00000 100
1960 July 12 G 1.0 ADF 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF Chum jumping at mouth Sept 2 G 0.S ADF S00 0 200 0 Fish jumping at mouth 1961		Α	FWS						No fish observed
July 12 G 1.0 ADF 20 reds 700 reds at mouth Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF Chum jumping at mouth Sept 2 G 0.S ADF S00 0 Fish jumping at mouth 1961									
Aug 2 A mouth ADF 29 reds Aug 24 A mouth ADF Chum jumping at mouth Sept 2 G 0.5 ADF S00 0 200 0 Fish jumping at mouth 1961		G 1.0	ADF					20 reds	700 reds at mouth
Sept 2 G 0.5 ADF S00 0 200 0 Fish jumping at mouth 1961		A mouth	ADF					29 reds	
1961	Aug 24	A mouth	ADF						
		G 0. S	ADF	500	0	200		0	Fish jumping at mouth
Aug 1 A U. 3 ADr No fish observed									No fish shoomed
	Aug 1	A 0. 3	ADF						No fish observed



BIG CREEK

143-30 56°15.8' N. 133°20.4' W. WR 101 Previous No. 135

WRANGELL, SUMNER STRAIT, RED BAY, SW. corner.

MAJOR SPECIFS Pink.

OTHER SPECIES Chum, coho, red-ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle Aug. -Sept.

STREAM TEMPERATURES Normal range. Observed temperatures: 58° F., 9/14/50; 49° F., 10/1/50; 58° F., 9/12/51; SS° F., 9/20/52; 53° F., 9/30/52; 55° F., 9/14/53; 52° F., 9/24/53.

VALLEY DESCRIPTION A short valley between Red Lake and Red Bay.

DRAINAGE 1S square miles (polar planimeter.) Drains Red Lake, which is 2.3 miles long and 0.4 mile wide.

STREAM MOUTH IDENTIFICATION Lies in the SE. corner of the tidal flat in a small bight.

Breaks into many branches in the lower intertidal area.

ANCHORAGE Temporary anchorage is available in the bight W. of Dead Islet. Red Bay is used extensively during fishing season and offers good protection in all weather. For directions on entering, refer to the U.S. Coast Pilot.

TRAILS AND SURVEY ROUTES Easily traveled. Good trails follow either bank. The tributary has brushy margins and numerous downfalls.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.5 mile.

GRADIENT AND VELOCITIES Gentle.

GRADIENT AND VELOCITIES Gentle.

BOTTOM Rock, gravel, and algae.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS This zone offers poor spawning facilities except in the upper 500' where there is a fair spawning area.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.6 mile to lake.

AVERAGE WIDTH/DEPTH 301/6"-12"-

AVERAGE WIDTH/DEPTH 35'-50'/3"-10" .

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Mostly gravel with some silt and bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None

TRIBUTARIES A good-sized tribut rry enters from the W. 0.5 mile above the high tidemark. This tributary offers fair spawning facilities.

SCHOOLING ARFAS Numerous pools are found from the intertidal zone to the lake.

SPAWNING AREAS The entire stream contains good spawning areas. Red salmon spawn in the lake near the outlet; and in 2 small inlet streams.

GENERAL NOTES

ESCAPEMENT RECORD

		•			017	,	amuma apraina	DEL () DEC
D - 4 -	SURVEYED	D	PIN	K Dead	CHI Live	JM Dead	OTHER SPECIES Live	REMARK5
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Aug 30	G0.5	FRI	137	0	7	0		3,000 off mouth
Sept 26	G 0.5	FRI	2, 850	27	9	0	2 reds	·
1950			·					
Sept 14	G 1.0	FRI	445	1	125	0		
Sept 27	G 1.0	FRI	264	1	5	2	116 cohos, 2 reds	
Oct 1	G 1.0	FRI	131	11	0	1	108 cohos	
19 5 1								
Sept 12	G 1.0	FRI	1, 200	0	50	0	15 cohos, 2 reds	10
5ept 24	G 1.0	FRI	2,500	50	220	65	352 cohcs, 2 reds	40 per cent pinks spawning
Oct 3	G0.6	FRI	950	148	20	23	420 cohos	
1952 Sept 20	G0.5	FRI	270	4	1	8	35 cohos	1 dead coho
Sept 20	G0.5	FRI	15	2	1	4	33 CO1105	Pink run over. Stream high
19 53	00.5	11(1	13	-	1	•		Time ran over out and magn
Sept 1	G0.2	FW5			.100	0	50 reds	Few live pinks. Jumpers in bay
Sept 14	G0.5	FRI	20	0	10	1	162 cohos, 8 reds	Stream high
Sept 24	G0.5	FRI	6	1	2	2	25 cohos	Stream flooding
1954								
Sept 8	A0.6	FRI	400	0	0	0		Few at mouth
Sept 17	A 0 • 6	FRI	0	0	0	0		No intertidal fish seen
Sept 18	A 0.5	FRI	100	0	0	0		Salmon near mouth of stream
Sept 21	A 0.6	FRI	100	0	0	0		
1955							50 1	
July 9	G 0 . 5	FW5	0	0	0	0	50 reds	
July 12	G0.5	FWS	0	0	0	0	100 reds 20 reds	
July 21	G0.5 G0.5	FW5 FW5	0	0	0	0	20 reas	First chums noted in stream
July 26 Aug 2	G0.5	FW5	0	0	O	0		Some chums
Aug 30	G0.5	FWS	0	0	200	0		oome oname
Sept 6	G0.5	FWS	0	o	350	0		250 salmon at mouth of stream
Sept 8	G0.5	FW5	100	0	0	0		400 salmon in stream
Sept 16	A 0.5	FRI	>400	0	0	0		
Sept 23	G0.5	FRI	>300	0	0	0		None observed at mouth
1956								
Aug 2	G lake	FW5	50	0	50	0		
Aug 5-		FW5	300	0	300	0		
Aug 12-		FW5	200		50	0	1,300 reds	
Aug 15	G lake	FW5	100	0	205	0	200 reds	
Aug 20	G lake	FWS FRI	95 >100	0	305 0	0		None observed at mouth
Aug 26	A G lake	FWS	100	U	200	U		THORE OBSERVED OF MOUNT
Sept 4 Sept 8	G lake	FW5	200		200			
Sept 11	G lake	FWS	1,800		10			
Sept 14	G lake	FW5	1,000		500		500 cohos	
Sept 23	A	FRI	>200	0	0	0		None observed at mouth
Sept 28	A	FRI	>300		0	0		Many dead pinks. None in bay

No fish observed

Previous No. 135

1963

ADF

SURVEYED PINK CHUM OTHER SPECIES REMARKS Date Miles By Live Dead Live Dead Live 1957 July 20 G to lake FWS 15.000 reds July 24 G to lake FWS 300 100 400 reds 1,600 reds July 25-28 G to lake FWS 300 100 S00 reds July 26 G lakeshore FWS Aug 1-2 G to lake FWS 300 100 Aug 3-14 G to lake FWS 300 100 2,000-3,000 in boy G to lake FWS Aug 15 4,000 in bay Aug 19 G to lake FWS 400 200 Aug 20-31 G to lake FWS 4,000 in bay Aug 23 G lakeshore FWS 2,000 reds Sept 6 G to lake FWS 600 200 3,000-4,000 in bay Sept 22 A mkr FR1 300 Some chums. None in bay 1958 July 1 G 0.7 **FWS** 170 reds July 4 G to lake FWS 200 reds G to lake FWS July 6 400-500 reds 3,000 in bay July 22 G lake **FWS** 10,000 reds July 25 G to lake FWS 700 reds G to lake FWS July 28 200 300 Aug 1 G to lake FWS 100 100 17,000 reds in lake Aug 11 G to lake FWS 100 100 **FWS** None observed off mouth Aug 27 Α G 1.2 FWS 439 Sept 2 10 8 reds Sept 9 A lake **FWS** 600 **FWS** Sept 9 Α None observed off mouth Sept 19 FWS Α Fish present upstream Sept 22 **FWS** A lake 300 1959 July 20-G 1.0 FWS Aug 5 No fish observed A 2.0 Aug 3 **FWS** No fish observed Sept 4 G 0.2 **FWS** 250 50 Sept 4 G ADF 1,100 14 19 reds 1960 A length Aug 30 ADF 300 0 3,500 reds in lake Sept 2 G 0.5 ADF 500 200 1961 July 6 G 0.6 ADF No fish observed Many reds jumping July 28 A 0.6 ADF 1,500 reds off mouth Aug 1 A mouth ADF No salmon observed Aug 12 G mouth ADF 3,000 reds off mouth Sept 9 A 0.6 ADF 1, 200 reds

143-30 56°19.4' N. 133°16.8' W. PINE CREEK

WR 102 Previous No. 136

WRANGELL, SUMNER STRAIT, RED BAY, 0.7 mile S. of Pine Pt.

OTHER SPECIES Coho, steelhead. MAJOR SPECIES Chum. ESCAPEMENT MAGNITUDE ESCAPEMENT TIMING Middle. Sept. (est.) SPAWNING FACILITIES Limited.

STREAM TEMPERATURES Normal range. No observed temperatures. VALLEY DESCRIPTION

DRAINAGE 7.8 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Small lagoon area.

ANCHORAGE In Red Bay.

TRAILS AND SURVEY ROUTES Easily waded.

AERIAL SURVEY NOTES Heavy overstory prevents surveys.

INTERTIDAL ZONE

LENGTH 0.1 AVERAGE WIDTH/DEPTH GRADIENT AND VELOCITIES Moderate. BOTTOM Rocky. LOW TIDE LOCATION Flats. HIGH TIDE LOCATION Edge of woods, small rapids. SCHOOLING AREAS SPAWNING AREAS Very limited. GENERAL NOTES

UPSTREAM

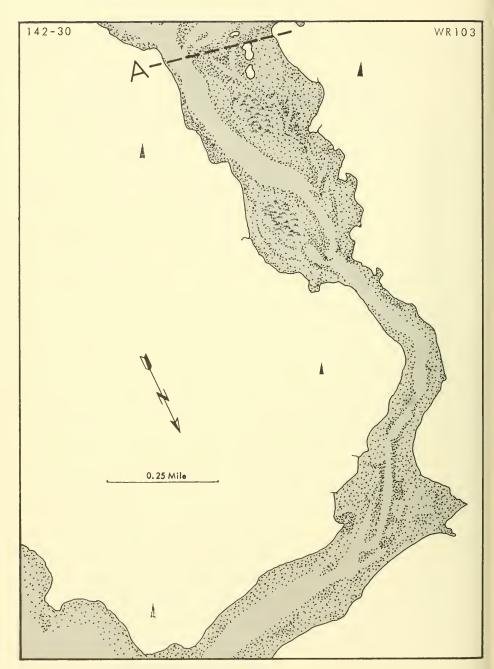
AVERAGE WIDTH/DEPTH 151/12".

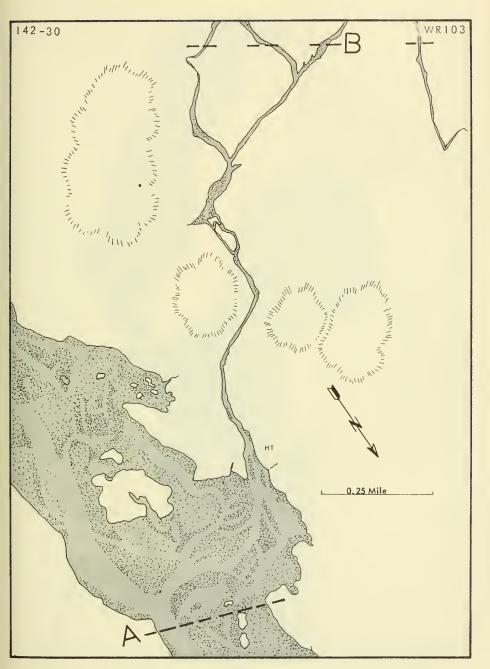
LENGTH ACCESSIBLE GRADIENT AND VELOCITIES Swift. BOTTOM Bedrock, gravel, and boulders. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS Numerous small pools.

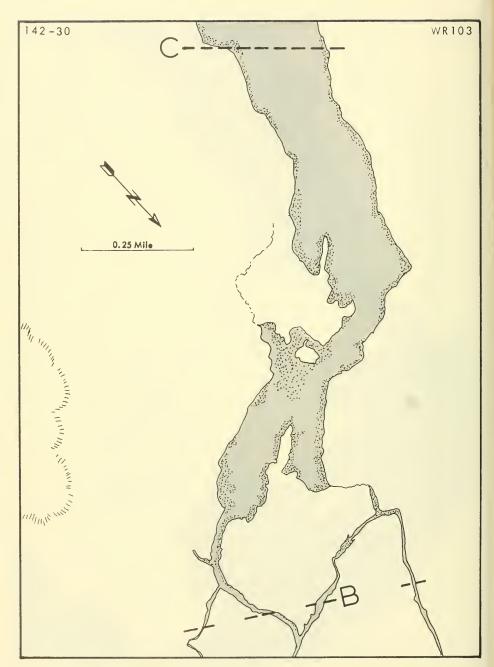
SPAWNING AREAS Gravel pockets between rapids and small side channels. GENERAL NOTES Abundance of small steelhead fingerlings in every pool in June.

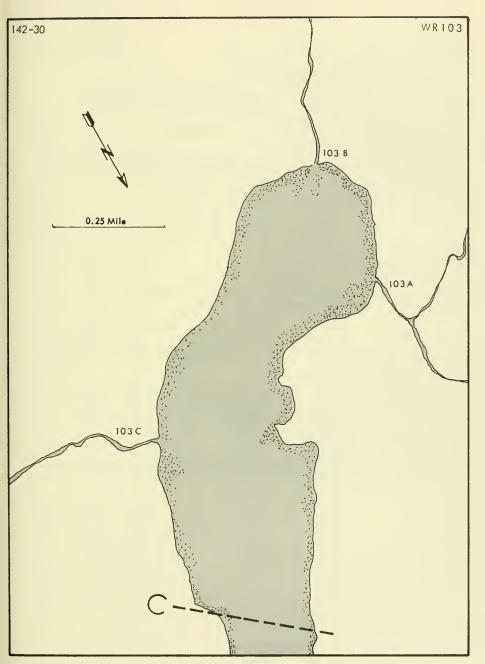
ESCAPEMENT RECORD

SURVEYED		PIN	К	сні	JM	OTHER SPECIFS	REMARKS	
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Sept 13	0.3	FWS	10		75			
1953	G 0. 2	FWS	0	0	2	0		
Sept 6	G 0. 2	FW5	0	0	2	0		Chum fair, pink poor
Sept 17 1954	G 0. 2	rw5	U	U	U	U		Chum lair, pink poor
Aug 10	A	FWS						None observed. Water low
Aug 19 1955	A length	FWS	50					
Sept 1 1956	G 0.5	FWS						No fish observed
Sept 11 1957	G 1.5	FWS	25		65			
Aug 14	G 0.2	FWS						No fish observed
Aug 15 1958	A 1.0	FWS						No fish observed
Aug 19	A 0.5	FWS						No fish observed
Sept 10 1959	A 1.0	FWS						No fish observed
Aug 21 1960	Α	FW5						No fish observed
-2-00	No survey	s						
1961								
	No survey	'S						









ADF STAT. No. WR 103 Previous No. 137

142-30 56'17' N. 133'09.7' W.

WRANGELL, CLARENCE STRAIT, SALMON BAY, Head.

OTHER SPECIES Chum, coho, red. MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle Aug. - Sept. (cst.) ESCAPEMENT MAGNITUDE SPAWNING FACILITIES

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Runs through a nearly flat area with numerous scattered muskeg areas. Several stream-cut valleys enter the main valley.

DRAINAGE 22 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Flows out of the northernmost entrance to Salmon Bay. An island lies one-eighth mile off the mouth in the tidal flat. This island dries on three sides at low water. ANCHORAGE The bay is used extensively as a harbor during certain seasons.

TRAILS AND SURVEY ROUTES

AFRIAL SURVEY NOTES Poor due to very dark muskeg colored water.

INTERTIDAL ZONE

LENGTH 0.4 mile. AVERAGE WIDTH/DEPTH 60'/10". GRADIENT AND VELOCITIES Moderate. BOTTOM Mud, rubble, gravel. LOW TIDE LOCATION Entrance of bay. HIGH TIDE LOCATION SCHOOLING AREAS In bay off mouth and large pools in middle of intertidal area. SPAWNING AREAS Limited to the upper stretch.

UPSTREAM

LENGTH ACCESSIBLE 1.3 miles to lake. AVERAGE WIDTH/DEPTH 40'-50'/10". GRADIENT AND VELOCITIES

BOTTOM Gravel and sand grading into coarse gravel.

MARKER DISTANCE

GENERAL NOTES

MARKER IDENTIFICATION

BARRIERS Falls 4' in height one-fourth mile above the high tidemark are accessible by a natural bypass which goes around one side.

TRIBUTARIES A tributary enters 1 mile upstream-- has good spawning gravel and is, used by pinks and cohos.

SCHOOLING AREAS

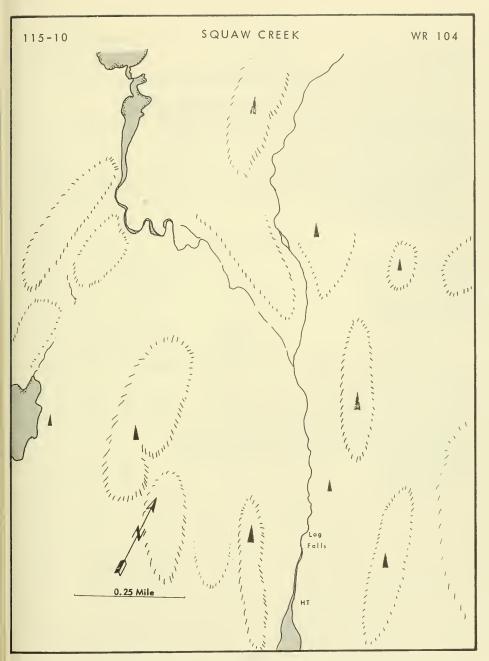
Many large pools. SPAWNING AREAS Riffles throughout.

GENERAL NOTES Gradient becomes quite slow about 0.6 mile upstream. Stream is quite deep in this area. Three inlet streams to Salmon Bay Lake, Nos. 103A, 103B, and 103C are major red and coho producers.

Date	SUR VEYED Miles	Ву	PIN Live	K Dead	CHUM Live D	í Dead	OTHER SPECIES Live	REMARKS
1953 June 19 July 19	G 0. 2 A	FWS FWS						Few red, bay and stream 2,000 reds in pothole 4,000 reds in pothole
Aug 4 Aug 20	G 0. 2 A	FWS FWS						2,000 reds in pothole
Sept 1 1954	G 0. 2	FWS					500 cohos	,
July 29		FWS					60 reds	
Aug 4 Aug 23	0. 2	FWS FWS	SO				3,500 reds 250 reds	
Aug 24	0. 2	FWS	80				300 reds	
Aug 28 1955	0.2	FWS					1 cohos	
June 15	G 0. 2	FWS						Few reds in Salmon Bay
June 29	G 0. 2	FWS						First reds noted
July 16 July 27	G 0. 2 G 0. 2	FWS FWS						1,000 reds passed by Red run improving
Aug 17	G 0. 2	FWS	350				1 reds	Ked Idn Improving
Aug 21	G 0. 2	FWS		400				Some pinks. Few reds
Aug 26	G 0.2	FWS					Few cohos	
Sept 8	G 0.2	FWS	2,000				400 cohos	Some chums
Sept11	G 0. 2	FWS					200 cohos	Some pinks and chums
	tideflats	FWS					300 cohos	C
Sept 26 1956	G 0. 2	FWS	2,000				250 cohos	Some chums
July 4	G 11.6	FWS FWS					3,000-4,000 reds 2,000 reds	Tidal zone Entered. Tidal zone
July 8- Aug 15	G 0.5	FWS	100		150		2,000 reds	Entered. Tradi 2011e
Aug 18	G 1.5	FWS	150		150		600 cohos	
Aug 26	G 1.5	FWS	2,000		1,000			
Aug 29	G 1.5	FWS	2,000		1,000		500 cohos	
Sept 1	G 1.5	FWS	3,000		1,000		500 cohos	
Sept 3	G 1.5	FWS	6,000		400		900 cohos	
Sept 7	A 1.0	FWS	5,000		500		3,500 cohos	
Sept 10	A 1.0	FWS	5,000		500		3,500 cohos 12,000 reds	
Sept 14	G	FWS	6,500		1, 200		3,000-4,000 cohos	
1957	200	FTUC					250 40	
July 14	G 0. 2 G 0. 2	FWS FWS					250 reds 500 reds	
July 19 July 31	G 0. 2	FWS			400		200 1503	
Aug 5	G 0. 2	FWS			400		550 reds	
Aug 13	G 0. 2	FWS			200		250 reds	
Aug 17	G 0. 2	FWS	600		200		50 reds	
Aug 24	G 0. 2	FWS	500		100			
Aug 27	G 1.0	FWS	200		10		5 reds	
Aug 28	G Iake	FWS					1,000 reds	
Season	000	FWS	70	1			5,000 reds	
Sept 10	G 0. 2	FWS	75	1				

WR 103
ESCAPEMENT RECORD - Continued Previous No. 137

	SURVEYED		PIN	IK	CHU	M	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1958								N. Calastrania
June 9	G 1.0	FWS					200 1-	No fish observed
July 7	G 1.0	FWS					200 reds	In big hole
July 20	G 1.5	FWS	150				400 reds	Red in slough
July 23	G 1.5	FWS			100		700 reds	
July 27	G 1.5	FWS	100		30		500 reds	
July 31	G 1.5	FWS					250 reds	
Aug 2	G 1.0	FWS	30		2		40 reds	
Aug 10	G 1.0	FWS	150				2 40	
Aug 17	G 1.0	FWS	200				2 reds	
Aug 29	A lake	FWS	800				4,000 reds	
Sept 9	Λ lake	FWS	1,400		20			
Sept 11	G 2.0	FWS	850		20			
Sept 23	G 0.8	FRI	500		350		5,500 reds	
Season 1959		FWS					3,300 reds	
June 8-15	G flats	FWS						No fish observed
July 1- 3		FWS					100 reds	
July 4- 5	G flats	FWS					200 reds	
July 6-7	G flats	FWS					S00 reds	
July 8	G flats	FWS					300 reds	
July 9	G flats	FWS					100 reds	
July12	G flats	FWS					200 reds	
July14	G flats	FWS					300 reds	
July15	G flats	FWS					500 reds	
July16-20	G flats	FWS					400 reds	
July20-25	G flats	FWS					2,000 reds	
July25-31	G flats	FWS					3,000 reds	
July28	G flats	FWS					500 reds	
Aug 1-9	G flats	FWS					1,S00 reds	
Aug 11	G flats	FWS					3S cohos	
Sept 6 1960	G flats	FWS	400					
Aug 30	A length	ADF					400 reds	
1961								No fish observed
July S	G	ADF						No fish observed
July 11	A	ADF						No fish observed
July 28	A length	ADF						Red jumping at
Aug 1	A mouth	ADF						mouth
1962								
July 26	A	ADF						7,000 at mouth
Aug 7	A	ADF						5,000 at mouth
Aug 31	G 0.5	ADF					10,450 reds	
1963								X (2.1 1 1
July 29	A	ADF						No fish observed
Aug 27	A	ADF						Large school in intertidal zone
Sant 10	G 0.2	ADF					580 reds	Good gravel all the
Sept 10	0 0, 2	ADF					300 1eus	way; good distribu-
								tion
Sept 10	G 2.0	ADF					3,900 reds	Few reds above
	s. end to							falls
f	alls							



SOUAW CREEK

ADF STAT. No.

WR 104

Previous No. 140

115-10 56°07.9' N. 133°05.2' W.

WRANGELL, CLARENCE STRAIT, KASHEVAROF PASSAGE, WHALE PASSAGE, on inlet N. of W. side of Thorne I.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle Aug. -Sept (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES
STREAM TEMPERATURES Normal range. No observed temperatures.
VALLEY DESCRIPTION
DRAINAGE 3.3 square miles (polar planimeter)
STREAM MOUTH IDENTIFICATION

ANCHORAGE The bay which extends to the NW. near the middle of the passage affords good anchorage.

An excellent anchorage is also found N. of this bay along the E. side of the passage between the irregular shaped island and shore.

TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 20'-25'/6"-8".

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

LENGTH ACCESSIBLE

GENERAL NOTES

UPSTREAM

GRADIENT AND VELOCITIES
BOTTOM Coarse gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS The stream enters a canyon 1 mile upstream and a 4' falls is found near the lower end of the canyon, possibly a barrier to salmon.

TRIBUTARIES A small stream enters three-fourths of a mile upstream.

SCHOOLING AREAS A few deep holes are available for schooling salmon.

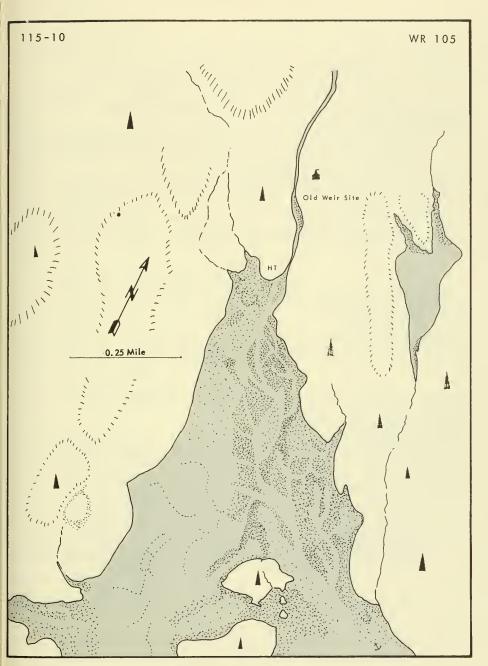
SPAWNING AREAS

ESCAPEMENT RECORD

				, ,	- '		* *	
	SURVEYED		PIN	1K	CH	UM	OTHER SPECIES	REMAR KS
Date	Miles	By	Live	Dead	Live	Dead	Live	
		,						
1951								
Sept 21	1.0	FWS	6,670	20	625	246		
1953								
Aug 11	A	FWS						No salmon observed
Sept 5	G 0. 2	FWS	300	0	0	0		Some live chums. 500
1074								pinks in bay
1954	^	FWS						No salmon observed
Aug 10 Sept 20	A 0. 2		12,000					NO SUTINOIT OBSELVED
1985	0.2	1110	12,000					
Aug 14	G 0. 2	FWS						No salmon observed
Aug 21	A	FWS						None at mouth
Aug 23	G 0. 2	FWS						Pinks and chums at mouth
Sept 16	G 1.5		10,000	0	500	0		
Sept 29	G 1.S	FWS	20,000					
1956								N 1 1 1
Aug 15	A 0.7	FWS	2 225		555			No salmon observed
Aug 28	G 2. 0 G 1. 0	FW5 FW5	2,335 S,150		555 1,050			
Sept 1 Sept 11	G 1.0		35,000		7,000			
Sept 12	A 1.0	FW5	3,000	100	7,000			
Sept 18	G 1.0	FWS			2,000		20 cohos	8,000 pinks and chums
			,					schooled at mouth
1957								
Aug 23	G mouth	FWS					SO cohos	
Aug 29	G 0.7	FWS	1,000	20	100	40	SO cohos	
Sept 11	G 1.2	FWS	422	20	1,050	40		
1958 Aug 8	G 0. 2	FWS						100 pinks, 200 chums
Aug o	G 0. 2	LWS						at mouth
Aug 11	G 0.5	FW5						25 pinks at mouth
	23 G 0. 5	FWS						30 pinks at mouth
Aug 26	A length	FWS						200 salmon at mouth
Aug 27	G 0. 2	FWS						100 pinks at mouth
Aug 30	G 0. 2	FWS						150 pinks at mouth
Sept 1	G 0. 2	FWS	25					150 pinks at mouth
Sept 1	G 0.5	FWS	16					
Sept 19	A length	FWS	7S0 10	100				
Sept 26 1959	A length	FWS	10	100				
Aug 24	G mouth	FWS	1,000		1,000			
Aug 27	G mouth	FWS	400		600			
Aug 28	G mouth	FWS	400		600			
Aug 29	G mouth	FWS	1,000		500			
Sept 6	G 0.5	FWS	375		125			600 pinks off mouth

ADF STAT. No. WR 104 SQUAW CREEK - Continued Previous No. 140 115 -10

	SURVEYED		PINK		CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1960								
1961	No surve	eys						
Aug 1	A mouth	ADF						Mixed jumpers off
Aug 26	A mouth	ADF						Mixed jumpers off
1962								
July 26	A 0.5	ADF						No fish observed
Aug 16	A 1.0	ADF						No fish observed
								Good runs reported but
1963								foot survey not made
July 29	A length	ADF						No fish observed; difficult to survey
Aug 27	A bay	ADF						Good showing at mouth



ADF STAT. Na. WR 10S Previous No. 141

115-10 56°07.6' N. 133°08.8' W.

WRANGELL, CLARENCE STRAIT, KASHEVAROF PASSAGE, WHALE PASSAGE, Head.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle Aug. - Sept. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES · Excellent.

STREAM TEMPERATURES · Normal range. Observed temperatures: S0° F., 9/27/S0; 48. S° F., 10/1/S0; 61. S° F., 8/28/S1; S5° F., 9/13/S1; S3° F., 9/24/S1; 48° F., 10/4/S1; S2° F., 9/20/S2; 49° F., 10/2/S2; S0° F., 10/8/S2; S2° F., 9/14/S3; S0° F., 9/2S/S3; 47. S° F., 10/3/S3

VALLEY DESCRIPTION A heavily wooded valley with low-lying hills.

DRAINAGE 22 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters the extreme head of the flats and flows along the E. side of the small wooded islands. The flats extend nearly to the S. edge of the islands.

ANCHORAGE Refer to WR 104.

TRAILS AND SURVEY ROUTES Road on right side to second lake. Survey trail on left side from first lake down to tidewater.

AERIAL SURVEY NOTES Light and water color often limit surveys.

INTERTIDAL ZONE

LENGTH 1 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Sand, gravel, and bedrock.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS School in the bay off the mouth.

SPAWNING AREAS The upper one-fourth mile is an excellent spawning area.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2.5 miles. AVERAGE WIDTH/DEPTH 40'-60'/4"-6".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Large rock and bedrock with gravel.
MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Three barriers exist on this stream. The first two are only partial blocks while the third,
just below the first lake outlet, appears to be a total block to pink and chum. Caho do go over.

TRIBUTARIES None.

SCHOOLING AREAS In the first mile only a few holes are present. The hole below the old weir site is used most extensively.

SPAWNING AREAS A good spawning riffle is found in the first 150 yards above the high tidemark; from this point to a S-foot cotaract and for a short distance above, there is poor spawning area. Above this there are excellent spawning facilities.

GENERAL NOTES This stream drains two lakes, the first about 2.5 miles upstream is approximately 200 yards across by 500 yards long. The second lake is about 0.5 mile above the first and is about 1.8 miles long by 0.5 mile wide. Coho fry have been found in the second lake. The stream goes underground for about 150 yards at the outlet of the first lake. Coho go through to the second lake, but pink and chum appear to be stopped at falls 100 yards below the underground outlet.

	•		, -			_		* *
SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS	
Date	Live	By	Live	Dead	Live	Dead	Live	112372 11110
Date	Live	БУ	rive	Dead	LIVE	Dega	LIVE	
10.40								
1949		ETD T	700					
Aug 29	G 1.0	FRI	700					
Sept 19	G 1.0	FRI	31,800	0	600			
1950								
Aug 28		FWS	700		230			
Sept 27	G 1.0	FRI	4,586	142	306	169	20 cohos	
Oct 1	G 1.0	FRI	4,695	649	234	102	48 cohos, 1 red	
1951			•					
Aug 29	G 0. 1	FRI	24	0	0	0		Thousands at mouth
Sept 13	G 0. 6	FRI	5,000	SS	160	S	1 coho	Thousands off mouth
Sept 21	1.7	FWS	40,000	33	1, 200	J	1 00110	z nousanas ozz moden
	G 1.0	FRI	18,800	185	1, 170	365	10 cohos	Fish spawning
Sept 24								
Oct 4	G 1.0	FRI	6, 800	1, 180	S10	320	200 cohos	75% pinks spawning
1952								
Sept 20	G 0.7	FRI	3,630	1	279	0		Many fresh
Oct 2	G 0.7	FRI	22	37	0	1		Stream flooding
Oct 10	G 0.7	FRI	1,410	1, 3 96	8	32	40 cohos	
1953								
Aug 3	G 0.7	FWS	500	0	500	0		4,000-S,000 in mouth
Aug 10	G 0.7	FWS	400	0	400	0		Fish observed at mouth
Aug 11	G 0.7	FWS						Fish at mouth
Sept S	Α	FRI	2,000		200			Some live chums, dead pinks
Sept 14	G 1.0	FRI	1,100	0	125	0		Stream flooding
Sept 25	G 1.0	FRI	1,350	40	250	10	1 coho	on cam nooung
				40	200	10	1 00110	Some live chums, dead pinks
Sept 27	A	FRI	2,000	100		20		Some five chunk, dedd pinks
Oct 3	G 1.0	FRI	642	150	120	35		
1954								
Aug 10	A	FWS						No fish observed
Season		FWS	50,000					
1955								
Aug 21	Α	FWS						None observed off mouth
Aug 23	G 1.5	FWS						Pinks and chums off mouth
Aug 26	A mark	FRI	5,000					>30,000 in bay
Sept S	A mark	FRI	>1,000					7S,000-100,000 in bay
Sept 15	G 2.0	FWS	12,000					,
Sept 16	A mark		70,000					
Sept 16	G 1. S	FWS	10,000	150	150	20		
	A mark		80,000	130	130	20		
Sept 23					10.000			
Sept 23	G 2.0	FWS	40,000		10,000			
Sept 28	A mark		6S,000					
Sept 29	G 1. S	FWS	20,000					Some chums
1956								
Aug 12	G	FWS						No fish observed
Aug 19	G 2d mark	FWS	225					
Aug 26	A mark	FRI	3,000					
Aug 27	A mark	FWS	3,000					
Aug 29	G 0. S	FWS	3,000					
Sept 2	G 1.5	FWS	15,500		2,000			
Sept 9	A to mark	FRI	25,000		_,			5,000 at mouth
- cpc 3	to mark		20,000					,

S	UR VEYED	,	PIN	K	сни	M	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1956								
		PAIC	5 500					
	to log jan		5,500					
	A to lake		42,000		2 500			
Sept 18	G 1. 2	FWS	35,000		2,500			1 1
Sept 28	A mark	FRI	42,000					Many dead
1957	C 0 F	EW.C	100					
Aug 16	G 0.5	FWS						1 500 in intentional
Aug 21	A 1.0	FWS	700				10 1	1,500 in intertidal
Aug 27	G 1.0	FW5	1,500				10 cohos	
Aug 31	G 0. S	FWS	500					>F 000 l ob
Sept 9	A mark	FRI	300					>5,000 pinks above
6 10	000	FILLS	100		10			marker
Sept 18	G 0.5	FWS	100		10			10,000 . 1
Sept 22	A mark		5,000			200		10,000 salmon in stream
Sept 27	A mark	FRI	2,000			300		
1958	1	FILLS	0.70					
Aug 25	A mark		350					
Aug 27	A length		4,000		70			
Aug 31	G 1.5	FRI	3,880		72			
Aug 31	G 2.5	FWS	3,030		25			
Sept 1	G 0. 2	FWS	3,500					3,500 pinks at mouth
Sept 7	A length		>20,000					
Sept 17	A length		20,000					
Sept 19	A 4.0	FWS	35,000					
Sept 23	G 1.0	FWS	1,500		50		750 cohos	
Sept 26	A length	FWS	37,500		1,000			
1959								
Aug 16	G 0.5	FW5	1,500					
Aug 24	G flats	FWS	5,000		10,000			
Aug 25	G	FWS	15,000		20,000			
Aug 26	G	FW5	5,000		10,000			
Aug 27	G	FWS	3,000		7,000			
Aug 28	G	FW5	2,000		6,000			
Aug 29	G	FWS	20,000		500			Estimated 100,000 pinks
								have gone up
Sept 5	G 2.0	FWS	26,000		50			Plus 20,000 pinks in tidal
								zone; 600 pinks off mouth
1960								
Aug 30	A 2.5	ADF	400					500 pinks in intertidal
Sept 2	G 1.5	ADF	6,000		3,500			5,500 at mouth
1961								
Aug 1	A 2.5	ADF						Jumpers off mouth
Aug 26	A 2.5	ADF						Pink present, water dark
Aug 30	G 2.5	ADF	106,000	few	few	few		3,000 below weir
Sept 7	A 2.5	ADF	many					15,000-20,000 below weir

Bio-Research Div. weir count

WR 105 ESCAPEMENT RECORD - Continued Previous No. 141

SUR VEYED PINK CHUM OTHER SPECIES REMARKS Date Miles By Live Dead Live Dead Live 1962 A length ADF July 26 150 salmon at mouth Aug 7 A length ADF No salmon observed Aug 16 A length ADF Few pinks A length ADF 1,500 2,000-3,000 at mouth Aug 21 Aug 27 G lake ADF 69,000 6 2 cohos \$00 in intertidal zone A length ADF Sept 12 114,000 upstream 138,000 downstream Sept 12 A length ADF 130,000 upstream 161,000 downstream 1963 A length ADF No fish observed July 29 Aug 1 G mouth ADF Few cohos Cohos jumping Aug 15 ADF 4,500 Mixed; 3,000 counted through weir Aug 27 A mouth ADF S,000 mixed fish at mouth Aug 15-

2,881 cohos

723

115-10

Oct 1

weir

ADF 67,31S

WR 105 Previous No. 141

				1101100
Date	Pink	Chum	Coho	Remarks
19 2 9 Oct 5	191,948	5,728	2,856	Final weir total. Weir installed July 21.
1930 July 20 22 23 24 25 26 27 28 29 30 31 Aug 1			38 44 46 217 166 59 2 20 12	
2 3 4 5 6 7 8 9 10			7 14 5 3 2 6 13 857	
12 13 14 15 16 17 18 19 20 21 22 23 24	278 1,130 228 377 1,495 2,862 3,091 6,435 7,114 11,629 14,214	10 20 10 7 40 125 150 500	1,718 1,000 480 50 20 60 45 55 60 175 60 40	
25 26 27 28 29 30 31 Sept 1 2 3 4	12, 468 14, 679 9, 752 13, 700 15, 500 7, 737 9, 600 6, 600 4, 806 3, 050 3, 417 7, 776	400 84 52 12 23 56 46 104 75 56 20 128 252	25 25	
6 7 8 9 10 11 12 13	3,428 1,980 5,477 4,700 1,500 2,496 6,456 15,000	252 40 245 256 60 120 325 644	5HH	

Date	Pink	Chum	Coho	Remarks
1930 Sept 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Oct 1 2 3 4	35, 150 31, 129 20,000 18, 136 14,566 38, 189 22,540 14,606 7,076 4,198 3,400 2,300 2,507 1,410 1,602 1,401 2,121 790 410 52 18	842 652 660 757 225 241 147 35 16	22 72 296 395 370 560 330 152 86 32 243 252 16 122 82 14 10	
Total 1931 July 5 6 7 8 9 10 111 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	420,576	7,542	54 114 22 23 77 245 185 103	No further count. Weir removed Oct 4
29 30 31 Aug 1 2 3 4 5	10 7 14		23 5 2 9 2 2 245	

Remarks

Date	Pink	Chum	Coho
1931			
Aug 7			
8			
9			
10			
11			
12			
13			
14			
15			
16	5,442		40
17	162		14
18	5,006	13	21
19	2,586	17	33
20	464	11	13
21	359	7	11
22	22,553	650	43
23	45,825	552	23
24	34,500	417	
25	21,402	188	16
26	25, 159	280	23
27	51,827	3,940	
28	29,465	2,015	
29	36,060	2,531	
30	31,781	1,235	67
31	28,704	745	938
Sept 1	30, 144	3,400	1,110
2	7,760	1,540	1,065
3	2,462	2, 393	1,220
4	1,217	1, 250	650
5	1 ,797	2,019	
6	1,925	1,475	733
7	2,968	1, 200	180
8	1,951	460	62
9	11, 396	4,805	1,410
10	6,650	3, 265	700
11	9 ,63 8	15,572	1,505
12	29,706	12, 187	3,096
13	7, 101	818	990
14	10,916	979	1, 160
15	6 ,63 9	657	1,270
16	2,031	162	410
17	236	178	18
18	14	20	7.4
19	642	38	74
20	1,122	1,802	354
21 22	400 378	1,300 99	81 32
23	950	59	27
23	680	103	44
25	847	67	24
26	772	148	22
27	265	37	11
28	16	3	1
Total	481,949	68,617	18,364
	,-	,	,

Remarks

Date	Pink	Chum	Coho
1961			
Aug 7	53		399
8	211		76
9	17		16
10	44		13
11	0		0
12	267	3	333
13	17, 139		1,065
14	4,236		101
15	130		4
16	1 7 6		10
17	662		11
18	0		0
19	430		2
20	638		4
21	470		12
22	1,343		9
23	5,138	4	8
24	0		0
25	0		0
26	33,046	53	0
27	2,542		5
28	2,071	8	21
29	1,010		6
30	192	1	7
31	2,776	76	51
Sept 1	1,017	39	15
2	299	16	7
3	1,657	292	40
4	472	66	4
5	253	115	4
6	114	72	2
7	413	472	6
8	3,875	860	54
9	411	313	10
10	420	269	12
11	215	197	3
12	341	347	17
13	305	203	4
14	242	96	0
15	90	333 250	0
16	63		
17	1,340	2, 154 91	33 0
18 19	24 377	342	16
20	62	68	4
21	45	129	11
22	97	223	7
23	249	536	6
24		83	
25	353 185	50	2
26	93	12	0
27	38	32	0
28	88	31	1
28	667	277	117
30	163	43	117
Oct 1	163	46	278
2	23	13	3
Total	86,598	8, 215	2,823
I OLG I	00, 390	0, 210	2,023

247

Remarks

115-10		*** C11	oounes	
Date	Pink	Chum	Coho	
1962 Aug 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Sept 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	67 2, 195 297 1, 313 102 55 503 5, 619 10, 023 1, 938 1, 950 8, 821 11, 637 6, 324 10, 801 8, 999 9, 901 7, 833 5, 842 4, 365 4, 463 3, 448 1, 862 1, 605 551 527 380 426 316 129 6, 768 1, 844 990 168 90 935 3, 635 1, 360	2 1 1 11 8 1 1 18 12 11 1 4 3 6 10 10 1 8 7 4 13 5 35 12 66 319 146 57 8 8 33 219 189 41	159 249 17 67 24 5 71 287 128 12 5 23 23 15 5 12 14 20 9 14 13 1	
17 18 19 20 21 22	92 4 1	9 3 1	2 2	
23 24 25 26	65	21	51	
27 28 29 30 Oct 1	10 19 39	19 13 38	17 6 54	
2	4			

Weir Counts - Continued

Date	Pink	Chum	Coho	Remarks
1962				
Oct 4 5				
5				
6 7 8 9	23	1	50	
7				
8				
9				
10				
11 12				
13		2	39	
14		2	32	
15				
16			668	
17				
18				
19				
20				
21				
22				
23				
24				
25				
26			121	
27	100 220	1 357	131	
Total	128, 339	1,357	2,502	

Estimated in stream prior to weir installation

Remarks

115-10)		Weir Cou	ints - Conti	nued
Date		Pink	Chum	Coho	
1963		1,200		300	
Aug	15 16 17 18 19 20	5,207 1,387 176 6 5		395 108 7 0 1	
	21 22 23 24 25 26 27 28	0 0 0 57 13 0 58 3		0 0 0 1 0 0 2	
Sept	29 30 31 1 2 3	0 0 0 657 701 5, 293	3 1 21	0 0 0 2 5 515 954	
	4 5 6 7 8 9	18, 909 19, 988 7, 803 3, 844 89 58 18	107 68 159 60 1 4	954 185 116 65 2 1	
	11 12 13 14 15	530 246 17 179 58 32	22 15 1 31 4	9 19 1 4 4 0	
	17 18 19 20 21	182 437 45 68 0	77 73 8 14 0	23 36 5 16 0	
	22 23 24 25 26 27	10 14 6 3 1	5 12 4 1 2	0 8 0 0 1	
Total	28 29 30	5 1 8 67,315	0 0 30 723	0 0 90 2,881	

Weir removed October 1,1963

Remarks

D. Church	2-1
Date Pink Chum	Coho
1964	
Aug 8 37	
9 2	
10 0	
11 0	
12 1	
13 0	
14 500	
15 183	
16 1,806	C.P.
17 1, 986	65
18 749	282
19 2,570	10
20 1, 246 21 238	13 11
21 238 22 0	0
23 30	0
24 0	0
25 14,564 84	47
26 7,502 4	3 6
27 2,574 1	14
28 3,128 2	31
29 5,669 86	29
30 2, 202 5	15
31 1,670 0	28
Sept 1 4,000 3	5
2 8,400 4	8
3 1,670 14	1
4 6,593 21	3
5 1,582 10	1
6 5,258 82	1
7 9, 283 16	2
8 2,994 28	0
9 448 5	0
10 1,697 50	0
11 1,533 99	0
12 915 38	0
13 15,837 242	0
14 15, 211 80 15 6, 610 23	0
16 4,861 51	18
17 3 0	0
18 0 0	
	0
19 805 31 20 142 2	

Note: About 3,000 pinks below the weir at the time weir removed. Count of total pinks probably low. Adjusted count of 138, 112 suggested.

ADF STAT. No. WR 106 Previous No. 144

115-10 56°02' N. 133°04.2' W.

WRANGELL, CLARENCE STRAIT, KASHEVAROF PASSAGE, WHALE PASSAGE, S. corner.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho.
ESCAPEMENT TIMING Middle, Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES
STREAM TEMPERATURES Normal range. No observed temperatures.
VALLEY DESCRIPTION
DRAINAGE 12.6 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE Shelter may be found on the N. side of the passage near its S. entrance in the small cove just past the two charted rocks.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 10'/4".

LENGTH
GRADIENT AND VELOCITIES Gradual.
BOTTOM Gravel and bedrock.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 20'/10".

GRADIENT AND VELOCITIES Gradual.

BOTTOM Gravel and bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS An 8' falls three-fourths mile upstream is a block to salmon.

TRIBUTARIES

SCHOOLING AREAS Numerous bedrock holes.

SPAWNING AREAS

GENERAL NOTES

	SURVE YED		PINK		СН	JM Dead	OTHER SPECIES Live	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Aug 29	G 0.5	FRI	700	0	0	0		Heavy schools at mouth
Sept 19	G 1.0	FRI	31,800	0	600	6		Excellent showing
1950								
Aug 28		FWS	201		26			
Sept 14	G	FRI	187	47	27	18	2 cohos	
1951								
Sept 21	0. 7	FWS	6,000		450	328		
1953								
Aug 11	A	FWS						No fish observed
1954 Aug 10	А	FWS						No fish observed
Season	A	FWS						No fish observed
1955		I W 3						140 11311 00361 764
Aug 21	A	FWS						1 jump off mouth
Sept 15	G 1.7	FWS	10,000		1,500			- ,
Sept 18	G	ADF	2,000		•			
1956			·					
Aug 15	A to lake	FWS	400					
Aug 27	G 0. 3	FWS	150					
Sept 2	G	FWS	200		50			
Sept 11	G lengtl		2,000					
Sept 12	A lengtl		3,000					
Sept 18	G 0.7	FWS	13,000		700			3,000 off mouth
1957	G 0.5	muc	2 000		1 500		4 cohos	
Aug 26		FWS FWS	2,000 30		1,500 15		5 cohos	
Aug 27 Aug 29	G G 0.5	FWS	2,500		1,600		2 cohos	
Sept 7	G 0.5	FWS	100		50		L COHOS	
Sept 11	G 0.7	FWS	110		850			
1958	0 0.,		110					
Aug 29	G 0.7	FWS	19		4			
Sept 1	G 0.5	FWS	77					
Sept 26 1959	A lengtl	h FWS	50					
Aug 12	G 0.1	FWS						2S chums in tidal zone
Sept 6	G	FWS	25					Tidal zone
1960	_							
	No surve	eys						
1961								
	No surv	eys						

ADF STAT. No. WR 107 Previous No. 150

115-10 56°00.3' N. 132°57.9' W.

WRANGELL, CLARENCE STRAIT, GOLD AND GILLIGAN LAGOON, entrance to Kashevarof Passage.

MAJOR SPECIES

ESCAPEMENT TIMING

SPAWNING FACILITIES

STREAM TEMPERATURES

VALLEY DESCRIPTION

DRAINAGE Aerial 1 square mile (polar planimeter)

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES Fair visibility.

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

115-10

ESCAPEMENT RECORD

	SUR VEYED	,	PINI	К	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1953								
Aug 11	A	FWS						No fish observed
Sept 27	A	FWS						None off mouth. Thou- sands unidentified salmon
1954								
Season 19SS		FWS						Good escapement
Aug 21	A length	FWS						No fish observed
Season 1956	G length	FWS					500 cohos	
Aug 11	G length	FWS						No fish observed
Sept 3 1957	G	FWS	6		25	2		
Sept 27 1958	A 3.0	FRI						Many dead, unidentified
Aug 30	A 1.0	FWS						No fish observed
Sept 19	A length	FWS						No fish observed
1959								
	No reco	d						
1960								
	No surve	ys						
1961	No surve	ys						

AVERAGE WIDTH/DEPTH 201/3".

Previous No. 154

WRANGELL, CLARENCE STRAIT, KASHEVAROF PASSAGE, COFFMAN COVE, Head.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle. Aug. -Sept.

ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES Good but limited by the small size of the stream.

STREAM TEMPERATURES Cold range. Observed temperatures: 50° F., 9/21/52; 47° F., 10/3/52;

STREAM TEMPERATURES Cold range. Observed temperatures: 50° F., 9/21/52; 47° F., 10/3/52 45° F., 10/9/52; 48° F., 10/4/53. VALLEY DESCRIPTION

DRAINAGE S.1 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION

ANCHORAGE Good anchorage may be had in the middle of the SE. part of the cove. A midchannel course will carry in safely.

TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

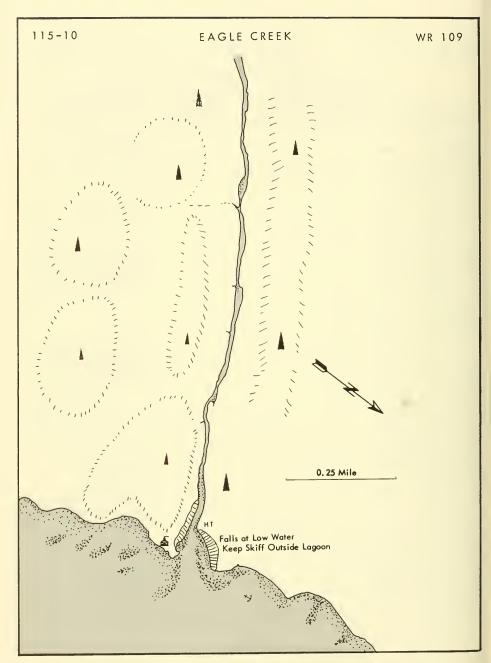
LENGTH .0.5 mile.
GRADIENT AND VELOCITIES Slight.
BOTTOM Clean, fine gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 15'/3".
GRADIENT AND VELOCITIES Slight.
BOTTOM Gravel and sond.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
SCHOOLING AREAS Numerous holes under log jams.
SPAWNING AREAS
GENERAL NOTES A very small stream of continuous fine gravel, sand, and many windfalls.
Very winding.

ESCAPEMENT CREEK

	(, 5,, -, -, -, -, -, -, -, -,										
		SUR VEYED		PIN	IK	CHI	JM	OTHER SPECIES	REMARKS		
	Date	Miles	By	Live	Dead	Live	Dead	Live			
	1949										
	Aug 29	G 0.1	FRI	15	0	2	0		Very minor stream		
	1952				_						
	Sept 21	GQS	FRI	82	3	0	0				
	Oct 3	G 0.5	FRI FRI	23 2	1 2	1	0				
	Oct 9 1953	G Q S	rki	2	2	U	U				
	Aug 11	A	FWS						Few fish observed		
	Sept 3	A 1.0	FWS						300. pinks ond chums in inter-		
	JCP J	71 210							tidal zone		
	Sept 6	A	FWS	25							
	Sept 23	A 1.0	FWS					Few cohos			
	Sept 25	A 1.0	FWS						300 pinks and chums in inter-		
									tidal spawning		
-	Sept 26	G0.2	FRI						Stream flooding. Vis. zero		
-	Oct 4	G 0.5	FRI	44	7			25 cohos			
	1954										
:	Season		FWS	10,000							
	1955								37: 13:12:		
	Aug 21	A G 1. 5	FWS FWS	6 000					Visibility good		
	Sept 14	G 1. 5	FW2	6,000					75 dead. Estimate 2,000		
	1956								pinks in sloughs at mouth		
	Aug 15	A 2.5	FWS						No fish observed		
	Sept 11	G 1.0	FW5	2,000					Plus 5,000 in tidal zone		
	Sept 19	G 1. 2	FWS	350					,		
	1957										
	Aug 17	A length	FWS			15					
	Aug 21	A 1.0	FWS			25					
:	Sept 12	G 0.5	FWS	18		4					
	1958										
	Aug 13	A length							No fish observed		
	Aug 25	G 2.0	FWS						No chum observed		
1	Sept 26 1959	A 2.0	FWS						No fish observed		
	Aug 12	G	FWS						No fish observed		
	Sept 12	G 0. 3	FWS						No fish observed. Loggers		
	ocp 12	3 0. 3	1 110						report 3,000 pinks in cove		
	1960								report 5,000 prime in cove		
	Aug 30	A length	ADF						Stream damaged by logging		
	1961	3							3 , 33 3		
	Aug 26	A length	ADF	present					Water too dark for survey		
	1962										
	July 26	A 1.0	ADF						No fish observed		
	Aug 7	A 1.0	ADF						No fish observed		
	Aug 30	A length	ADF						No fish observed		
	1963										
	Aug 1S	G to log	AD F			12			Stream muddy from bridge to		
		bridge							tidewater		



Previous No. 155

55°58' N. 132°58.2' W.

115 - 30

WRANGELL, CLARENCE STRAIT, 1.8 miles S. of Luck Pt.

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. Aug. -Sept. OTHER SPECIES Chum, coho, red. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Poor.

STREAM TEMPERATURES Normal range. Observed temperatures: 59°F., 9/13/50; 52.5°F., 9/26/50; 48.5°F., 10/2/50; 57°F., 8/1/51; 57°F., 8/13/51; 56°F., 8/25/51; 53°F., 9/8/51; 65°F., 8/29/51; 58°F., 9/14/51; 52°F., 10/2/52; 50°F., 10/9/52.

VALLEY DESCRIPTION

DRAINAGE 30 square miles (polar planimeter).

STREAM MOUTH IDLENTIFICATION No tideflat. Flows directly into Strait. Rock 100 yards off mouth. ANCHORAGE Anchoring off the mouth is safe only in calm weather. Anchor Coffman Cove or Ratz Harbor.

TRAILS AND SURVEY ROUTES This stream is extremely difficult to travel along its margins and is nearly impossible to wade because of the slippery rocks. Game trails follow the ridges on both sides, but are strewn with downfalls. Most easily surveyed from lake down. Cabin on lake.

AERIAL SURVEY NOTES Good visibility, in upper reaches.

INTERTIDAL ZONE

LENGTH 0.2 mile

AVERAGE WIDTH/DEPTH 30'/10".

GRADIENT AND VELOCITIES Moderate to steep.

BOTTOM Shattered bedrock, boulders, and some gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A large hole just above the constriction.

SPAWNING AREAS About 100 yards at the upper end of this zone offers limited spawning facilities. Not much spawning takes place in this zone.

GENERAL NOTES This area has steep walls for the first 150 yards. Travel is difficult in this area.

UPSTREAM

LENGTH ACCESSIBLE 1.8 miles to lake.

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES Moderate to steep.

BOTTOM Large boulders, bedrock, and sand.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES None.

SCHOOLING AREAS Several large pools, mostly in upper half of stream.

SPAWNING AREAS Spawning facilities are limited to the stream's margins and gravel pockets between boulders except in upper one-half of stream which is excellent spawning area.

GENERAL NOTES Almost a continuous rapids for first mile.

, ADF STAT. No. WR 109 Previous No. 15S

ESCAPEMENT RECORD

[active sure of ground sure of the designated of the section sure of the											
Date			CH Live	UM Dead	OTHER SPECIES	REMARKS					
Date	Miles	Ву	Live	Dead	Live	Dead	Live				
1928											
Sept 29	Weir	USBF	405, 762	2	1,982		523 cohos, 2,701 reds	Final total. Weir in- stalled June 27			
1929								statica jaire 27			
Oct 5	Weir	USBF	102,654		5,066		1,861 cohos, 1,939 reds	Final total. Weir in-			
1930								stalled July 2			
Oct 1	Weir	USBF	223,012		23, 224		6,525 cohos, 6,371 reds	Final total, Weir in-			
1931								stalled June 25			
Sept 29	Weir	USBF	532,863		50,772		3, 289 cohos, 15, 749 reds	Final total, Weir in-			
10.40								stalled July 5			
1949 Aug 28	G 1.0	FRI	5,500	6				3,000 off mouth			
Sept 18	G 1.0	FRI	14,500	12				3,000 pinks			
1950		FWS	1,500		7,500		2 000 2				
Aug 26 Sept 13	G 0. 6	FRI	5,460		106	S	5,000 reds				
Sept 26	G 0. 6	FRI	3,986	129	3, 230	96					
Oct 2	G 0.6	FRI		2,480	2, 449						
1951											
Aug 29	G 0. 6	FRI	317	8	0	0	4 cohos, 40 reds	Many fish off mouth			
Sept I Sept14	0.7 G 0.6	FWS FRI	365 13,000	20	30	0	2 reds	1 dead reds			
Sept 25			S 15,000	20	560	U	1 reds	Few dead pinks			
ocpt to	20,0		5 10,000		500		1104	1,000 pinks spawning			
								4,000-5,000 off mouth			
1952								TV 1.			
Oct 2 1953	G 0.5	FRI	16	39	13	41		Flooding			
Aug 7	Α	FWS						Jumpers at mouth			
Aug II	A	FWS						Few at mouth			
Sept 3	A	FWS						Chums and pinks seen			
Sept 23	A	FWS	900		500		Few cohos	High water			
1954 Sept 8		FWS						6 salmon head of cove			
Sept 27	A	FWS	30,000		0			Some dead pinks			
1955											
July 1	G	FW5						1,000 reds entered			
July 6	G 0. 1	FWS					1 200 - 10	Reds present			
July 18 July 21	G 0. 1 G 0. 1	FWS FWS	530				1,000 reds 200 reds	Holes full of red			
July 23	G 0. 1	FWS	1,000				500 reds	1,000 pinks, 200 reds off			
•								mouth			
July 24	G 0. 1	FWS	1,000					200 reds off mouth			
July 25	G 0. 1	FWS	1,300				50 reds	Good showing off mouth			
July 28	G 0. 1	FWS	1,000								
July 29 July 30						Many jumpers off mouth					
Aug 1	A	FWS	500					Creek still low			
Aug 6	G 0.1	FWS	5,000		100						

WR 109

ESCAPEMENT RECORD

Date	SUR VEYEL Miles		PINI Live	K Dead	CHI L ive	UM Dead	OTHER SPECIES Live	REMARKS
1955 Aug 7	G 0. 1	FWS	1,000					Level high
Aug 11 Aug 18	G 0. 1 G 0. 1	FWS FWS	500 1,000		300		10 cohos	Many cohos off mouth
Aug 19 Aug 22	G 0. 1	FWS	2,000 6,000					Chums showing creek mouth
Aug 23 Aug 24 Aug 25	G 0. 1 G 0. 1 G 0. 1	FWS FWS	7,000 6,000 8,000					Cohos jumping near creek
Sept 23 Sept 28	A A	FRI	80,000 125,000					In flats below lake Some dead pinks
1 9 56 June 26	A	FWS					15 reds	
Aug 12 Aug 19	G 0. 5 G 0. 2	FWS FWS					34 reds 33 reds	
Aug 21 Aug 23	G G 100'	FWS FWS						1,500 fish 2,500 fish
Aug 26	G mouth							Many salmon
Sept 9 Sept 11	A to lak		20,000					
Sept 11	A to lak							
Sept 23	A	FRI	>30,000					
Sept 28 1987	A mark	FRI	80,000					20,000-30,000 at mouth
	18 G O. 1	FWS	50-100				100-150 reds	
July 25	G 0. 1	FWS	250					
July 28	G 0. 1 G 0. 1	FWS FWS	100-150 15					
Aug 2 Aug 6	G 0. 1	FWS	30				1 cohos	
Aug 8	G 1.7	FWS	140					
Aug 16	G 0. 1	FWS	400				100 cohes	
Aug 16 Aug 19	G 0. 1 G 0. 1	FWS FWS	800 1,200				200 cohos	
Aug 23	G 0. 1	FWS	500					
Aug 24	G 0.5	FWS	400		10			
Aug 28	G 0. 1	FWS	1,200		50			
Aug 31	G 0. 1 G mouth	FWS	1,500		200			4,000-5,000 mixed in front
оср 11	O mouth							of mouth
Sept 22	A mark		20,000	200	>5,000			
Sept 27 1958	A mark	FKI	3,000	300	20,000	2,000		
July 10	G mouth	FWS					400-600 reds	
July 19	G mouth						300 reds	
	28 G mouth G mouth							2,000 salmon at mouth 2,000 pinks at mouth
July 28 Aug 21	G 1. 0	FWS	2,000					3,500 pinks at mouth
	-27 G mouth		_,					4,000 pinks at mouth
Sept 7	A to lake		3,000		1,000			
Sept10	G 1.0	FWS	200		10			

ESCAPEMENT RECORD

SURVEYED		P	PINK		UM	OTHER SPECIES	REMARKS
Date	Miles	By Live	Dead	Live	Dead	Live	
1958	A 1 -1 - 175	WS 2,00	10				200 off mouth
Sept 17	A to lake F	,					200 011 modeli
Sept 17	A length F			1			
Sept 22	G mouth F			1			
Sept 26		WS 25,00	2,000				No fish observed
Sept 29	G mouth F	ws					No 11sh observed
1959	c 13	ws				1,500 reds	Tidal zone
July 9		ws WS				3,000 reds	Tidal zone
July 11		WS				1, S00 reds	Tidal zone
July 12		ws WS				1,000 reds	Tidal zone
July 18	_	ws 1,00	10			1,000 1805	Tidal zone
Aug 12 Aug 14		WS 1,00					Tidal zone
Aug 14 Aug 18		WS 4,50					Tidal zone
Aug 23			30				800 pinks off mouth
Sept 12	_	ws .					Too rough to land
1960	1	***3					100 10 ag.: 10 1aa
Sept 7	A length A	DF					No salmon observed
1961	A teligen A						
Aug 1	A mouth A	DF					No salmon observed
Aug 26	A mouth A						300 off mouth
Aug 29		DF 19,00	0 0			Few cohos	20,000 pinks at mouth
1962		,					
July 26	A A	DF					250 at mouth
Aug 7		DF					No salmon observed
Aug 21	A length A	DF 4,00	00				
Aug 30	A length A	DF					Excellent showing of
,							fish throughout
Sept S	A mouth A	DF					3,000 at mouth
1963							
July 15	A mouth A	DF					No fish observed
Aug 7		DF					No fish observed
Aug 21	G mouth A	DF					7,000 salmon at mouth

WR 109 Previous No. 155

U. S. Fish & Wildlife Service Weir Counts

			U. S.	rish	6 Wil	dille Servic	e Weir Coun	ts
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1928 June 27 28 29 30 July 1 2 3				16 9 3 3				
4 5 6 7				27 18 4				
8				64				
10 11 12 13				3 23 232 446				
14 15				30 7 19				
16 17 18				12 9				
19 20 21 22 23				2 268 97 99				
24 25 26 27				23 71 64 23				
28 29 30 31				14 3 3 2				
Aug 1 2 3 4								
5 6 7				9 69 9 4				
8 9 10 11 12	9 198 2,855 1,826			111 162 196 77				
13 14 15	2,955 3,901 3,460	3	5	69 2				
16 17 18	886 5, 145 3, 369			8 22 8				
19 20	1,939 1,225			6				

WR 109

115-3	0		EAC	ILE CR	REEK -	Continue	d		
Date	Pink	Chum	Coho	Red	King	Stream gag	e Water	temp.	Remarks
1929 July 12 13 14 15 16 17 18 19 20				19 6 22 32 22 420 17 77 23					
22 23 24 25 26 27 28 29 30 31 Aug 1 2		4 3 1 2 1	4 2 3 2 1	78 21 60 66 225 132 112 61 16 14 22 15					
5			2	18 24					
6 7		49		5					
8 9		19		9					
10 11 12 13 14 15 16 17 18 19	41 50 34 70 424 866 1,054 1,850 1,550	14 3 4 6 23 9	19 4 36 32 30 55 275	27 18 8 9 10 18 26					
21 22 23 24 25	1,700 3,500 5,000 4,700	34 40 80 90	186 110 115 104	9					
26 27 28 29 30 31 Sept 1 2 3	7,100 12,400 4,750 5,800 7,100 5,000 3,721 4,055 4,161 3,606	14 90 26 48 49 19 18 11 19 20	28 84 38 39 43 24 16 9 8 21						
5	1,678	24	20						

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1929								
Sept 6	2,618	51	34					
7	1,757	30	5					
8	616	29	29					
9	1,041	32						
10	1,003	49	10					
11	1, 150	44	7					
12 13	1,850 1,800	9 2 11 5	11 17					
14	429	28	4					
15	1, 200	140	21					
16	1, 270	116	13					
17	871	107	8					
18	971	178	33					
19	2, 627	307	51					
20 21	594	287	61					
22	61 1 5 8	57 92	7 9					
23	97	110	2					
24	99	74	1					
25	144	140	1					
26	162	100						
27	158	38	1					
28 29	195	42						
30	115 192	18 119	1					
Oct 1	251	379	1					
2	715	592	4					
3	150	589	152					
4								
. 5	150	330	68					
Total	102, 654	5,066 1	,861	1,938				
1930								
June 25				5				
26				9				
27				7				
28				8				
29 30								
July 1								
2								
3								
4				61				
5				54				
6 7				264				
8				107 42				
9				184				
10				856				
11				340				
12				52				
13				37				
14				61				
15 16				14 11				
17				3 9				

113-30				EAGL	ECRE	EK - Contin	ued		WR	109
Date	Pink	Chum	Coho	Red	King	Stream gage	Water	temp.	Remarks	
1930 July 18 19 20 21 22 23 24 25		17		30 86 116 41 53 442 1,610 254						
26		3		114						
27 28		3		171 103						
29				37						
30 31		2		11 41						
Aug 1		4		28						
2				57 16						
4		9		6						
5 6		1		14						
7				19						
8 9		2		14 11						
10				27						
11 12		3		41 12						
13	17		3	443						
14 15	11 26	4	5 6	79 54						
16	18	•	Ü	38						
17 18	12 19	6		29 8						
19				10						
20 21	9 710	3		41 47						
22	922	7	104	8						
23 24	828 66 7		6 4 31	6 9						
25	540	3	18	8						
26 27	2,702 1,549	2	26 18	6 4						
28	394		12	3						
29 30	2,559 3,124	4	35 49	4 18						
31	1,500	2	19	7						
Sept 1 2	4,900 1,547	2 4	137 48	8						
3	1,009	7	25	6 2						
4 5	1,009 5,209	8 13	16 0 1 7 6	5 8						
6	4,875	52	102	2						
7 8	5,570 10,914	55 124	11 5 9 5							
9	11,450	153	72	2						
10	8,012	68	40	3						

115-30				EAGI	E CKI	EK - Contin	iueu	
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1930 Sept 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Oct 1 2 3	6,800 7,400 9,600 22,000 13,500 13,000 11,000 10,500 5,380 5,264 2,041 1,726 1,477 1,154 4,080 5,963 3,279 3,255 2,560	55 22 119 555 1, 115 2, 940 1, 452 1, 280 1, 364 918 745 710 991 470 852 2, 951 1, 473 1, 181 744	34 28 30 146 108 268 760 575 864 900 322 157 36 23 22 48 116 239 123 210 156	5 3				Wain removed Oct 4
4 Total	223,012	23, 224	6,525	6, 371				Weir removed Oct. 4
1931 July 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Aug 1 4 20 31 32 32 33 34 36 37 38 38 38 38 38 38 38 38 38 38				47 31 52 128 161 218 316 407 462 342 372 20 264 967 17 236 265 947 711 729 337 702 163 395 311 24				

115 - 3	0			EAGI	LE CR	EEK - Conti	nued ADF	STAT. No.
Date	Pink	Chum	Coho	Red	King	5tream gage	Water temp.	WR 109 Remarks
1931 Aug 4 5 6 7 8 9 10 11 12 13 14	11 3			15 343 560 1,061 105				
16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 30 31 5ept 1 2	420 128 348 1, 421 866 1, 411 4, 229 15, 234 50, 139 37, 587 61, 110 41, 425 27, 000 23, 000 30, 537 27, 537 20, 024 17, 845	1 22 88 38 50 78 381 266 264 134 165 500 396 763	34 6 24 20 45 11 38 174 278 111 172 247 144 158 139 120 77 77 51 61	113 107 163 192 228 90 159 380 644 90 37 32 35 14				
8 9 100 111 122 13 144 155 166 177 188 199 200 211 222 233 24 255 266 277 28 Total	15, 089 14, 910 12, 118 10, 200 7, 450 6, 800 4, 600 2, 240 1, 335 1, 158 960 627 956 476 210 270 208 120 66 92	894 1, 635 3, 644 3, 508 4, 608 5, 680 1, 860 2, 202 2, 412 2, 525 1, 856 2, 900 2, 004 1, 246 1, 384 1, 040 950 472 852 930 50, 772 3	27 108 179 111 70 244 175 64 42 22 19 0 0 0 12 0 0 0 0 5, 289	15,749				

ADF STAT. No.

115-39 55°53.3' N. 132°37.9' W. WR 110 Previous No. 156

WRANGELL, CLARENCE STRAIT, RATZ HARBOR, Head.

MAJOR SPECIES Pink. OTHER SPECIES Chum.

ESCAPEMENT TIMING Middle. Aug. -Sept. ESCAPEMENT MAGNITUDE 250,000

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Normal range. Observed temperatures: 48° F., 10/5/53; 54° F., 9/15/53; 49.5° F., 9/27/53.

VALLEY DESCRIPTION Logged.

DRAINAGE 8.2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters through flats at head of bay.

ANCHORAGE This harbor affords protection from all except N. to NE. winds. The usual anchorage is in the 5. part of the harbor.

TRAILS AND SURVEY ROUTES Easily traveled up the streambed. Game trails follows both banks. AERIAL SURVEY NOTES Logging road for length. Usually too dark for survey.

INTERTIDAL ZONE

LENGTH 0.1 mile.

AVERAGE WIDTH/DEPTH 231/31

GRADIENT AND VELOCITIES Gentle.

BOTTOM Algae, rocks, and barnacles; clean gravel further up.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Two holes between the intertidal forks and the high tidemark.

SPAWNING AREAS The upper 200 yards has a clean gravel bottom and offers fair spawning facilities.
GENERAL NOTES The stream branches in this area and the left branch goes to a lagoon while the

UPSTREAM

LENGTH ACCESSIBLE To falls between lakes.
GRADIENT AND VELOCITIES Gentle.

right branch continues as the main stream.

AVERAGE WIDTH/DEPTH 25'/4".

BOTTOM Small gravel and occasional boulders. MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Between lakes.

TRIBUTARIES One good tributary below first lake, available to barrier falls 0.7 mile.

SCHOOLING AREAS Numerous holes are found throughout.

SPAWNING AREAS Three miles of good spawning area.

GENERAL NOTES Cohos, pinks, and reds spawn between lakes. Cohos reported above falls. Rock work planned in 1964 to enable reds and cohos to enter upper lake. Entire watershed to be logged by 1964. Little Ratz Harbor Creek is immediately south of Ratz Harbor and is reached by log road; to be clear cut in 1964. Good minor pink and coho stream; 4,000-5,000 pinks in 1963.

WR 110 Previous No. 156

Б.	SURVEYED			NK	СН		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Aug 28	G 1.0	FRI	987	S				Scattered jumps in bay
Sept 18	G 1.0	FRI	4,450	9				3,000 pinks off mouth
1950 Aug 26		FWS						2,000 pinks and chums
1953		1 110						2, 000 p.m.b and onam
Aug 12	G 0. 2	FWS						No fish observed
Aug 21	G 0. 2	FWS						Few jumpers observed
Aug 30	G 0. 2	FWS						SO salmon observed
Sept 10 Sept 15	A G 0, 6	FWS FRI	7 10	60	280	53		Few salmon observed
19S4	G 0. 0	LIVI	110	00	200	33		
Sept 27	A	FRI	13,000		0	0		Some dead pinks
								off mouth
1988		THIC						No field about 4
Aug 21 Aug 22	G 1.5	FWS FWS						No fish observed No salmon in bay
Aug 25	G 1. 5	FWS	200					no sumon m ouy
Sept 13	G 1. S	FWS	7,000	200				S00 pinks in sloughs, right
1956								
Aug 15	A lake	FWS						No fish observed
Sept 4 Sept 9	A lake A to lake	FWS FRI	4,000					No fish observed >1S,000 on flats; S,000
зері 9	A to lake	LIVI	4,000					chums at mouth
Sept 11	A lake	FWS	3,000					3,000 in bay
Sept 19	G 1.0	FWS	25,000		S,000			
1957								250
Aug 17 Sept 27	G mouth	FRI	1,000	>1,000				250 pinks at mouth Few live chums
Season	A lake	FWS	4,000	71,000			2,000 cohos	1 ew live chains
1958			-,				_,	
July 25-	26 G mouth							3,000 reds at mouth
Aug 21	G 1.5	FWS						37S pinks at mouth
Aug 29	G mouth							125 pinks at mouth 17S pinks at mouth
Aug 30 Sept 7	A mouth	FRI	>400					None observed off mouth
Sept 7	A length		300					1.0.10 00201704 044 1110411
Sept 9	G 2. 0	FWS	948					
Sept 17	A mkr	FWS	1,500					
Sept 17	A	FRI	1,500					Few dead pinks. None at
Sept 17	G 1.0	FRI	1,680	60	121	1\$		mouth
Sept 19	A 1.0	FWS	4,500					
Sept 23	A length		2,000					
Sept 26	G 2.0	FWS	4,250		7 S0			
1959	4.1.0	THIC	10					
Aug 4 Sept 12	A 1.0 G 0.2	FWS FWS	10					No fish observed
Sept 12	G 0. Z	1 113						1.0 11011 00001 704

ADF STAT. No.

115-30 ESCAPEMENT RECORD - Continue

WR 110 Previous No. 156

	SURVEYED		PINE		CHU	М	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1960								
Aug 24	A 0.5	ADF						No salmon observed
1961								
Aug 26	A 0.5	ADF						Pink present. Stream
								too dark to estimate
1962								
July 26	A 0.5	ADF						No fish & served
Aug 7	A 1.0	ADF						1,000 at mouth
Aug 30	A length	ADF	15,000					700 in intertidal zone
Sept 20	G to 2d lake	ADF	20,000				1 00 reds	Good seeding of pinks
1963								
Aug 7	A to	ADF						No fish observed in stream;
	2d lake							1,500 at mouth
Aug 14		ADF	400					
Aug 16	G to	ADF	2,300					Stream muddy
	lst lake							,
Aug 21	A	ADF						200 salmon in intertidal zone

ADF STAT. No. WR Previous No.

142-30 55°10.6' N. 132°05.2' W.

WRANGELL, CLARENCE STRAIT, KASHEVAROF PASSAGE, EXCHANGE COVE, Head.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING Middle.
SPAWNING FACILITIES
STREAM TEMPERATURE
VALLEY DESCRIPTION
DRAINAGE
STREAM MOUTH IDENTIFICA

OTHER SPECIES Chum.

DRAINAGE
STREAM MOUTH IDENTIFICATION Enters at head of Exchange Cove.
ANCHORAGE At entrance of Exchange Cove.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Only the intertidal area can be aerial surveyed.

INTERTIDAL ZONE

LENGTH 1.0 mile.
GRADIENT AND VELOCITIES Moderate.
BOTTOM Mostly sand.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS Off mouth.
SPAWNING AREAS Upper intertidal area only.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 50'/8".

ESCAPEMENT RECORD

142-30

Date	SUR VEYED Miles	Ву	PINI Live	K Dead	CHI Live	JM Dead	OTHER SPECIES Live	REMARKS
1953								
Aug 25 1955	G 0. 2	FWS						No fish observed
Aug 24	A	FWS						No fish observed
Sept 16	G 0.7	FWS	2,000					Chum present
1956			•					-
Aug 15	A to lake	FWS						No fish observed
Sept 11	A	FWS	6,000-8,0	000				
Sept 17	G 0.7	FWS	600		40			
1957								
Aug 10	A 1.0	FWS						No fish observed
Aug 26	G 0. S	FWS	150		50			S,000 pinks in cove
Sept 11 1963	G 1. 0	FWS	350	20	690	129		
Aug 27	A bay	ADF						Many at mouth; jumps in bay

ADF STAT. No.

115-10 56°06' N. 133°08.4' W.

WR Previous No. 142 No. 109

WRANGELL, CLARENCE STRAIT, KASHEVAROF PASSAGE, WHALE PASSAGE, NECK LAKE, 1.5 miles from head

MAJOR SPECIES Pink. ESCAPEMENT TIMING Middle. SPAWNING FACILITIES Poor. STREAM TEMPERATURE VALLEY DESCRIPTION DRAINAGE 16.6 square miles (polar planimeter). ANCHORAGE Small bight 0.5 mile S. of stream entrance.

OTHER SPECIES Chum.

AVERAGE WIDTH/DEPTH

STREAM MOUTH IDENTIFICATION Enters short lagoon on W. shore of Whale Passage at head. TRAILS AND SURVEY ROUTES Trail to lake on E. bank. AERIAL SURVEY NOTES Impossible to survey from air.

INTERTIDAL ZONE

LENGTH 0.1 mile. GRADIENT AND VELOCITIES Swift. BOTTOM Mostly bedrock. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS Off stream mouth. SPAWNING AREAS Very limited. GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.1 mile. GRADIENT AND VELOCITIES Swift. BOTTOM Some gravel and bedrock. MARKER DISTANCE None. MARKER IDENTIFICATION BARRIERS Falls at 0.1 mile upstream. TRIBUTARIES None. SCHOOLING AREAS SPAWNING AREAS Very limited. GENERAL NOTES

AVERAGE WIDTH/DEPTH 201/16".

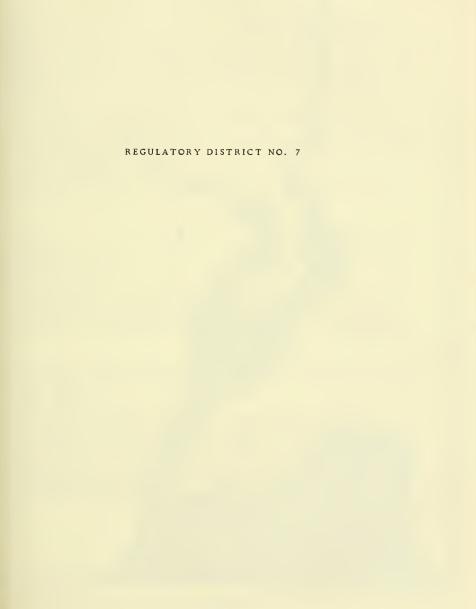
ADF STAT. No.

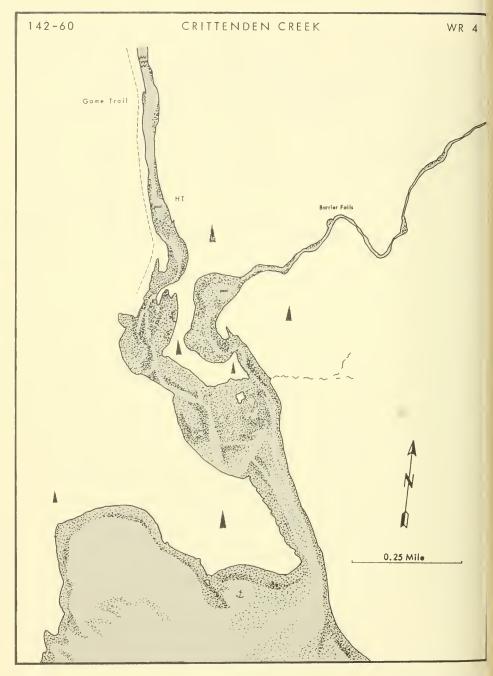
ESCAPEMENT RECORD

115-10

Previous No. 142 No. 109

	SUR VEYED		PINK	СНИМ	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live Dead	Live Dead	Live	
1955						
Aug 14	G	FWS				No fish observed
Aug 21	Α	FWS				1 jumper off mouth
Sept 14	G 0.7	FWS	3,000			
Sept 18	G 0.5	ADF	1,500-2,000			
1986						
Aug 15	G 0. 1	FWS				No fish observed
Sept 1	G 0.3	FWS	450			
Sept 11	G 0.7	FWS	500			
Sept 12	A	FWS	300			
Sept 18	G	FWS	10,000	300		





Previous No. 5

WRANGELL, EASTERN PASSAGE, 1 mile NE. of Babbler Pt., N. of Mill Creek.

MAIOR SPECIES Pink.

OTHER SPECIES Chum, coho-ESCAPEMENT TIMING Middle. Aug-Sept. ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 150'/14".

AVERAGE WIDTH/DEPTH 1001/6".

SPAWNING FACILITIES Fair to good.

STREAM TEMPERATURES Normal range. Observed temperatures: S9°F., 9/5/51; S7°F., 8/9/52; S0°F., 8/19/S2; S1°F., 8/28/S2; S7.S°F., 8/8/S3; S3.S F., 8/18/S3; S3°F., 8/29/S3.

VALLEY DESCRIPTION The lower part is of glacial origin; the upper is stream-cut. Valley walls rise up at a moderate rate from the streambed.

DRAINAGE 54 square miles (polar planimeter). Precipitation-fed. A few small lakes drain into the W. fork.

peninsula. It is slightly constricted at the mouth but broadens inside the peninsula. There is flattened terrain on both sides of the mouth.

ANCHORAGE Wrangell is only a short distance away. Adequate dock space is available for moorage. Suitable anchorage is found just N. of the mouth and 100 to 150 off shore a bar is found S. of the mouth. Skiff can go upstream 2 miles.

TRAILS AND SURVEY ROUTES Game trails follow both banks. It is wadeable in places. A skiff can be taken up to the falls on a 20' tide.

AERIAL SURVEY NOTES Poor for aerial observation. Very good light conditions are needed for satisfactory observations.

INTERTIDAL ZONE

LENGTH 1.3 miles.

GRADIENT AND VELOCITIES Gentle.

BOTTOM Shale rock and silt.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Two large pools at the head of the zone are utilized, the upper one directly below the first falls.

SPAWNING AREAS Fair spawning facilities in the upper one-third. Below this, the bottom is unsuitable for spawning. This is about the only area available to pinks.

GENERAL NOTES The intertidal zone, a wide grass bordered area, is navigable at any tide level.

UPSTREAM

LENGTH ACCESSIBLE 0.3 mile to falls

GRADIENT AND VELOCITIES Moderate.

BOTTOM Shale gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS One-half mile upstream the first falls is a total block to pinks at most water levels. Pinks are also blocked at the second falls. Cohos can pass at most water levels.

TRIBUTARIES A stream enters from the E. at the upper end of the intertidal zone. A falls 200 yards upstream is 40' high and a total block to salmon.

SCHOOLING AREAS The pool below the falls is the only major schooling area.

SPAWNING AREAS The lower part of the upstream area has the most suitable spawning gravels. Large rock and boulders become more numerous upstream. A long stretch of excellent spawning ground is found above the falls.

GENERAL NOTES Reported to be a good salmon stream.

ESCAPEMENT RECORD

	SUR VEYED		PINK		СНИ	M	OTHER SPECIES	REMARKS
Date	Miles	Ву		Dead	Live	Dead	Live	
1950		EMIC	2 000		60		200 1	
Aug 13 1951		FWS	2,900		68		200 cohos	
July 18	A 0. 3	FRI	0	0	0	0		None observed
July 25	A		_	_	-			No salmon
Aug 12	A 0.3	FRI	3, 200	0	1	0	180 cohos	
Aug 24	A 0.3	FRI	5,800	20	3	0		Half pinks spawning
Aug 25	A 2.0	FRI	5,000					
Sept 5	A 0.3	FRI	4,000	380	0	0	200 cohos	No visibility in lower stream
Sept 5	A 0. 1 G 1. 0	FRI FRI	2,700	500 2	0 25	0	S0 cohos	Exploratory beyond marker
Sept 20 1952	G 1.0	LVI	4,000	2	23		30 conos	
Aug 9	G 0.3	FRI	1,170	0	6	0		
Aug 19	G 0.3	FRI	1,145	0	6	-		Flooding stream
Aug 28	G 0. 3	FRI	475					Flooding creek
1953								
Aug 5	A	FWS						Poor
Aug 8	A 0. 3	FWS	155	0	1	0	10 1 1	Survey to falls
Aug 18 Aug 28	A 0. 3 A 0. 3	FWS FWS	25 1 19 0	1	20 7	0	10 cohos	
Sept 7	A 1. S	FWS	2	0	20	0	SO cohos	
1954	11.5	1 110	-	•	LO	· ·	30 001105	
July 20	G 1.0	FWS	1		S			
Sept 7	A 0.3	FRI						Few live chums
1955								
Aug 26	A 2.0	FWS	5	0	0	0		
Aug 31 1956	G 2.0	FWS	350	7	10			
July 24	A 0. 3	FWS						None observed
Aug 14	A 2. 0		3,000-4,000)				Several schools seen
Sept 4	A to falls	FWS	300					50 VOI 01 50 110 15 50 11
Sept 9	G to falls	FWS	2,500					Left fork
Sept 9	G to falls	FWS	1,500					
Sept 12	A 0.5	FWS	2,000					
Sep t 17 1987	G 1.5	FWS	3,000				150 cohos	Both forks
July 30	A 5. 0	FWS						No fish observed
Aug 9 1958	A length	FWS			150			No spawning observed
Aug 8	A length		100		150			
Aug 11	G falls	FWS	2,750		100			
Aug 11	G 0. S	FWS	3,000					
Aug 22	A 2. 0	FWS	4,000		100			Form dead winter
Aug 26	A 0.3 A length	FWS	3 500		50			Few dead pinks
Aug 30 Sept 17	A length A 0. 3	FWS	2,500		50			Few dead
3ept 17	A 0. 3	T. 41.2						1 CH GEGG

ADF STAT. No. WR 4 CRITTENDEN CREEK - Continued Previous No. S

ESCAPEMENT RECORD

142-60

	SURVEYED)	PIN	K	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1959								
Aug 10	A 1.0	FWS	650					Left-hand fork
Sept 17	G to falls	FWS	140					Right-hand fork
Sept 17	G to falls	FWS	30					
Sept 18	G	FWS	>200				150 cohos	
1963								
July 23	G falls	ADF			25-30			
July 23	G falls	ADF	100					200 in intertidal zone
Aug 23	G falls	ADF	300					

Previous No. 6

S6° 27. 6' N. 132° 12. 2' W.

WRANGELL, EASTERN PASSAGE, N. side S miles above Point Madan.

OTHER SPECIES Cutthroat trout. MAIOR SPECIES Red. ESCAPEMENT TIMING Middle Aug. -Sept (est.) ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Poor in Mill Creek, fair in Virginia Lake and good in the inlet streams. STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Flows through a short, broad valley between Virginia Lake and the Eastern Passage.

DRAINAGE 41 square miles (polar planimeter). Drains Virginia Lake, which is 2 miles long and 0.5 mile wide. The lake is fed by numerous small feeder streams.

STREAM MOUTH IDENTIFICATION Enters a small lagoon, wooded on the SE. side and not wooded on the NW. shore. The lagoon is entered by both Mill Creek and another tributary. Mill Creek enters W. of the tributary.

ANCHORAGE Temporary anchorage is found close in and NW. of the mill buildings. TRAILS AND SURVEY ROUTES A good trail follows the right streambank up to the lake. AERIAL SURVEY NOTES Cannot survey from the air.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 150'/36".

LENGTH 0.1 mile GRADIENT AND VELOCITIES Swift. BOTTOM Large boulders. LOW TIDE LOCATION HIGH TIDE LOCATION Large falls. SCHOOLING AREAS None. SPAWNING AREAS GENERAL NOTES No intertidal zone.

UPSTREAM

LENGTH ACCESSIBLE 0.3 mile to lake AVERAGE WIDTH/DEPTH 1251/48". GRADIENT AND VELOCITIES Steep.

BOTTOM Large gravel and boulders, large areas of bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A 201 falls is found at the high tidemark. This falls is passable, but has to be negotiated under favorable conditions of tide and water level.

TRIBUTARIES A small stream enters near the mouth. The main inlet to Virginia Lake is a large, clear water stream with clean gravel offering considerable spawning area.

SCHOOLING AREAS Many large pools.

SPAWNING AREAS The stream is swift and deep above the falls and presents unfavorable conditions for spawning.

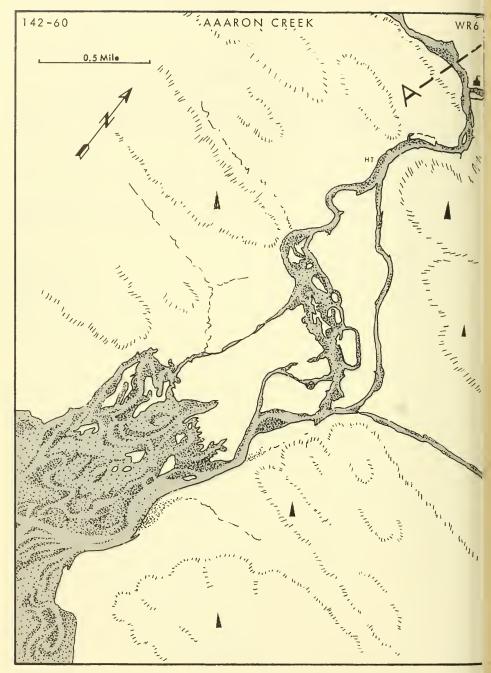
GENERAL NOTES A popular trout fishing area. Boats and shelter are available on the lake.

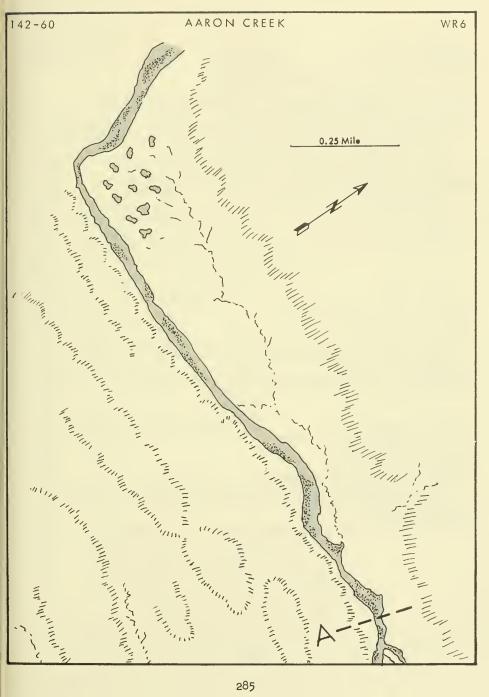
MILL CREEK

Previous No. 6

ESCAPEMENT RECORD

Date	SUR VEYED Miles	Ву	PIN Live	K Dead	CHU L ive	M Dead	OTHER SPECIES	REMARKS
1953								
Aug S 1986	A	FWS						No salmon observed
June 28 1987	A mouth	ADF						15 jumps per minute
June 24	G mouth	FWS						No salmon observed
July16	G mouth	FWS						Few reds jumping
July 25	G to falls	FWS						300 reds below falls
July 30 1958	A 2.0	FWS					3,000 reds	
July 13	G mouth	FWS						No salmon observed
Aug 11 1959	G mouth	FWS						No salmon observed
June 28	G 1.0	FWS						No salmon observed
Aug 4 1963	A length	F WS						No salmon observed
July 29	A mouth	ADF						No salmon observed





WRANGELL, BLAKE CHANNEL, enters large bay E. of Neptune I.

MAJOR SPECIES Pink and chum. ESCAPEMENT TIMING Early, July-Aug. ESCAPEMENT MAGNITUDE

OTHER SPECIES Red, king.

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. Observed temperatures: 53.5°F., 8/8/51; 56.5°F., 8/31/51; 56°F., 9/2/51; 52°F., 7/21/52; 55°F., 7/29/52; 54.5°F., 8/6/52; 45°F., 8/15/52; S1.5°F., 7/24/52; 52°F., 7/31/53; 52°F., 8/10/53; 50°F., 8/18/53.

VALLEY DESCRIPTION Glacial origin. Flows through a rugged valley; mountainous in its upper part. The valley is about a mile wide. A long tideflat is found at the lower end.

DRAINAGE Precipitation-fed. Snowfields, both glacial and seasonal, surround the upper valley.

STREAM MOUTH IDENTIFICATION Enters through grass flat over 2 miles long. The mouth opens into the W. corner of the bay.

ANCHORAGE Bergs Bay offers best anchorage in passage. Enter on either side of the island in its mouth but give it a good berth. A reef extends 200 yards northward of the inner end of the island.

TRAILS AND SURVEY ROUTES Go up the main stream in a skiff as far as the tributary. Survey the tributary on foot. Trail extends from Bergs Bay head through timber to stream mouth. AERIAL SURVEY NOTES Only the tributary is clear enough for aerial surveying.

INTERTIDAL ZONE

LENGTH 1 mile.

AVERAGE WIDTH/DEPTH 120'/30".

AVERAGE WIDTH/DEPTH 801/21-31.

GRADIENT AND VELOCITIES Moderate. BOTTOM Mud, sand, and very fine gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A deep area at the confluence of Aaron Creek and the tributary entering from the left at the head of the grass flats is the main schooling area.

SPAWNING AREAS None.

GENERAL NOTES The water is glacial colored and does not permit observation of the features in this area. Bottom very unstable in the entire intertidal area.

HPSTREAM

LENGTH ACCESSIBLE 7 miles. GRADIENT AND VELOCITIES Moderate. BOTTOM Fine sand and gravel. MARKER DISTANCE I mile.

MARKER IDENTIFICATION BARRIERS None observed. Valley becomes steep.

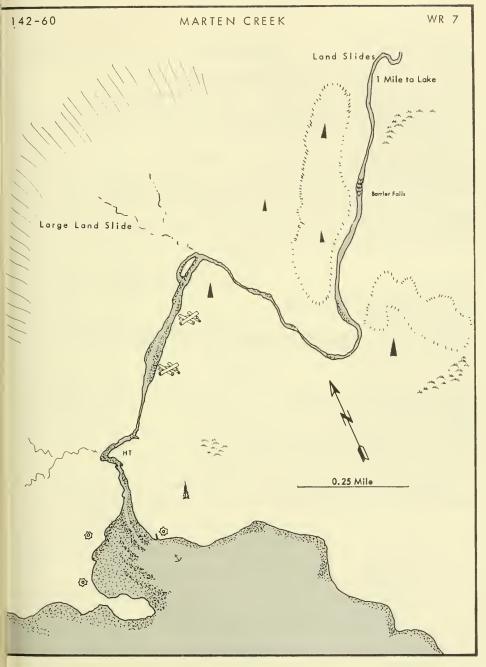
TRIBUTARIES A clear water stream enters at the head of the grass flat from the E. This stream is like a slough at mouth and offers poor spawning facilities. Above this the current increases and good spawning facilities are found.

SPAWNING AREAS

GENERAL NOTES The glacial colored water does not permit observation of physical features.

	•				•			
	SURVEYE	D	PIN	ΙΚ	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	118372 11112
Dute	WITTES	Бу	LIVE	Dead	LIVE	Dedu	LIVE	
1950								
Aug 19	Α	FRI						Many dead
Sept 2	A	FWS			1,722		SO cohos	Wighly dedd
1951	Α	1.11.2			1,722		30 001103	
July 25	A	FRI	15,000					200 dead chums
	A 0. 3	FRI	10,000	20	210	75		200 dedd Chulls
Aug 8	A 2. S	FRI	8,000	20	210	/3		Numerous dead chums
Aug 25	A 0.3	FRI	300	230	1	10		Run is over
Aug 31	A 0. 3	FRI	500	230	1	10		Numerous decayed dead
Sept 3 1952	A 0. 3	LVI	300					Numerous decayed dedd
	A 0.5	FRI	35	0	200	4		
July 21		FRI	115	0	382	25		
July 29	A 0.5			4			10 1.1	
Aug 6	A 0. S	FRI	339	4	191	201	10 kings	Manus dand Burn auca
Aug 12		WS-AD		112	ກວ	100	20 1-1	Many dead. Run over
Aug 15	A 0.5	FRI	344	112	23	180	20 kings	Spawning about over
1953	2.0.4	ED I	560	1 105	20			
July 24	A 0.5	FRI		1, 195	20			
July 24	A 0.5	FWS	540		730	177		
July 31	G 0.5	FWS	1,650	_	1,150	177		
July 31	A 0. S	FRI	1,933	0	1,536	617		E 11 1
Aug 4	A S. 0	FRI				200		Few live chums
Aug 10	G 0.5	FWS	640		340	60		
Aug 18	G 0.7	FWS	300		100			
1954								
July 15		FWS			600			47.000
Aug 3		FWS						47,000 pinks and chums
Aug 5	A 0.5	FRI	600	0	2,000	0		
Aug 7	marker	FRI	500		5,000	6,000		
Aug 14	marker	FRI	100	_	_			Many dead chums
Aug 15	A 0.5	FRI	100	0	0			Many dead chums
Aug 26	A 0. 5	FWS						None observed
Sept 7	A 0.5	FWS						None observed
1955								
July 29	A 0.5	FRI	,	2,000				
Aug 1	A 0. S	FRI	1,000	3,500				
Aug 15	A 0.5	FRI	500					Peak over
Aug 19	A 0.5	FWS	400					Spawning
1956					_			
July 17	G 0.3	FWS			2			
July 23	A 1.0	FWS			250			
July 24	A mkr	FRI	200		400			
July 28	A 2.0	FRI			6,000			
Aug 4	A mkr	FRI	300		700			
Sept S	G 1.5	FWS	7,500		100			
Sept12	A 4.0	FWS					12 other species	

	SURVEYED		PIN	K	СНИ	M	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1957		nn r	0.000		6 000			
July 29			2,000		6,000			10,000
July 30	A to falls	FWS	1 000		1 000			1S,000 salmon
Aug 9		FWS	1,000		1,000			
Aug 9	Α 5. 0 Λ 5. 0	FWS FWS	20,000		7,000			
Aug 18 1988	A 3.0	L VV 3	20,000		7,000			
July 24	A 3.0	FWS	500		3,000			
Aug 8	A 3. 0	FWS	4,000		3,000			
Aug 13	A 3. 0	FWS	1,800		0,000			
Aug 26	A	FWS	-,					No fish observed
Aug 27	A length		175					
1959								
July 28	A 3.5	FWS	1,000		2,000			Many dead chums
Aug 4	A 2.0	FWS						10,000 mixed fish,
								3,000 dead
Aug 10	A 2.0	FWS	S,000		2,000			
Aug 12	A 3. 2	FWS						Few live salmon,
								many dead chums
1960								
July 8	A length		0		200			
July 20	G	ADF	3,000		5,000			NT 6: 1 1 1
July 28	A length							No fish observed
1961	0.1 .1	ADE						I
July 6	A length		1 600		600			Jumping off mouth Chum spawning
July 21	A length A length		1,500 2,000		1,300			Fish spawning
July 27 Aug 2	A length		5,000		2,000	many		Pink in schools
Aug 18	A length		3,000		2,000	muny		Almost all fish dead
1962	A length	no.						Attitiost dit IIsli deda
July 6	A length				350			
July 16	A mouth							No fish observed
July 19	A mouth							2,000 at mouth
July 24	G 0. 2	ADF			300			
1963	4.0.0	ADE						N. 6: 1 1
July 24	A 0. 2	ADF			4 500			No fish observed
July 29	A length	ADF			4,500			Spawning scattered; poor seeding



Previous No. 10

142 - 60

56°14' N. 131°53' W.

WRANGELL, BRADFIELD CANAL, I mile from entrance on N. shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum, red. ESCAPEMENT TIMING Middle. Aug. -Sept. ESCAPEMENT MAGNITUDE SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Warm range. Observed temperatures: S1.S°F., 7/20/S0; 63.5°F., 9/7/51; 62.5°F., 8/14/52, S7.5°F., 8/26/S2; SS°F., 9/3/S2; S8°F., 8/16/S3; S8°F., 8/29/S3; S7°F., 9/6/\$3.

VALLEY DESCRIPTION Stream-cut. Runs W. and S. Broadens in the area around the lakes. Numerous tributary valleys. Heavily wooded near the mouth.

DRAINAGE 22 square miles (polar planimeter). Drains three lakes: Clay Lake with an area of SO acres; Martha Lake with an area of 440 acres and Upper Martin Lake with an area of 80 acres.

STREAM MOUTH IDENTIFICATION Enters through a small grass flat. W. cf the mouth there is a steep bank. A wooded peninsula lies S. of the mouth and blocks its view from a southerly direction.

ANCHORAGE Good temporary anchorage just off the creek mouth. TRAILS AND SURVEY ROUTES Travel up the stream is difficult if the water is higher than normal. The left bank is reportedly most suitable for travel.

AERIAL SURVEY NOTES The lower portion of this stream is not suitable for gerial survey.

INTERTIDAL ZONE

LENGTH SOO! AVERAGE WIDTH/DEPTH 1001/21.

GRADIENT AND VELOCITIES Swift.

BOTTOM Broken rock in upper; sand bottom in lower.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A large pool at the high tidemark offers facilities for schooling salmon.

SPAWNING AREAS Some spawning occurs in the upper one-fourth.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2.5 miles to lake. AVERAGE WIDTH/DEPTH 40'-60'/16"-30"

GRADIENT AND VELOCITIES Swift.

BOTTOM Broken rock and large boulders below falls; sand and gravel above.

MARKER DISTANCE Q8 mile.

MARKER IDENTIFICATION

BARRIERS ASO' falls I mile upstream is a total block.

TRIBUTARIES Numerous small tributaries enter the lakes. Spawning has not been reported to take place in any of them.

SCHOOLING AREAS Pools are found throughout the upstream area.

SPAWNING AREAS Two large pool areas above the first rapids are the best spawning areas available. A little spawning takes place above the pools.

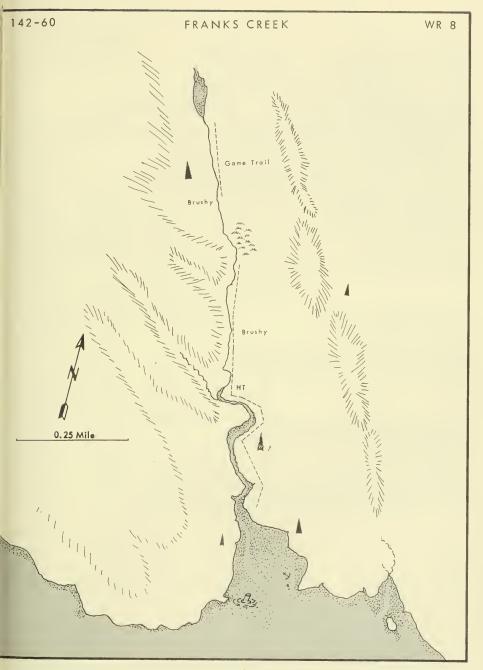
GENERAL NOTES There is evidence of logging operations a short distance above the mouth.

	•		,		,	3	, ,	, , ,
	SURVEYED		PI	NK	СН	TIM.	OTHER SPECIES	REMARKS
Date	Miles	By		Dead	Live	Dead	Live	KLMAKKS
Date	Miles	Бу	LIVE	Dedd	LIVE	Deud	LIVE	
1949								
	A O 1	FRI	0	0	0	0		No fish in stream
July 10	A 0. 1	1.1/1	0	O	V	U		No fish in stredin
1950	A 0 F	ED f	0	0	0	0		NI- field in the second
July 20	A 0.5	FRI	U	U	U	U	F1-	No fish in stream
Aug 16	A 0. S	FRI	10 200				Few reds	
Sept 6		L AA 2	10,390					
1951		FRI						27 1 1
July 25	A 0. 5		10,000		300			None observed
Aug 23				1 666	10	10	2 1	C : -
Sept 7	A 0.7	FRI	5,850	1,666	10	15	3 reds	Spawning
1952	107	EDI	220			20		
Aug 14	A 0. 7	FRI	955	2.1		38		
Aug 26	A 0. 7	FRI	1,275	31	44	3		
Sept 3	A 0. 7	FR1	1,060	63	61	26		
Sept 12	A 0. 7	FRI	357	259	39	26		
1953		F71.10						
July 20	A	FWS			200			No salmon observed
July 23	A 0. S	FRI	640		200			Chum spawning
Aug 16	A 0. 7	FRI	648	1	67			
Aug 29	A 0. 7	FRI	2,452	19	28	3	0 1 - 4 4	
Sept 6	A 0. 7	FRI	1,409	239	40	28	8 cohos, 4 reds	
1954		FILLS						M
Aug 6		FWS						Many pinks
1955								AT 01 1 1
July 8	G 0. 2	FWS						No fish in stream
July 31	G 0.5	FWS						No sign of salmon
Aug 12	A 0.7	FWS						Very few salmon seen
1956		TT.15						NT C 1 1 1
July 28	length	FWS	ac.		100			No fish observed
Aug 4	G 0. S	FWS	75					
Aug 9	G 0.5	FWS	7S		100			2001
Sept12	A	FWS						300 other species
1957	007	TTHE	100		250			
Aug 2 1958	G 0.7	FWS	100		250			
	010	EME	0.0					
Aug 7	G 1. 0	FW5	50					
Aug 8	A length		1,500					
Aug 13	A length		1,250		1 200			
Aug 22	A length		900		1, 250			
Aug 22	G 1. 0		10,000		2,000			
Aug 26	G 1.0	FWS	30,000		500			
Aug 30	G falls	FWS	3,900		36			
1989		EMC						2 000 sink and abu
July 10	G	FWS						2,000 pinks and chums in
T 1 10		EMIC						intertidal zone
July 12	G	FWS						No fish observed
Aug 4	A to falls	FWS						100 unknown species

ADF STAT. No. WR 7 MARTEN CREEK - Continued Previous No. 10

142-60

	SURVEYED	SURVEYED PINK		IK	СН	CHUM OTHER S		REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1959								
	4 0 7	T77.45C						
Aug 19	A 0.7	FWS						No fish observed
Oct 5	G 0.7	FWS	135	10				
1960								
July 27	G 0.3	ADF	85			4		
Aug 4	A 0.8	ADF	400					
Aug 13	G 0.8	ADF	550			5		25 chums and 75 pinks
ring 10	0 0,0	1 66- 1	000					at mouth
1961								de moden
		400						N. C. 1 1 1
July 27	A 0.8	ADF						No fish observed
1962								
July 6	A length	1 ADF						No fish observed
Aug 28	A length	ADF	400					
1963	,							
July 23	G 0, 2	ADF	35			0		
July 24	A mouth							Windy and rough flying
								No fish observed
July 29	A mout	nadr						No 11311 Ooserved



AVERAGE WIDTH/DEPTH 30'-40'/6"-10".

Previous No. 11

WRANGELL, BRADFIELD CANAL, 8 miles from entrance on N. shore-

MAJOR SPECIES Pink,
ESCAPEMENT TIMING Middle, Aug. -Sept.
SPAWNING FACILITIES Excellent, but limited.

STREAM TEMPERATURES Cold range. Observed temperatures: 50°F., 8/1/S1; 50°F., 8/13/S1; 49.5°F., 8/25/S1; 50.5°F., 9/1/S1; 51.5°F., 9/8/S1; 49°F., 9/16/51; 46°F., 7/27/S2; 47°F., 7/31/S2; 51°F., 8/8/52; 48.5°F., 8/16/S2; 50.5°F., 8/24/S2; 48.5°F., 7/30/S3; 50.5°F., 8/7/S3; 50°F., 8/16/S3; 48°F., 8/26/S3; 49°F., 9/5°F., 9/5°F.,

VALLEY DESCRIPTION A short stream—cut valley. The valley wall rises sharply W. of the stream. The E. side of the stream is flat for a short distance, then rises sharply.

DRAINAGE 6.2 square miles (polar planimeter). Precipitation-fed. A few small ponds are scattered throughout the drainage system.

STREAM MOUTH IDENTIFICATION A small tideflat. The stream meanders through the upper part of the intertidal zone.

ANCHORAGE Suitable anchorage in all except severe storms is found 100 yards out from the old trap pilings.

TRAILS AND SURVEY ROUTES At high tide a skiff may be taken upstream for several hundred yards. The stream is easily waded except at times of high water. A game trail follows the W. bank. AERIAL SURVEY NOTES Heavy brush along the banks obstructs aerial visibility.

INTERTIDAL ZONE

LENGTH 0.4 mile. AVER
GRADIENT AND VELOCITIES
BOTTOM Fine gravel with boulder areas.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS Good schooling areas throughout.
SPAWNING AREAS Spawning takes place in the upper half.
GENERAL NOTES Wadeable at low tide.

UPSTREAM

LENGTH ACCESSIBLE 5 miles.

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Gravel predominant; some small boulders.

MARKER DISTANCE
MARKER IDENTIFICATION

BARRIERS None reported.

TRIBUTARIES None reported.

SCHOOLING AREAS Good resting pools are interspersed between riffle areas.

SPAWNING AREAS Numerous good spawning riffles.

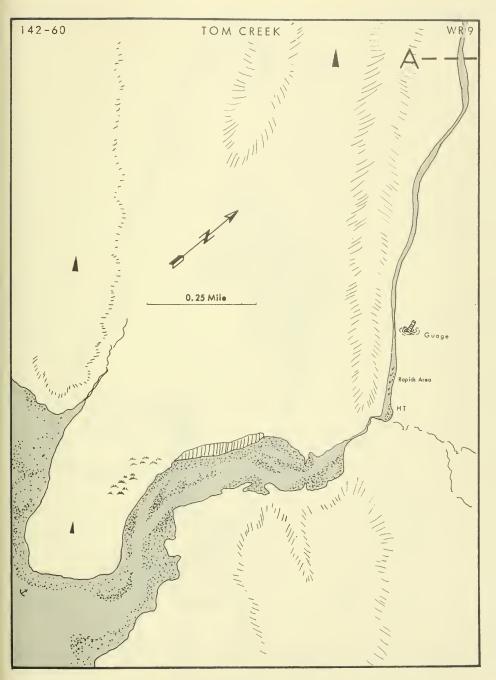
GENERAL NOTES Brown bear are present on this and most other mainland streams.

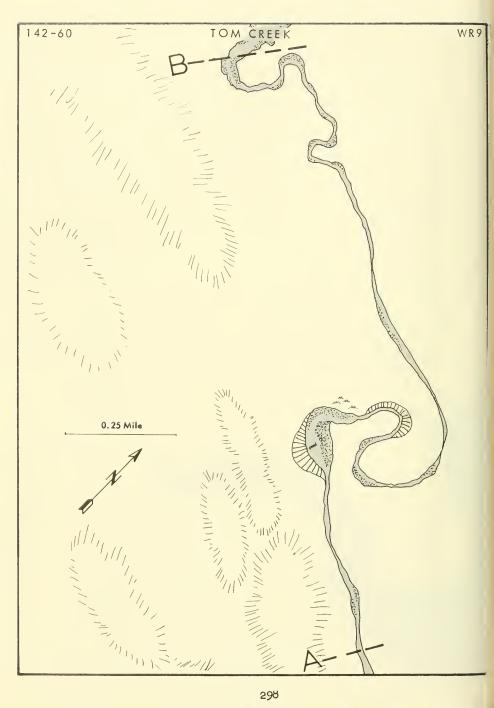
	CIDIEI		Desc		CI T	73.6	OTHER EDECIES	DEMARKE
Date	SUR VEYED Miles	By	PIN: Live	K Dead	CHU Live	Dead .	OTHER SPECIES Live	REMAR K5
Date	wiiles	Бу	Live	Dedu	LIVE	Dedd	DIVE	
1950								
Aug 16	A							Too small for aerial
								survey
Sept 6 1951	A	FW5	2,900		55			
July 12	A 0. 5	FR1	0	0	0	0		
Aug 1	A 0.5	FRI	1,083	6	18	1		Schooled. Little spawning
Aug 13	A 0.5	FRI	26, 200	165	113	9		
Aug 22	A 0.7	FWS	15,000	363	2			
Aug 25	A 0.5	FR1	16,800	785	8	18		One-fourth spawning
Sept 1	A 0.5	FRI	14,400	1,250	0	0		
Sept 1	A 2.5	FR1	17,300	6,800	0	150		Exploratory beyond marker
1952		TTD T	0	0	2	0		
July 22	A 0.5 A 0.5	FRI FRI	0 559	0	2 47	0 2		
July 31 Aug 8	A 0. 5	FRI	1,624	21	172	10		
Aug 16	A 0.5	FRI	1, 205	250	83	91		Spawning past peak
Aug 24	A 0.5	FRI	790	321	3			-paning pau pan
1953			,					
July 23	A 0.5	FRI	27	0	12	0		
July 30	A 0.5	FRI	61	0	15	0		2 pinks, 47 chums next
								quarter mile
Aug 7	A 0.7	FRI	594	1	73	5		
Aug 16	A 0.7	FRI	968	12	43	15		
Aug 26	A 0. 7	FRI	1,720	36	11	6		
Sept 5 1954	A 0 . 7	FRI	671	228	4	26		
Aug 14	marker	FRI	100					
Aug 15	A 0. 5	FRI	0	0	0	0		Less than 100 pinks
1955			_					
July 10	G 0.5	FWS	0	0	0	0		
July 26	G 0.5	FWS	0	0	7	0		
Aug 1	G 0.5	FRI	0	0	0	0		Good spawning area
Aug 9	G 0.5	FWS	0	0	35			
Aug 10	G 1.0	FWS	0	0	375	0		Whiteitian man and a bigh
Aug 12	A 0.7	FWS	0	0 8	0	0		Visibility poor, water high Very few salmon present
Aug 25 1956	G 1.0	FWS	0	٥	U	U		very few sufficient present
Aug 4	length	FWS	12		0			
Aug 4	G 1. 0	FW5	500		300			
Aug 11	G 1. 0	FWS	100					
Sept 7	G 0.7	FWS	200					
1957								
July 30	A 5.0	FW5						500 seen
Aug 18	A length	FWS						1,500 salmon

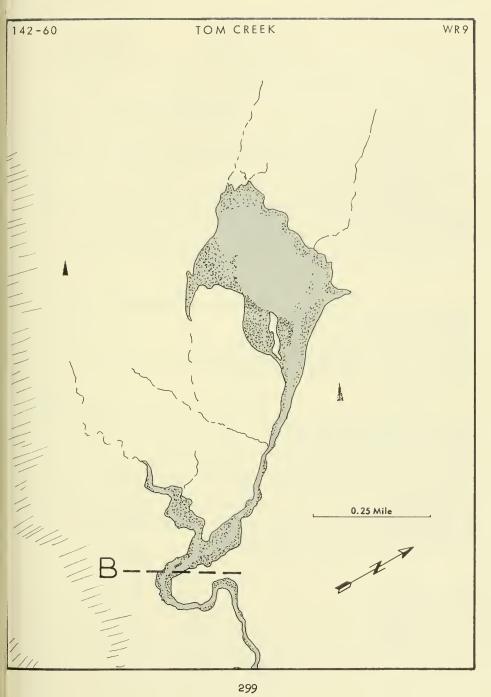
142-60

ADF STAT. No. WR 8
FRANK'S CREEK - Continued Previous No. 11

	SUR VEYED	RVEYED PINK		CHU	M	OTHER SPECIES	REMARKS	
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1958								
July 24	A lengtl	ı FWS	3,000		2,000		2,500 kings	
Aug 8	A lengtl	rWS	400		200			
Aug 13	A lengtl	ı FWS	400		100			
Aug 1S	G 1.0	FWS			200			
Aug 27	A length	n FWS	1,000		SO			
1989								
July 6	G	FWS						S00 pinks and chums in intertidal zone
July 14	G 1.0	FWS						No fish observed
July 28	A 2.0	FWS						No fish observed
Aug 4	A 0. S	FWS						No fish observed
Aug 10	A 1.0	FW'S			300			
Aug 19 1960	G 0.7	FWS	100					100 dead
Aug 13 1961	G 2. S	ADF	125		14			
	Not surv	reved						
1962		,						
July 6 1963	A mouth	h ADF						300-400 at mouth
July 24	G 0. S	ADF						No fish observed
July 24	A mouth	h ADF						No fish observed; flying rough







W .

Previous No. 12

WRANGELL, BRADFIELD CANAL, 9.5 miles from entrance on N. shore.

MAJOR SPECIES Pink. OTHER SPECIES Chum, coho, red, king. ESCAPEMENT TIMING Middle. Aug. - Sept. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair in the lower 2 miles, excellent in the mile below the lake and in the three-fourths mile above the lake.

STREAM TEMPERATURES Normal range. Observed temperatures: 55.5°F., 8/7/51; 54.5°F., 8/17/51; 56.5°F., 8/18/51; 58°F., 8/30/51; 53°F., 7/30/52; 58°F., 8/11/52; 51.5°F., 8/27/52; 48°F., 7/22/53; 53°F., 8/1/53; 59°F., 8/7/53; 52°F., 8/17/53; 52°F., 8/24/53.

VALLEY DESCRIPTION Stream-cut.

DRAINAGE 21 square miles (polar planimeter). Drains two small lakes: Tom Lake, 3 miles upstream, and Campbell Lake, 4.5 miles upstream.

STREAM MOUTH IDENTIFICATION Enters the canal 3 miles W. of the Harding River. Lies at the head of a lagoon, about 0.5 mile long and 100 yards wide.

ANCHORAGE Suitable anchorages are found on either side of the mouth, 100 yards off shore.

TRAILS AND SURVEY ROUTES At flood tide a skiff can be taken to the foot of the rapids, about 200 yards, and then run up to the lake. Travel is difficult along the banks.

AERIAL SURVEY NOTES Extensive areas of moss-covered rocks make detection of fish from the

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 2501/18".

LENGTH 0.8 mile.

GRADIENT AND VELOCITIES Gentle.

BOTTOM Fine gravel and a few large boulders. LOW TIDE LOCATION

HIGH TIDE LOCATION The lower end of the rapids.

SCHOOLING AREAS The lower two-thirds is made up of deep pools.

SPAWNING AREAS Does not appear to be utilized for spawning to any significant degree. Some spawning occurs in a limited area in the upper one-third.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2.2 miles to lake. AVERAGE WIDTH/DEPTH 100'/2' -3'.

GRADIENT AND VELOCITIES Gentle.

BOTTOM Fine to moderate gravel with sand and silt in sluggish area.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A 40' falls three-fourths mile above the first lake blocks the passage of salmon.

TRIBUTARIES Two tributaries enter Tom Lake. The largest on the S.E. side of the lake has good spawning gravel.

SCHOOLING AREAS Numerous pools are scattered throughout the stream's length, but are most frequent in the second mile.

SPAWNING AREAS Spawning areas are limited in the lower 2 miles, but are excellent in the riffle just below the lake and in the area below the falls.

GENERAL NOTES The stream follows a meandering course.

TOM CREEK

ADF STAT. No. WR Previous No. 12

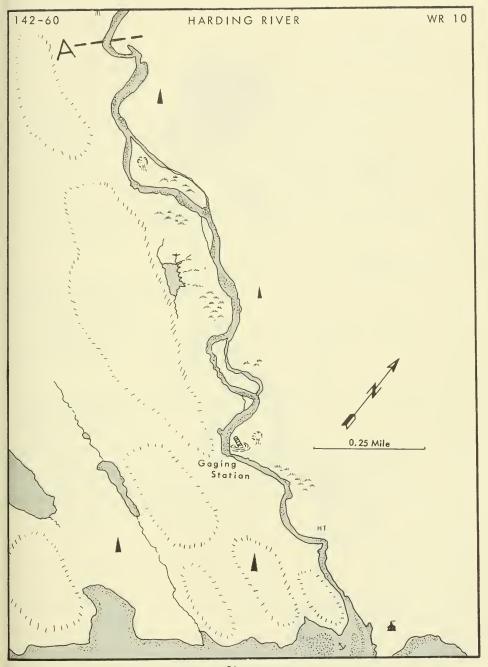
9

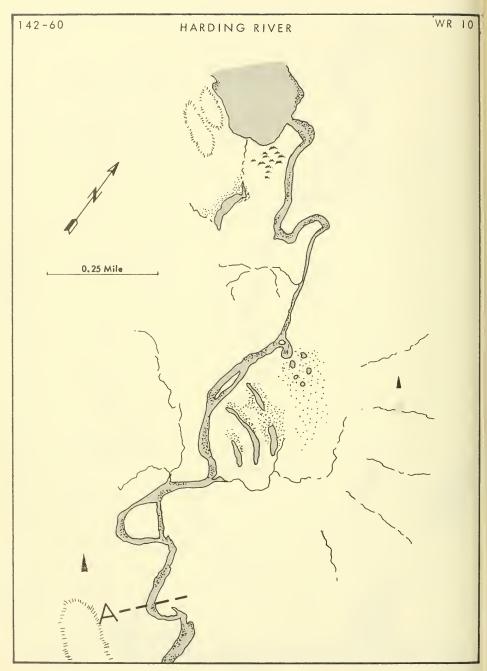
ESCAPEMENT RECORD

[Counts induce by ground surveys are designated by G, deficit surveys by A]										
	SURVEYED)	PIN	ſΚ	CH	JM	OTHER SPECIES	REMARKS		
Date	Miles	By	Live	Dead	Live	Dead	Live			
1980		THAC	10.055		770					
Aug 8	A	FWS FRI	10, 255		770			Et d. al annul and		
Aug 16 19 5 1	A 3.S	r IVI						Fish throughout		
July 13	A 3.0	FRI	285		267					
July 25	A 3.0	FRI	200		20,			10,000 salmon. Count		
J,								difficult		
July 27	A 3.0	FRI	24,870		2,670			15,000 pinks schooled		
								above lake		
Aug 7	A 3.0	FRI	43,896	\$40	2, 330	930	27 reds	Pink spawning		
Aug 18	A 3. 0	FRI	49,100	3,480	297	1,240	17 reds	Pink spawning		
Aug 23	A 0.6	FWS	2,500	500	20	10		Exploratory to falls above		
								lake. S,600 live and 180 dead pinks		
Aug 30	A 3.0	FRI	19,000	17, 100	80	400	3 cohos, 30 reds,	dedd pilks		
riag o			,	,			4S kings			
Sept 13	A 3.0	FRI	4,600	200	25	3	700 cohos, 21 reds,			
							20 kings			
1952										
July 30	A 3.0	FRI	3,575	0	2, 135	12	25 kings, 10 reds			
Aug 11	A 3.0	FRI	9,270	285	2, 129	S91	1S cohos, 146 reds,			
Aug 12	A 3.0	FRI					91 kings	Poor showing on delta		
Aug 12	A 3, 0	11(1						at lake inlet		
Aug 27	A 3.0	FRI	2, 205	618	105	393	25 cohos, 180 reds			
							36 kings, 10			
							dead reds, S dead			
							kings			
1953	A 3.0	FWS						No fish observed		
July 20 July 22	A 3.0	FWS	1.000	12,000				NO IISII ODSELVEU		
July 22	A 4.0	FRI	1, 260	0	3,701	S	3 reds	Survey to lake same as		
			•		•			1981 and 1982		
Aug 1	A 4.0	FRI	10,230	0	9,040	521	13 reds, S3 kings			
Aug 7	A 4.0	FRI	13,420	50	8,040	3, 250				
Aug 17	A 4.0	FRI	8, 168	753	1,960	3,066	255 reds			
Aug 24	A 4.0	FRI	3,8/2	1,738	600	3,329	7S cohos, 309 reds 6 dead reds, 107	,		
1954							kings			
Aug S		FWS			100		111195			
Aug 5	A 3.0	FRI	500	0	3,000			Some dead chums		
Aug 15	A 3.0	FRI	1,700		3,000			Some dead pinks and chums		
Sept 10	A 3.0	FRI	600	0	0			Few dead chums		
1955										
July 10	G 0.5	FWS	0	0	30	0				
July 11	G 0. S A 3. 0	FWS FRI	0	0	10 300	0		Jumps in bay		
July 23 July 26	G 0. S	FWS	0	0	0	J	2 kings	Jumps III ouy		
Aug 1	A 3.0	FRI	1,100	0	800	0	a tungs			
Aug S	G 0.5	FWS	,					Few live pinks, 22 chums		
								off mouth		
Aug 1S	A 3.0							None observed off mouth		
Aug 19	A 3.0	FWS	mco.					Salmon spawning		
Aug 19	A 3.0	FRI FWS	700 500		so			Spawning		
Aug 26	A 3.0	L M 2	300		30			Spawning		

ADF STAT. No. WR 9
TOM CREEK - Continued Previous No. 12

	SURVEYED	,	PIN	₹K	CHU	M	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1956	A 3.0	FR1	0	0	400		Few kings	
July 22	G 0.7	FWS	200	· ·	500		rew Kings	
July 26	length	FWS	200		1,000			
July 28 July 28	A	FWS			1,000			
July 29	A 3. 0	FRI	400	0	1,500			3,000 chums at mouth
July 23	Α 3. 0	FWS	100	•	2,000			3,000 0
Aug 4	A 3. 0	FRI	300	0	900	0		Pink fresh
Aug 17	A 3. 0	FRI	1,500	0	600	Ŭ		300 dead chums
Aug 24	A 3. 0	FRI	200	0	0	0		Water high
1957	71 310		200	•	•			
Aug 4	A 3.0	FRI	3,000	0	5,000	200		Pink in lower stream
Aug 9	A to lake	FWS	200		1,000			
Aug 16	A 3.0	FRI	2,000		500			Some dead pinks and chum:
1958								
July 17	A 3.0	FWS	200					
July 24	A length	FWS			1,000			
Aug 1	G 2.0	FRI	200		100			
Aug 4	G 1.0	FWS	200		50			
Aug 8	A length	FWS	1,000		2,500			
Aug 11	A mark	FWS	2,000		2,000			
Aug 11	A 3.0	FRI	2,000	0	2,000	200		
Aug 13	A length	FWS	500		2,000			
Aug 22	A length	FWS	500		2,000			
Aug 25	A 3.0	FWS	200					Few chums. Old fish
								spawning
Aug 31	G 2.0	FR1	750		20			
Sept 8	G 1.5	FWS	50					
1959	_							200 : 1 1 1 .
July 9	G	FWS						300 pinks and chums in
					1 000			tidal zone
July 22	G 1.5	FWS	1,000		1,000		FO 1-	Samuel Jaimes
July 28	A 4.0	FWS	100		200		50 reds	Several kings
Aug 4	A 3. 0	FWS	200		3,000			
Aug 10	A length		200		2,500			50 reds in lake
Aug 12	A 4.5	ADF FWS	100		100			No fish observed
Oct 6	G 0. 5	rw5						NO IISH Observed
1960	A 1	ADE						No fish observed
July 8 July 18	A length A length							No fish observed
Aug 4	A length				9,000			Fish in lower stream
1961	A length	no:			2,000			
July 17	G	ADF					1 king	300 at mouth
July 23	A	ADF					5	100 mixed fish at mouth
July 27	A length		300		few			
Aug 8	A length		1,500		1,000			Many dead fish
Aug 18	A length		1,200		,			All spawning
1962			-,					
July 25	A lake	ADF	700				25 reds	Fish in lake and stream
Aug 28	A mout)							No fish observed
1963								
July 24	A 0. 2	ADF	4		1			
July 24	G 0.5	ADF						
July 29	A lake		20,000					Mixed in upper stream
Aug 5	skiff to	ADF	14,000		1,000			Above lake in inlet
	lake							stream
						200		





Previous No. 13

WRANGELL, BRADFIELD CANAL, 6.3 miles from head on N. shore.

MAJOR SPECIES Chum.

OTHER SPECIES Pink, king, coho.

ESCAPEMENT TIMING Early. July-Aug. (est.) ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Glacial and stream-cut.

DRAINAGE 97.2 square miles (polar planimeter). Drains Fall Lake S miles upstream. The river has its headwaters near some small glaciers about 20 miles above the lake

STREAM MOUTH IDENTIFICATION It enters Bradfield Canal opposite the Eagle River and Duck I.

ANCHORAGE Good anchorage W. of Duck I. Good float W. of river mouth.

TRAILS AND SURVEY ROUTES Small light skiffs can be run to falls. The U.S.G.S. has blazed a trail up the right bank as far as the thermograph building. The stream is wadeable just above this point.

AERIAL SURVEY NOTES Visibility is not too good because of the glacial water.

INTERTIDAL ZONE

LENGTH 0.5 mile.

AVERAGE WIDTH/DEPTH 2001/3".

AVERAGE WIDTH/DEPTH 150'/20".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Boulders with sand and mud in the lower part.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS A deep area about halfway up the intertidal zone is utilized. Large pool at head of tidewater.

SPAWNING AREAS Some spawning might take place near the head of the zone.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE S miles to falls.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Sand, gravel, and rock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Suspected block just below lakes.

TRIBUTARIES Numerous tributaries enter from the W. side. No reports of spawning in any tributary stream.

SCHOOLING AREAS Pools are scattered throughout the stream's length. A large, deep hole at the U.S.G.S. thermograph building is heavily utilized.

SPAWNING AREAS Spawning area is good from thermograph building station to just below falls.

Spawning takes place in all riffle areas.

GENERAL NOTES Very good population of brown bear.

	SUR VEYED		PIN	٧K	CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
July 10	G 2.0	FRI						King and chum breeding
Aug 12	G 2.0	FWS						Good showing of chum
1950								
Aug 9	A	FWS	7,500		230			
Aug 16	A 6.0	FRI			001			Good showing. Many dead
Aug 16 19 5 1	G 0.5	FRI	107	1	991	283		
July 25	A 6.0	FRI						20,000 salmon
1952	A 0.0							20,000 301111011
Aug 7	5.0	FW5			35,000			
Aug 12	A 6.0 F	WS-A	DF					Fair showing, mostly chums
1953								
July 20	A 6.0	FWS			40,000			
1954	C 0 F	FWS				30		Manualina abana
Aug 1 1955	G 0.5	r W S				50		Many live chums
July 12	G 2.0	FW5						No jumps observed
July 23	A 6.0	FRI	0	0	5,000	0		
July 25	A 1.0	FW5			5			1 king at mouth
Aug 1	A 6.0	FRI	2,000	0	14,000	0		
Aug 19	A 6.0	FRI						Water high and colored
1956								pink spawning
July 22	A 6.0	FRI	0	0			Few kings	
July 28	Iength	FW5			2,500		3-	
July 29	A 6.0	FRI	1,000	0	11,000			500 pinks at mouth
July 31	A length	ADF	15,000					
Aug 1	A	FWS	15,000					
Aug 4	A 6.0	FRI			5,000			Several schools at mouth
Aug 9	A G 1.5	FRI FWS	600		10,000			
Aug 11 Aug 17	A 6.0	FRI	000		2,500			5ome pinks. None at mouth
Aug 24	A 6. 0	FRI			2,000			Few pinks observed
1957								•
July 30	A	FRI	1,000		20,000			
Aug 4	A 6.0	FRI	3,000	0	,			Pink in lower stream
Aug 7	A 9.0	FWS			70,000			
Aug 7	G to falls	FW5			100,000 45,000			
Aug 9 Aug 16	A to lake A 6.0	FRI	2,000		20,000		>500 kings	
1958	A 6. 0	1111	2,000		20,000		- 500 kings	
July 17	A 3.0	FWS			75			
July 24	A length	FW5			12,500			
Aug 4	A 1. 0	FWS			3,000			
Aug 11	G mark		3,000	0	10,000			None observed at mouth
Aug 11	A 6.0	FRI	3,000	0	2,000			None observed at mouth
Aug 13 Aug 31	A length	FRI			25,000			No fish observed, few dead
raug 31		2 1 1 1						, , , , , , , , , , , , , , , , , , , ,

	SUR VEYED	PINI	ζ.	CHU	JM	OTHER SPECIES	REMÀRKS
Date	Miles By	Live	Dead	Live	Dead	Live	
1050							
1959 July 9	G FWS						No Gold about 1
July 22	A 5. 0 FWS	2,000		3,000			No fish observed
July 28	A 5. 0 FWS	2,000		7,500			Few pinks
Aug 3	G FW5			.,			600 mixed fish at mouth
Aug 4	A 5.0 FWS			25,000			2,000 dead
Aug 10	A length FWS			20,000			·
Aug 11	A 6.0 FRI	3,000	0	2,000			None observed at mouth
Aug 12	A 4.0 ADF			4,000			Few pinks. Many dead chums
Sept 3	A length FWS						No fish observed. Evi-
1010							dence washed out
1960	1 105						N. 6
June 28- July 19	A ADF						No fish observed
July 21	G 3.5 ADF						Many chums present
July 23	G 4.5 ADF	0		25,000			New fish
Aug 4	A length ADF	0		45,000			Fish spawning
1961	, , , , , , , , , , , , , , , , , , ,			,			- 1011 0 - 1111111
July 9	G 0. 6 ADF	0		0			Few chums in intertidal
July 11	A 4.5 ADF	0		50			
July 17	G 4.5 ADF	500	0	16,000			Chum spawning
July 23	A 4.5 ADF	few		14,000			Heavy spawning on
							all riffles
Aug 4	A length ADF	few		50,000	many		
Aug 18 1962	A length ADF	many		10,000	17,000	J	
July 6	A length ADF						No fish observed
July 16	A length ADF			600			140 II3II ODSELVED
July 25	A to lake ADF			25,000			100 in intertidal zone
Aug 28	A length ADF	50		200			
1963							
July 29	A length ADF			20,000			Count not accurate
Aug 6	skiff 2.0 ADF	1,000		5,000			

ADF STAT. No.

NORTH BRADFIELD RIVER

142-60 \$6°15' N. 131°28.5' W. WR 11 Previous No. 14

WRANGELL, BRADFIELD CANAL, N. Head.

MAJOR SPECIES Pinks.

ESCAPEMENT TIMING Middle. AugrSept. (est.)

COTHER SPECIES Kings.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION A large glacial-cut valley with many tributary valleys. Most of the valley is heavily timbered with spruce.

DRAINAGE Fed by several glaciers.

STREAM MOUTH IDENTIFICATION

ANCHORAGE Remain at Harding and run to river with skiff.

TRAILS AND SURVEY ROUTES Survey the lower river from a skiff. The upstream area is easily reached along the numerous gravel bars.

AERIAL SURVEY NOTES Impossible to survey due to glacial color of water.

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GOOD.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 15 miles.

AVERAGE WIDTH/DEPTH 1501/24".

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES Moderate to swift.

BOTTOM Gravel, small and large rocks, and boulders.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None.

TRIBUTARIES Several small, but good, tributaries enter between 6 and 10 miles upstream.

SCHOOLING AREAS

SPAWNING AREA The first 6 miles has numerous gravel riffles, the next 4 miles has coarse rubble and good gravel is found beyond a glacier 12 miles up.

GENERAL NOTES King salmon carcasses have been observed.

ADF STAT. No. WR 11 Previous No. 14

ESCAPEMENT RECORD

Date	SUR VEYEI Miles	Ву	PINI Live	Nead	CHI Live	JM Dead	OTHER SPECI	ES REMARKS
1950 Aug 16 Sept 10 1951	A 1.5 A	FRI FW5	2, 300		230			North Fork #14 fair
July 25 1953	A 3.0	FRI						None observed
1954	Not surv	veyed						
1085	Not surv	veyed						
1955 July 7 Aug 1	G 1.5 G 1.5	FWS FWS						No fish observed No fish observed
1956 July 12 Aug 7	G 2. 0 A	FWS FWS						No fish observed No fish observed
Aug 14 Sept 17 1957	A 3.0 A 2.0	ADF ADF						No fish observed No fish observed
July 12 Aug 7	G 2. 0 A	FWS FWS						No fish observed No fish observed, water colored
1958 July 23 1959	G mout	h FWS						None observed
	No surv	eys						
1960	No surv	eys						
1961	No surv	eys						
1962	No surv	eys						

ADF STAT. No. WR 12 Previous No. 15

142-60 56°13.6' N. 131°27.8' W.

WRANGELL, BRADFIELD CANAL, East head,

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES
ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES Went up at hig

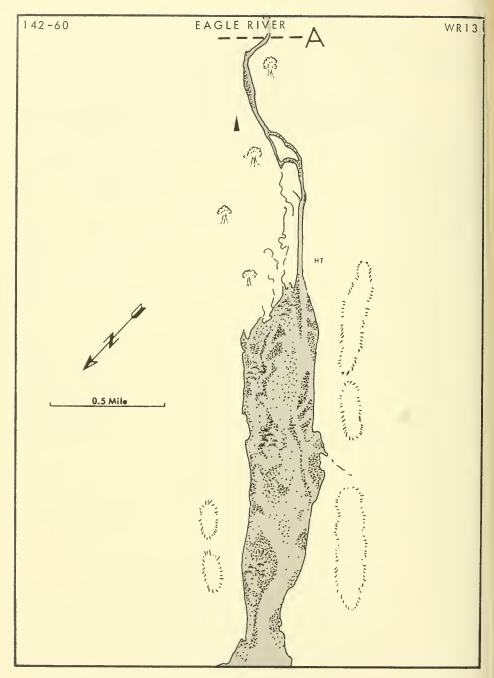
GENERAL NOTES Went up at high tide, but not able to find many fish, so concluded the escapement was light here.

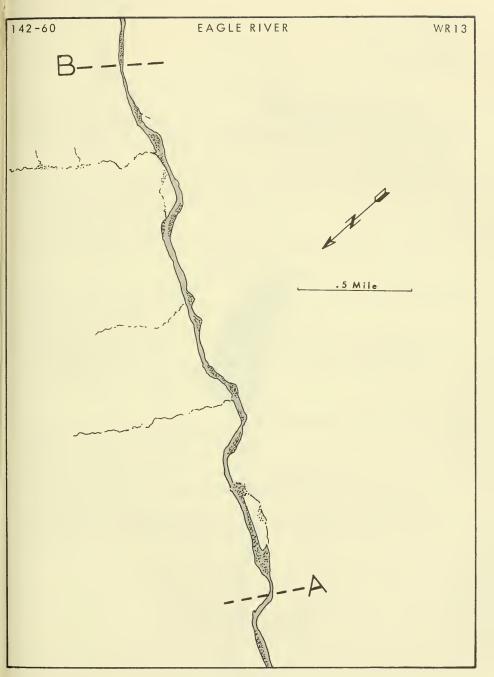
EAST BRADFIELD RIVER

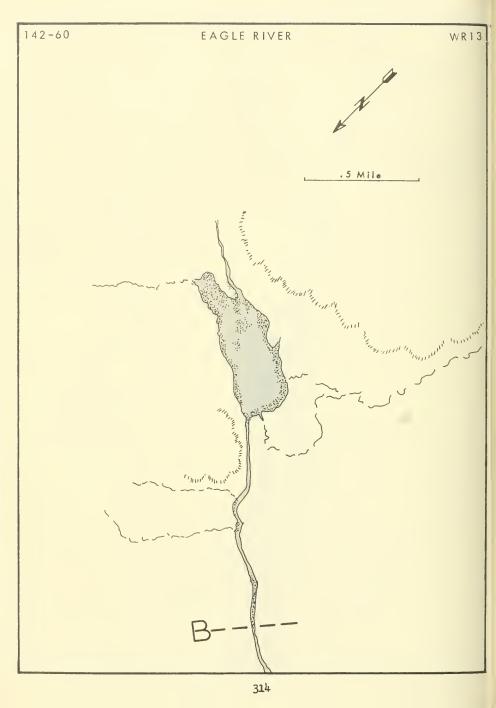
WR 12 Previous No. 15

ESCAPEMENT RECORD

	SUR VEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1950								
Aug 16 1956	A 15.0	FRI						#15 5. fork good showing
Sept 17 1957	A 2.0	ADF						No fish observed
July 12	G 2.0	FW5						No fish observed
Aug 7		FW5						No fish observed
July 23 1959	G mout!	FW5						No fish observed
	No surve	eys						
1960								
	No surve	eys						
1961								
	No surve	≥ys						







142-60 56°09.7' N. 131°35.6' W.

Previous No. 16

WR 13

ADF STAT. No.

WRANGELL, BRADFIELD CANAL, EAGLE BAY, Head on S. shore.

MAIOR SPECIES Pink. ESCAPEMENT TIMING Late. Sept. - Oct. ESCAPEMENT MAGNITUDE Est. 250,000.

OTHER SPECIES Chum, coho, king.

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Warm range. Observed temperatures: 54°F., 8/1/50; 55.5°F., 8/16/50; 55°F., 9/11/50; 50°F., 9/24/50; 57°F., 8/1/51; 58°F., 8/13/51; 56°F., 8/25/51; 53°F., 9/8/51; 57°F., 9/16/51; 56°F., 8/24/52; 52.5°-56.5°F., 7/21/53-7/28/53; 62°F., 8/1/53; 55°F., 8/14/53; 56.5°F., 8/25/53:

VALLEY DESCRIPTION Glacial origin. Flattened in its lower reaches becoming steep-sided upstream. DRAINAGE 62 square miles (polar planimeter). Drains two fair -sized lakes. Snowfields surround the

valley and probably contribute snowmelt at certain times of the year.

5TREAM MOUTH IDENTIFICATION Enters Bradfield Canal just \$W. of Duck Island. A large grass flat is found at the mouth.

ANCHORAGE Refer to WR 10.

TRAILS AND SURVEY ROUTES A skiff should be taken upstream at high tide to the upper end of the grass flats. From here, the stream may be followed along the right side though travel is not easy. AERIAL SURVEY NOTES Aerial visibility is excellent. Light best early in day.

INTERTIDAL ZONE

LENGTH 1 mile.

AVERAGE WIDTH/DEPTH 100'-200'/12"-24".

GRADIENT AND VELOCITIES Slight.

BOTTOM Good spawning gravel - lower area sand, silt, and mossy stones.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Deep holes on the W. side of the flats about 0.5 mile upstream offer excellent facilities for schooling.

SPAWNING AREAS Limited to about 500 yards near the upper end. The lower section is composed largely of fine sediment.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE >3.5 miles.

AVERAGE WIDTH/DEPTH 100'-150'/10"-16".

GRADIENT AND VELOCITIES Moderate. BOTTOM Gravel, small and large rock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A falls is one-half mile below the first lake.

Falls is impassable.

TRIBUTARIES Numerous small tributaries. A tributary enters at the high tidemark and has a 50' falls 100 yards upstream.

SCHOOLING AREAS Holes are interspersed throughout the distance surveyed.

SPAWNING AREAS Spawning areas appear to be spread uniformly throughout. The best areas seem to be in the lower 2 miles and above the 3-mile mark.

GENERAL NOTES

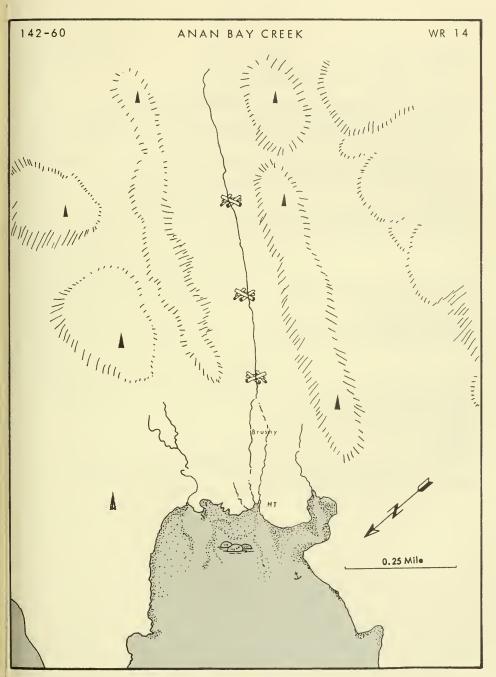
[Counts indue by ground surveys are designated by 6, derial surveys by 11]								
	SURVEYED		PINI	к	CHU	М	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
Ducc	*****	-,						
1949								
July 10	G 1.0	FRI						Too early
Aug 20	A	FWS	100,000		80,000			·
Aug 27	G 1.5	FRI	17, 200	191	215	158		Excellent showing
Sept 15	G 0.5	FRI	4,500					Stream high
1950			-,	,				_
Aug 1	G 0.5	FRI	218		409			Water discolored and high
Aug 16	G 1.5	FRI	13,888	29	2,069	179		
Sept 11	G 1.5	FR1	15, 201	1,225	179	0		
Sept 11	G 1.5	FRI	15,200	1,225	606	212	11 cohos, 23 kind	gs .
Sept 24	G 0.6	FRI	150	150	3	3	,	Flooding
1951								
Aug 1	G 1.0	FRI	20,080	0	1,800	0	50 kings	Spawning in intertidal
Aug 13	G 1.0	FRI	32,012	75	2, 350	280	2 reds, 50 kings	
Aug 25	G 1.0	FRI	19,500	330	363	179	14 kings, 3 coho	s Half spawning
Sept 2	2. 0	FWS	10,000					
Sept 8	G 1.0	FRI	48	5S	1	8		Flooding. No visibility
Sept 14	G 0.5	FRI	0	0	1	0		
Sept 16	G 1.0	FRI	2,300	650	130	25	S50 cohos, 2 king	gs
1952								
July 22	G 1.0	FRI	115	225	0	0		
July 31	G 1.0	FRI	706	0	826	7		
Aug 8	G 1.0	FRI	887	0	780	43		
Aug 15	G 1.0	FRI	8,095	226	494	564	4 kings	
Aug 24	G 1.0	FRI	1,290	30	70	63	5 kings	
1953								
July 20	G 1.0	FWS						1 jump at mouth
July 21	G 1.0	FR1	0	0	185	0		
July 28	G 1.0	FRI	1,110	0	1, 130	0		
Aug 6	G 1.0	FRI	4,820	0	2,310	47		
Aug 14	G 1.0	FRI	4,650	11	1,650	517		
Aug 25	G 1.0	FRI	2,080	94	S06	415	35 cohos, 23 king	
Sept 23	G 1.0	FWS						No salmon observed
1954								
June 1	G 2.0	FWS	1,000		10,000			
Aug 7	A 1.0	FRI	2,000	0	2,000	0		None observed off mouth
Aug 14	A 1.0	FRI	11,000	0	500	0		None observed off mouth
Sept 10	A 1.0	FRI	5,500	0	0	0		None observed on mouth
1955								No salmon observed
July 11	G 1.0	FWS	_	^	_	0		140 201111011 ODSELVED
July 23	A 1.0	FR1	1 500	0	0	0		
July 31		FWS	1,500		600			
Aug 1	G 1.0	FWS	400					
Aug 1	A mkr	FRI	300					
Aug 5			250					No salmon observed
Aug 15	A mark		200					110 Sulling Suscived
Aug 19	A mark		200					
Aug 26	to 1st lake	FWS	500					

142-60

ESCAPEMENT RECORD

	SURVEYED			PINK		UM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead		Dead	Live	
Date	1411163	Dy	2110	2000				
1956								
July 22	A 1.0	FRI	0	0	0	0		None observed at mouth
July 25	G 0.5	FWS	500		500			
July 28	A 3.0	FWS	500		500			
July 29	G mark	erFRI	600		1,500			
July 31	G mark	erFRI	400		1,600			
Aug 4	G 1.0	FWS	4,000		3,500		8 kings	
Aug 4	A to lake	FWS	1,500					
Aug 4	A 1.0	FRI	2,000	0	400	0		>100 at mouth
Aug 9	A 3.0	FWS	1,500		1,500			
Aug 12	G 1.5	FWS	6,000		2,500			
Aug 14	A to lake	FWS	6,000					
Aug 17	A marke		10,000				300 kings	
Aug 24	A marke		4,000					
Sept12	A 5.0	FWS						20,000-30,000 mixed
Sept 17	A 5.0	FWS	2,000				S kings	1, 500 dead
1987								37 6: 1 1
July 12	G 1.5	FWS						No fish observed
July 30	A 5.0	FWS	6,000		000			
July 30	A mark		200	0	800	0		Pint
Aug 4	A 1.0	FRI	700	U	2,000	U		Pink entering, chums spawning
Aug 7	A 4.0	FWS	15,000					spawning
Aug 9	A 3. 0	FWS	450		1,000			
Aug 16	A to marke		1, 500		300			Pirk fresh. Few above
riug 10			-,					marker
Aug 30	G 1.5 F	RI-FW	S 140		90		1 kings	
1958								
July 17	A 3.0	FWS			300			
Aug 7	G 1.0	FWS	10,000					
Aug 8	A 4.0	FWS	17,500		1,500			
Aug 11	A 1.0	FWS	32,000					All fresh. Schooled
Aug 13	A 3.0	FWS	2,000		1,000			
Aug 16	G 2.0	FWS	12,500		5,000			
Aug 22	A 4.0	FWS	25,000		3,000			
Aug 25	A 1.0	FWS	21,000					Some chums. Most spawning
Aug 27	A lengt		65,000		1,500			
Sept 8	G 1.0	FWS	25,000					
Sept 17	lake	FWS	200		200			
1959								
July 9	G	FWS	200		1			
July 28	A 3. 0	FWS	300					No fish observed
Aug 4	A 4.0	FWS	200					NO 11sh observed
Aug 12	A 3.0 A 3.0	FWS FWS	300					No fish observed
Sept 3 Oct 6	G 1.0	FWS	1					No dead
OCT 0	0 1.0	1 44.3						

	SURVEYED		PINK		CHUM		OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1960								
July 14	A length	ADE						No fish observed
July 21		ADF	50		10		7 kings	110 11011 000011104
Aug 14		ADF	3,500		1,500		37 dead kings	
1961			-,		-,			
July 9	G 1.5	ADF						No fish observed
July 11	A 3.0	ADF						No fish observed
July 23	A length	ADF						450 pinks in intertidal zone
July 27	A length	ADF	250					
Aug 8	A length	ADF	400					Few schools at mouth
Aug 18	A length	ADF	1,200					All spawning
1962								
July 6		ADF						No fish observed
	A to rapids							3,000 mixed
Aug 16	A length							14,000 mixed
Aug 28 1963	below lake	ADF	12, 300					2,500 in intertidal zone
July 24	A	ADF						200 pinks at mouth
July 24	G 1.0	ADF						No fish observed
July29	A length	ADF						Few pinks and chums



ADF STAT. No. WR 14

ANAN BAY CREEK

141-60 56° 10.8' N. 131° 52.3' W.

Previous No. 17

WRANGELL, BRADFIELD CANAL, ANAN BAY, Head.

MAJOR SPECIES Pink.

OTHER SPECIES

ESCAPEMENT TIMING Middle. Aug. -Sept.

ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH 6'-10'/6"-8".

AVERAGE WIDTH/DEFTH 10'-15'/8"-12".

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. Observed temperatures: 56.5° F., 7/31/52; 51° F., 8/24/52; 51.5°F., 9/1/52; 48°F., 9/12/52; SS°F., 7/30/53; 53.5°F., 8/14/53; 52°F., 8/24/S3: 53°F., 9/5/53.

VALLEY DESCRIPTION Stream-cut, running in a northwesterly direction. Valley walls rise sharply away from the W. side of the river in its upper reaches.

DRAINAGE 52 square miles (polar planimeter). Precipitation-fed.

STREAM MOUTH IDENTIFICATION Tidal area does not extend past the tree line. Heavily wooded.

ANCHORAGE Good anchorage is found just off the creek mouth.

TRAILS AND SURVEY ROUTES Many windfalls and brush overgrow the stream making travel difficult. Keep on top of the rim in the canyon for easiest travel.

AERIAL SURVEY NOTES Brush could obstruct aerial visibility.

INTERTIDAL ZONE

LENGTH 100 yards.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Mainly small and medium sized rocks.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Fish school off the mouth.

SPAWNING AREAS The upper half is utilized.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

GRADIENT AND VELOCITIES Steep.

BOTTOM Small gravel - 2"-4", large rock and boulders.

MARKER DISTANCE 3/8 mile.

MARKER IDENTIFICATION None established.

BARRIERS

TRIBUTARIES

SCHOOLING AREAS A few pools were found throughout the distance surveyed.

SPAWNING AREAS The best spawning area is just above the high tide mark. The bottom becomes very coarse near the lower end of the canvon.

GENERAL NOTES The stream splits and rejoins many times in its lower reaches.

ANAN BAY CREEK

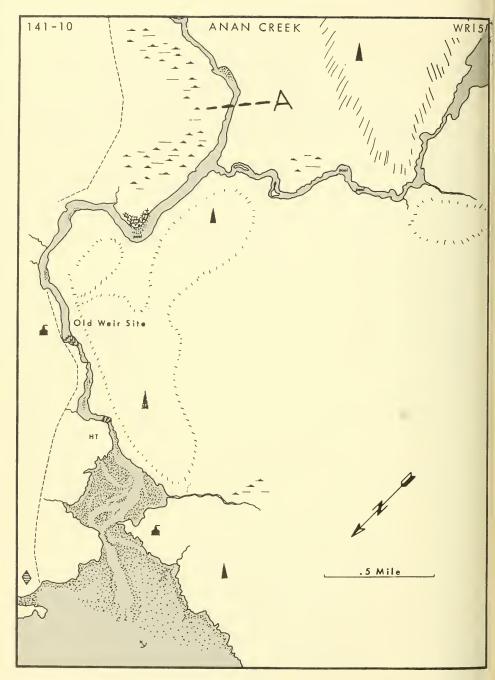
ADF STAT. No. WR 14 Previous No. 17

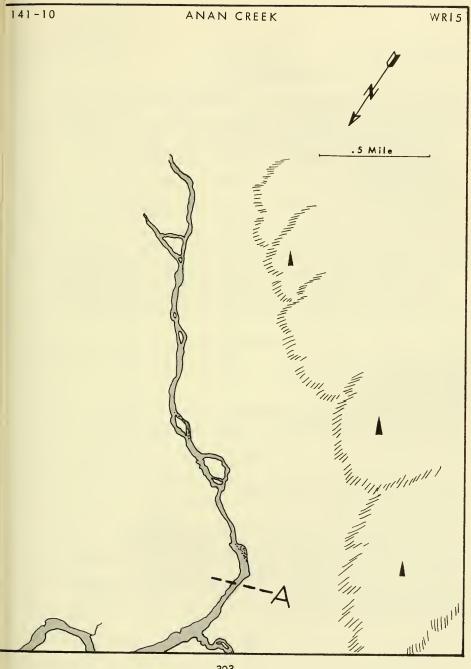
ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SURVEYED)	PIN	JΚ	сн	JM	OTHER SPECIES	REMAR K S
Date	Miles	By	Live	Dead	Live	Déad	Live	
		•						
1950								
Aug 19		FWS	500		1,000			
Aug 27 1951	G 0.1	FRI	3 00	0	0	0		Exploratory survey
Aug 22	G 0.7	FWS	6,000	600				
Sept 11	G 0.1	FRI	700	250				Past spawning peak
1952								
July 20	G 0.4	FRI	0					
July 30	G 0.4	FRI	0					
Aug 8	G 0.4	FRI	0					
Aug 16	G 0.4	FRI	3					
Aug 24	G 0.4	FRI	125					
Sept 1	G 0.4	FRI	76					
5 ept 12	G 0.4	FRI	25	2				
1953								
July 30	G 0.4	FRI						No fish in or off creek
Aug 6	G 0.4	FRI	7					
Aug 14	G 0.4	FRI	110					14 pinks spawning
Aug 24	G 0.4	FRI	306					205 pinks spawning
Sept 5	G 0.4	FRI	31					Pinks spawned out
1955								
July 29		FRI	25,000					
1960		,						
	Not surveye	d						
1960	Not surveye							

Not surveyed





AVERAGE WIDTH/DEPTH 80'-100'/12"-24".

Previous No. 18

WRANGELL, BRADFIELD CANAL, HUMPBACK BAY, Head-

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle. Aug. -Sept.

SPAWNING FACILITIES Excellent.

OTHER SPECIES Chum, coho, steelhead.

ESCAPEMENT MAGNITUDE 205,000.

STREAM TEMPERATURES Warm range. Observed temperatures: 64°F., 7/10/52; 64°F., 7/14/52; S5°F., 7/19/52; S9.5°F., 7/25/52; 63°F., 7/28/52; 62°F., 8/4/52; 61°F., 8/12/52; 65.5°F., 8/13/52; S9°F., 8/25/52; S6°F., 9/4/52; 56°F., 9/5/52; S8°F., 7/20/53; 61°F., 7/26/53; 62.5°F., 7/27/53; 64.5°F., 8/4/53; 69°F., 8/5/53; 60°F., 8/12/53; 62°F., 8/13/53; S9°F., 8/19/53; 59°F., 8/23/53; 57.5°F., 9/2/53; 58°F., 9/8/53; 56°F., 9/11/53; S2°F., 9/18/53.

VALLEY DESCRIPTION Broad in the lower part, narrows above the forks and has a steeper aradient. Heavily forested.

DRAINAGE S2 square miles (polar planimeter). Precipitation-fed. The E. fork is fed by numerous small lokes and ponds. The W. fork drains Anan Lake, 3 miles long, and Boulder Lake, 2 miles long.

STREAM MOUTH IDENTIFICATION Lies at the head of Humpback Bay. The stream enters a lagoon and the lagoon enters the bay through a constricted mouth.

ANCHORAGE Good anchorage is afforded in Humpback Bay or small cove on NE. shore of bay.

TRAILS AND SURVEY ROUTES A skiff may be taken into the lagoon at or near high tide and secured at the upper end. The skiff may also be left just E. of the mouth and a forest service trail, morked by a sign, followed upstream. The trail ends just above the old weir shack. A beaver dam is found 0.7 mile above the high tidemark and a rough section of stream may be by passed by going F. to the end of the pond and them S. through muskeg to the E. fork. The E. fork is easily waded.

AERIAL SURVEY NOTES Visibility is excellent in the E. fork. The W. fork has amber colored water.

INTERTIDAL ZONE

LENGTH 0.4 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel and sand.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Schooling takes place throughout, but the main schooling area is at the upper end. Fish also school heavily off the mouth.

SPAWNING AREAS The upper and middle part of the lagoon offer fair spawning facilities. GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE S miles. AVERAGE WIDTH/DEPTH 100'/12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Predominantly small gravel, grading into large 2 miles from mouth.

MARKER DISTANCE 3.3 miles.

MARKER IDENTIFICATION

BARRIERS Two falls, one at the high tidemark and another 700 yards upstream, are a partial block to salmon at certain water levels. Falls 3.5 miles up the E. fork is a complete block.

TRIBUTARIES The stream forks 1.5 miles upstream. The W. fork drains two lakes.

SCHOOLING AREAS Pools and deep areas are scattered throughout the main stream and forks.

Below the forks there are several large, deep areas.

SPAWNING AREAS The E. fork offers the best spawning facilities; all riffle areas are utilized.

Some good spawning areas are found below the forks. The W. fork is a series of cascades for a mile, but above this there are fair spawning areas.

GENERAL NOTES Brown bear frequent this stream.

Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SURVEYED Miles	Ву	PINI Live	C Dead	CHI Live	JM Dead	OTHER SPECIES Live	REMARKS
1925 Sept 8	Weir	USBF	260,844		133		654 cohos, 75 red 67 kings	ls Weir installed June 17
1926 Aug 31	Weir	USBF	121, 784		75		596 cohos, 57 red 87 kings	
1927 Sept 27	Weir	U5BF	44,936		280		1,942 cohos, 121 reds, 68 kings	Weir installed June 11
1928 5ept 19	Weir	USBF	195,577		67		2,859 cohos, 70 reds, 40 kings	Weir installed June 18
1929 Sept 22	Weir	USBF	221, 462		57		976 cohos, 6l reds, 40 kings	Weir installed June 14
1930 Sept 7	Weir	USBF	563,938		65		1,087 cohos, 20 reds, 57 kings	Weir installed June 12
1931 Sept 1	Weir	USBF	613,598		27		1,206 cohos, 31 reds, 42 kings	Weir installed June 17
1932 Aug 14	Weir	USBF	132, 351		80		2,015 cohos, 15 reds, 93 kings	Weir installed July 5
1935 Season 1949		USBF						850,000
July 8 July 21 Aug 13	G 3.5 G 1.0 G 3.0	FRI FRI FRI	3,500 5,000 300,000	6	33-35 40-48			Fish below falls
Aug 26 Sept 14 Sept 28 1950	G 4. 0 G 1. 0 G 2. 0	FRI FRI FRI	142,000 25,000 1,486	3,905 2,000				Some dead pinks
July 7 July 10 July 14	G 2.5 G 2.5 G 2.5 G 2.5	FRI FRI FRI FRI	1,757 12,136 15,692 41,925					
July 28 Aug 7 Aug 13	G 2.5 plus G 2.5	FRI FRI	36,560 36,000 52,834					For 2.5 miles more
Sept 18 1951 July 11	G 2. 5	FRI	14, 135					
July 20	G 2. 5	FRI	28,500					
July 25	A 2.5	FRI	50,000					20,000 salmon off mouth
July 26	G 2.5	FRI	54,000		2		3 reds	70% schooled

141-10

	SURVEYED)	PINI	к	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951		-,						
July 31	3.0	FWS	150,000					
Aug 10	G 2.5	FRI	137,000	250				
Aug 10	G 5.0	FRI	141,000	260				
Aug 16	G 2.5	FRI	123,000	700				Schooled
Aug 22	G 2.5	FRI	94,000	300	6	2	1 coho, 1 red	
Aug 22	G 5. 0	FRI	123,500	300	· ·	-	1 cono, 11ea	
Aug 29	G 2. 5	FRI	86,800	1,600	3		16 cohos	1 dead red
-	3.0	FWS		1,000	3		10 Cones	1 dedd red
Sept 2			350,000	7 000		1	Onehee	Unif nink ashanlad
Sept 4	G 2.5	FRI	50,000	7,000		1	9 cohos	Half pink schooled
Sept 12	G 2.5	FRI	32,000	3, 800				Water high, poor
4000								visibility
1952								
July 19	G 2.5	FRI	37,600					
July 19	A 5.0	FWS	19,000					
July 25	G 2.5	FR1	31,300	0	0	0		Ascending, small groups
July 28	G 2.5	FRI	22, 260	0	0	0		Ascending, small groups
Aug 4	G 2.5	FRI	36,835					
Aug 7	A	FWS	50,000					
Aug 12	G 3.0F	W5-AD	F 4,775	260	0	0	6 cohos	Possibly 85,000 pinks in
								all stream
Aug 12		FRI	36,750	950				
1953								
July 16	G 2.5	FRI	2, 160	0	0	0		
July 20	G 2.5	FRI	12,375	0	0	0		
July 27	G 2. S	FRI	9,647	0	44	0		
Aug 4	G 2.5	FRI	13, 425	0	0	0		
Aug 12	G 2.5	FRI	21,575	10	0	0		
Aug 19	G 2.5	FRI	15,893	41	30	0		
Aug 23	G 2.5	FRI	3,472	8	4	0		
Sept 2	G 2.5	FRI	11,246	0	4	0	100 cohos, 3 reds	
Sept 11	G 2.5	FRI	7,970	560	ó	o	3 kings, 3 reds	
Sept 18	G 1. 2	FRI	3,145	652	Ö	0	5 mings, 5 reas	
1954	0 1. 2	11(1	3, 143	032	•	·		
July 8	G	FWS	7,000	0	0	0		
	G 0. 2	FWS	10,000	0	0	o		
July 10	G 2. 5	FW5	0	0	0	0		
July 11		FW5	0	0	0	0		500 fish 1st and 2nd falls
July 13	G 2. 5							300 fish ist dha zha latis
July 15	G 0. 2	FW5	100,000	0	0	0		
July 20	G 0. 2	FW5	100,000	0	0	0		
July 22		FWS	500,000	0	0	0		
July 23	G 0.5	FWS	13,500	0	25	0		
July 24	G 0.5	FWS	2,547	0	0	0		
July 24	to gage		<200,000					
Aug 7	all	FRI	121,000					47 000 1
Aug 7	G 0.5	FRI	106,000					15,000 above marker
Aug 14	G 0.5	FRI	117,000		0	0		Few dead pinks
Sept 10	G 0.5	FR1	14,000		0	0		Few at mouth, 4,000 dead

ANAN CREEK - Continued

Previous No. 18

	SURVEYED)	PINE	ζ	сн	UM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1000								
1955 July 10	G 0.5	FWS	100	0	0	0		100 in lagoon
July 15	G 0. 2	FWS		ō	Ö	ō		100 m ragoon
July 23	A 3.0	FWS		0	0	0		No salmon above falls
July 24	G 0. S	FWS	8,000					
July 25	A 0. 2		10,000					
July 29	A 3.0	FRI	25,000	0	0	0		Two schools in Blake Channel
Aug 1	A 3.0 G	FRI FWS	60,000	0	0	0		3,000-S,000 at mouth
Aug 15	A 3.0	FRI	25,000 0	0	0	0		Weir site Flooding. Peak is past
Aug 5	A length			·	Ü	Ů		rooung. reak is past
Aug 19	A 3. 0	FRI	30,000	0	0	0		Schooled
Aug 24	A length	FWS						
1956								
June 28	G 1, 2		21,300					
June 28 July 2	G 1. 2 A 0. 7		24,800					
July 2 July 5	old weir		40,000 80,000					
	to thermog		100,000					
July 7			40,000					
July 7		FWS	125,000					
July 9	2d falls		130,000					
July 12	2d falls		180,000					170 000 1
July 14	A S. 0 A 3. 0		200,000	0	0	0		170,000 in creek
July 18 July 22	A 3.0		350,000 300,000	0	0	0		Jumps in Ernest Sound 30,000 at mouth
July 23	A 3.0		250,000	v	Ů	Ŭ		30,000 in lagoon
July 24	A 3.0		350,000	0	0	0		,
July 28	A 3.0	FWS	275,000					Large schools upstream
July 29	A 3.0		400,000	0	0	0		20,000 at mouth
July 31	A mark		300,000					10,000 in lagoon
Aug 4	A 3.0 A 3.0		300,000 370,000	0	0	0		Thousands at mouth
Aug 14	A 4.0		325,000	U	O	U		Spawning at peak
Aug 17	A 3.0		450,000	0	0	0		10,000 at mouth
Aug 24	A 3.0		200,000	0	0	0		Spawning throughout
Sept 4	A 4.5		325,000					Spawning at peak
Sept 7			200,000	_	_			
Sept 7	A 3. 0		200,000	0	0	0		Most spawning Thousands dead
Sept 11 1987	A length	r W S	300,000					I nousanas aeda
July 3	G 0. 2	FWS	14					
July 8	G to weir	FWS	300					
July 9	G 0. 2	FWS	350					
July 10	G to weir	FWS	1,350					Est. 2,000 off mouth
July 12	G 2. 0	FWS	3,775					Est. 5,000 outside
July 14 July 15	G 0. S G to weir	FWS FWS	•					
July 19	G to weir	FWS	,					
July 20	G mark 14		30,000					
July 22	G to falls	FWS	.,					1,500-3,000 pinks in bay
July 27	. 2 past falls	FWS	15,000					,
July 26		FWS	SS,000					

Date	SUR VEYED Miles	Ву	PINK Live Dead	CHUM Live Dead	OTHER SPECIES Live	REMARKS
Dute	1411162	Бу	Live Dedu	Eve Dead	Eive	
1957						
July 28	G 2nd falls		25,000			
July 29	A mork		70,000			Few off mouth
July 29	G length		60,000			
	5 mi past Y	FRI	59,000			
July 30 Aug 4	A 5.5 A mark		38,500 85,000			All schooled
Aug 7	A 5. 0	FWS	200,000			All schooled
Aug 9	A length		85,000			
Aug 16	A mark		55,000			300 dead. None at mouth
Aug 25	A mark		65,000			Few dead
Aug 29	G to forksFI		,			Some chums
Sept 2	A mkr FI	RI-FW	\$ 45,000			3,000 dead
Sept 11	G to forks FF	RI-FW	S 19,000	380		
1958						
June 24	G to falls	FWS	175			10,000 outside lagoon
June 28	G 1. 2	FWS	5,000			
July 2	G 0.7	FWS	3,500			
July 2	G	FWS	7, 250			
July 3	G 1.0 G 0.5	FWS FWS	11,000 6,000			
July 5 July 5	A& G 0. 5	FWS	7,000			
July 5 July 5	G 1.0	FWS	8,000			
July 8	G 1.0	FWS	12,000			
July 10	G 1. 0	FWS	13,000			
July 11	G 2d fork	FWS	23,000			
July 12	A abv fork	FWS	50,000			
July 14	G 0.7	FWS	25,000			
July 14	G to canyon	ı FWS	38,000			
July 15	G abv falls		27,000			
July 16	G 1. 2	FWS	30,000			
July 17	G 4. 0	FWS	68,000			
July 17	A length		75,000			
July 20	G fork	FWS	36,000			
July 24	A to falls G S. 0	FWS FRI	85,000			
July 31 Aug 2	G 1. 2	FWS	300,000 34,000			
Aug 8	A length		90,000			
Aug 11	A mark		60,000			Some dead pinks
Aug 17	G 1.5	FWS	2,000	50		•
Aug 22	A length		90,000			
Aug 25	A mark		60,000			Some chums
Aug 28	G lst falls	FWS	2,000			
Aug 29	G 5.0	FRI	100, 120			
Sept 17	A mark	FWS	10,000			Many dead pinks
1959 June 28	G 0.5	FWS				None observed
June 30	G 0. 2	FWS	170			
July 1	G	FWS	500			500 in lagoon, 1,000
,,						off mouth

ADF STAT. No. WR 15 Previous No. 18

SURVEYE	D	PINK	CHUM	OTHER SPECIES	REMARKS
Date Miles	By	Live Dead	Live Dead	Live	
1959					
July 3 G 1.5	FWS	1,500			1,000 in lagoon
July 4 G 2.0	FW5	2,000			800 in lagoon
July 5 G 1.0	FWS	6,000			2,000 in lagoon
July 6 G 1.0	FWS	7, 200			1, 200 in lagoon
July 8 G 1. 2	FW5	10,000			1,000 in lagoon
July 9 G to forks	FWS	12,000			2,000 in lagoon
July 10 3d lookou	t FWS	12,000			1,000 in lagoon
July 10 G to forks	FW5	16,000			1,000 in lagoon
July 11 G to forks	FW5	20,000			1,000 in lagoon
July 12 G 1. 0	FWS	20,000			3,000 in lagoon
July 13 2d lookou		18,000			500 in lagoon
July 16 G 2. 7	FW5	35,000			500 in lagoon
July 23 G 1. 2	FW5	55,000			5,000 in lagoon
July 27 A 3.0	FWS	55,000			1,000 pairing off
July 28 A 5. 0	FWS	30, 000			Fish schooled in holes
Aug 4 A 4.0	FWS	55,000			
	th FWS	70,000			1,000 in lagoon
Aug 12 A 5.0	FWS	140,000			Schooled in holes
Aug 15 G lagoon		300			Few pinks coming in
	th FWS	85,000 70,000			
Aug 20 G to forks Sept 3 A 5.0	FWS	65,000			Active spawning, few dead
Oct 1 G 0.5	FWS	5,000			Active spawning, lew dedd
1960	1 113	3,000			
June 28 G	ADF				Pink present off mouth
					and in stream
July 7 G lst falls	ADF	3,000			3,000 off mouth
	th ADF	present			
July 11 G 2d fall		12,000			5,000 pinks at mouth
	th ADF	15,000			34
	th ADF	21,000			Many off mouth
July 14 G 2d fall		14,000			8 000 10 000 -i-1
July 15 A 3. 5	ADF	12,000			8,000-10,000 pinks at mouth
July 17 A leng July 17 G 2d fall	th ADF	41,000 28,000			6,000 in lagoon and 13,000
July 17 G 2d Idil	s ADI	20,000			pinks above second falls
July 19 A leng	th ADF	many			16,000 above falls
	th ADF	75,000			Few in lagoon
	th ADF	75,000			1,500 in lagoon
July 28 G 2d fall		75,000			Includes 45,000 below
•,		,			second falls
Aug 4 A leng	th ADF	93,000			3,000 to first falls
Aug 9 G lst falls	ADF	300			All old fish
Aug 14 G lst falls	ADF	250			50 pinks in lagoon
1961					
July 6 A leng	th ADF	100			Pink jumping off mouth
	th ADF	200			1,500-2,000 pinks in lagoon
July 8 G 1.0	ADF	5,000			Below second falls
July 9 A and G	ADF	5,000			1, 200 above the falls

		SUR VEYEL)	PIN	K	СН	UM	OTHER SPECIES	REMARKS
Dat 1961		Miles	Ву	Live	Dead	Live	Dead	Live	
July	13	G 0.5	ADF	7,000					500 pinks at mouth
July	14	A length	ADF	10,000					500 at mouth
July	16	G-A length	ADF	16,000					400 in intertidal zone
July		G 0.5	ADF	5,500					250 in intertidal zone
July	21	A length	ADF	20,000					
July		A length	ADF	15,000					1,700 at mouth
		A length	ADF	17,000					200 pinks in intertidal
Aug	2	A length	ADF	>40,000					2,000 in intertidal
Aug	4	A length	ADF	42,000					500 at mouth
Aug	8	G 2d falls	ADF	6,500					1,000 in intertidal
Aug	8	A length	ADF	31,000					Above second falls
Aug	18	A length	ADF	60,000					None in lagoon
Aug	26	A length	ADF	50,000					
196		A 7	400						
June		A length	ADF						No fish observed
July	2	G 2d falls	ADF	2,000					
July	5	G 2d falls	ADF						15,000 in intertidal zone
July	6 8	A length	ADF						20,000 in intertidal zone
July	8	A length G 2d falls	ADF	EO 000					30,000 in intertidal zone
July July	9	G 2d falls	ADF ADF	50,000					
July	11	G 2d falls	ADF	60,000 50,000					10.000 : 1
July	12	A length	ADF						10,000 in lagoon
July	12	A length	ADI	1,500					40,000 at mouth; 50,000
July	14	G 0, 2	ADF	60,000					in intertidal
July	1.1	0 0, 2	ADI	00,000					4,000 at mouth; 20,000
July	15	G 0, 2	ADF	65,000					in lagoon
3427	10	0 0.2	1111	05,000					5,000 at mouth; 20,000
July	16	A 3.0	ADF	200					in lagoon 45,000 in lagoon
	17	A 2.0	ADF	50,000					40,000 in lagoon
	19	A length	ADF	30,000					2,000 at mouth
July	23	G 2d falls	ADF	35,000					15,000 in lagoon
July	25	A and G	ADF	55,000					45,000 in lagoon
July	29	A and G	ADF	55,000					30,000 in lagoon
	30	A length	ADF	40,000					40,000 in lagoon
Aug	3	A length	ADF	60,000					30,000 in Iagoon
Aug	9	A length	ADF	148,000					20,000 in lagoon
Aug		A length	ADF	147,000					30,000 in lagoon
Aug		A length	ADF	34,000					, <u> 149</u>
Aug	15	A length	ADF	200,000					1 king in lagoon
Aug	16	A length	ADF	200,000					5 5
	21	A length	ADF	135,000					1,000 in lagoon
Aug	30	A length	ADF	139,000					9,000 in lagoon
1963									
July	7	A lagoon							500 in intertidal zone
. ,	10	G 2d falls							1,000 at mouth
	15	G length	ADF	12,000					Spread out
	23	G 2.0	ADF	21,000					6,700 in intertidal zone
	26	G forks	ADF	40,000					550 in intertidal zone
	29	A length		70,000					15,000 in intertidal zone
Aug	1 5	G 2d falls		19,000					
Aug	7	G 2d falls		25,000					4,000 in intertidal zone
Aug :		A length	ADF	125,000					5,000 in intertidal zone
Aug :		A length A length	ADF	205,000					2,000 at mouth
arug .	- 0	a rengui	ADF	258,000		33	30		By helicopter
						5.	,-		

U. S. Bureau of Fisheries Weir Counts

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1925 June 17 18 19 20 21 22	13 4 6 6 14 168							
23 24 25 26 27 28	1, 445 2, 768 3, 645 2, 949 3, 465 1, 286							
29 30 July 1 2 3	328 793 749 2,570 4,976							
4 5 6 7 8	5,079 5,856 8,694 14,071 1,285				5			
9 10 11 12 13	1,519 1,164 137				6			
14 15 16 17 18	748 2,849 3,963 1,397 3,602				7			
19 20 21 22 23	7, 312 10, 385 9, 663 11, 235 10, 915							
24 25 26 27 28	10, 211 7, 841 4, 621 6, 489 4, 467	21	28	6	6			
29 30 31 Aug 1 2	6, 233 5, 512 7, 302 3, 665 4, 712	26	35		9			
3 4 5 6 7	1,938 1,864 1,296 4,905 8,310							
8	7,085 6,001	15	76		12			

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1925 Aug 10 11 12 13 14 15 16 17 18 19 20 21	6, 318 9, 400 3, 818 3, 282 2, 269 2, 961 1, 970 1, 675 1, 517 1, 694 709 1, 494							
22 23 24 25 26 27 28	773 618 624 279 376 333 245	16	74	9				
29 30 31 Sept 1 2 3	407 214 288 280 245 306 422	28	64		22			
5 6 7 8 9	319 220 134 143	27	377	43 17				
Total	260, 844	133	654	75	67			
1926 June 12	1							
13 14	8 16				1			
15 16	44 230				1			
17 18	177 403							
19 20	425 1,514				1			
21 22	2,984 1,494				3			
23 24	2, 621 1, 875				1 2			
25 26	563 893				2			
27 28 29	5 234 493				4			
30 July 1	1,826 1,950				3 2			
2 3	2, 445				6			
4	5, 305 7, 454	2			2			

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1 92 6								
Aug 30	11							
31	14							
Sept 1	101 504	10	65	18	2			
Total	121,784	75	5 96	57	87			
1927								
June 22	1							
23	_							
24 25	2							
26	1							
27								
28 29	4							
30	1 37							
July 1	94							
2	42				2			
3	290							
4 5	138							
6	178 550							
7	988							
8	18							
9 10	23 223				12			
11	674							
12	664							
13	977							
14	179							
15 16	1,398 1,254		2	3	10			
17	879		_	_				
18	897							
19 20	642 656							
21	1, 243							
22	881							
23	295		16		5			
24 25	838 835							
26	624							
27	482							
28	866							
29 30	1,859		24	2	1.4			
31	867 1,726		24	4	14			
Aug 1	876							
2	818							
3	996							
4 5	395 761							
6	947	6	41	1	5			
7	592							
8	603							
9 10	359 340							
10	340							

11110				AII	An Ci	KLLK - CONT	Inded	N W	7.5
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks	
1928									
June 27	3,011				1				
28	4, 198				1				
29	4,561				3				
30	3,570				2				
					2				
July 1	3,114								
2	5,628				3				
3	4, 356				2				
4	5,854				3				
5	5,646				3				
6 7	6, 555	1	1		3				
8	4,869	1	3	1					
9	2, 691		1	1	1				
	4,598								
10 11	4, 397	2	4 2			•			
12	3, 462 848	4	1		1				
13	1,524		1		1				
14	2,466	4	9		2				
15	5, 204	2	15	1	2				
16	8,561	5	25	5	-				
17	14,922	1	16	3	2				
18	15,696	•	34	2	1				
19	11, 136		18	_	-				
20	2, 318		31	1					
21	957		1	_					
22	47		1		1				
23	4,936		40						
24	5,652		35	1					
25	7, 177		29	2	2				
26	8, 265		27	1					
27	8, 309		37						
28	5,005		24						
29	3,838		3		1				
30	3,827	2	98	2	1				
31	3,007	2	108						
Aug 1	2, 381	2	86						
, 2	1, 365		30						
3	1,422	1	47						
4	863		74		1				
5	214	1	59						
6	853	2	169	1					
7	378	8	50						
8	180	5	79						
9	10		0						
10	12 18		8						
11 12	8		11						
13	52		3						
14	356	1	164	4					
15	185	1	50	-					
16	184	3	58	1	1				
17	113	3	64	1	1				
18	113		55	-					
19	248		66						
20	90		56						
21	69	1	40						

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks	
1928 Aug 22 23 24 25 26 27 28	32 1 53 46 6 24 17	1	26 21 35 15 4 6		1				
29 30 31 Sept 1 2 3 4 5 6 7 8	19 33 34 47 50 74 46 65 38 44	4 2	1 10 11 43 39 40 12 20 10	1					
8 9 10 11 12 13 14 15	36 55 243 194 171 106 228 53	1 2 2 1 1	5 3 89 147 107 33 95 121 41	3 2 1 9 8 6					
17 18 19 20 21 22 23 24 Total	38 17 9 4 7 6 195,577	1 67	68 48 15 11 20 12 2,859	10 2 70	1 1 40				
1929 June 14 15 16 17 18 19 20 21 22 23 24 25	4 1 10 13 3 20 6 11 183 553 553 796								
26 27 28 29 30 July 1 2 3	46 542 855 2, 699 2, 791 3, 705 1, 272 1, 410								

WR 15

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1929								
July 4	2, 899							
5	2, 494							
6 7	3, 207 7, 113			2	11			
8	7, 095			-				
9	4, 121							
10	5,470							
11	6, 340							
12 13	6, 254 4, 480							
14	4,882		1	6	13			
15	4, 175							
16	3,016							
17	2, 196							
18 19	1,818 3,685							
20	4, 209							
21	4, 229	4	10	11	5			
22	4, 223							
23	2, 273							
24	2,663							
25 26	3,431 6,306							
27	922	1	38	3	5			
28	3,067							
29	2, 693							
30	6,063							
31 Aug 1	9, 113 9, 267							
2	10, 454							
3	5,930							
4	8, 370							
5	5, 632							
6 7	5,044 5,001							
8	5, 156							
9	2,992							
10	3,031							
11	2,618	4	83	3	4			
12 13	2, 796 2, 595							
14	2,001							
15	1,957							
16	1, 140							
17	523	10	146	8	1			
18 19	1,002 1,023	12	146	٥	1			
20	1,078							
21	,							
22								
23	512							
24 25	586 199	2	91	6				
26	272	-		Ū				
27	782							
28	688							
						338		

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1929 Aug 29 30 31 Sept 1 2 3 4 5 6 7 8 9 10 11	500 503 300 852 564 526 423 161 403 232 266 209 144 104 325	1	158	8	1			
13 14 15 16 17 18 19 20	104 132 114 225 173 213 265 111	17	173	3	1			
21 22 Total	39 34 221,462	16 57	276 976	11 61	40			
1930 June 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 July 1 2 2 3 4 5 6 7 7 8 9 10 11 12 13	1 2 1 1 2 1 1 3 3 3 5 16 6 40 189 9 5 5 1, 275 2, 209 3, 203 2, 267 6610 1, 239 3, 369 4, 066 9, 171 11, 543 5, 488 4, 002 9, 319 24, 950 30, 611 31, 897 33, 754							

WR 15

111								
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1930								
July 14	27, 119							
15	8, 487							
16	6,816							
17	10,956							
18	20, 100							
19	30, 301							
20	24,834							
21	5,792							
22	1,189							
23	3,539							
24	7,746							
25	9,617							
26	10,423							
27	16,576							
28	14,530							
29	1,698							
30	6, 440							
31	26,378							
Aug 1	19,641							
2	220 32, 215							
3 4								
5	13, 353 4, 751							
6	150							
7	2, 141							
8	4,629							
9	8,028							
10	10,631							
11	10, 292							
12	10,978							
13	7,044							
14	2,088							
15	5,694							
16	3,044							
17	2,053							
18	325							
19	1, 122							
20	813							
21	746							
22	835							
23	961							
24 25	608 487							
26	248							
27	1,433							
28	427							
29	295							
30	483							
31	250							
Sept 1	251							
2	310							
3	310							
4	284							
5	408							
6	356							
7	267		1 005	7 90	F.7			
Total	563,956	65	1,087	7 20	57			

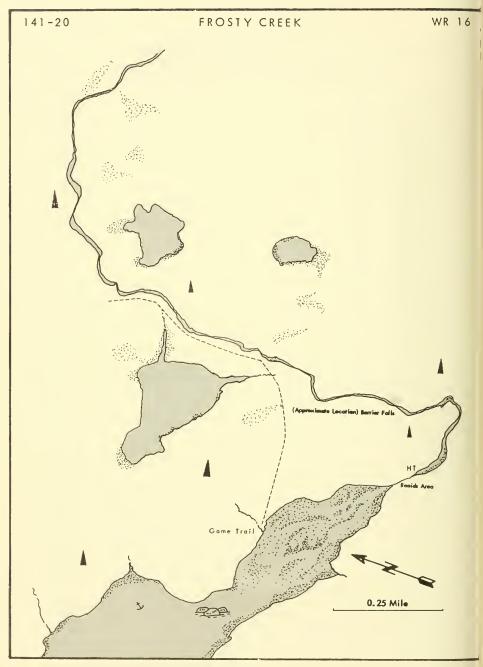
11

8, 153

141-10 ANAN CREEK - Continued Date Pink Chum Coho King Stream gage Water temp. Red Renarks 1931 June 17 5 18 1 19 7 20 5 21 66 22 90 23 325 24 624 25 1,484 26 2,754 27 2,720 28 2,791 29 3,330 30 5,770 July 1 8,882 2 8,763 3 9, 219 4 8,648 5 8,644 6 13,979 7 15, 202 8 18,022 9 18,743 10 15,693 11 13,300 12 6,627 13 15,013 14 19,563 15 31,906 16 24, 383 17 18,467 13,090 18 19 8, 136 20 9,064 21 12,013 22 10,646 23 5,717 24 9,494 25 8, 114 26 22,522 27 20,027 28 18,754 29 16,737 30 15,809 31 13,626 12,503 Aug 1 2 10,483 3 9,817 4 9,446 5 6,992 6 7,793 7 7,363 8 7,320 9 8, 157 10 8, 153

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1931 Aug 12 13 14 15 16 17 18 19 20 21 21 22 23 24 25 26 27 28 29	8, 153 8, 153 8, 153 7, 244 5, 034 3, 046 1, 327 1, 847 1, 148 1, 516 895 169 672 791 413 132 486 742							
31 Total 1932 July 5 6 7 8 8 10 11 12 13 14 15 16 17 18	575 613,604 10 45 1,033 1,628 2,647 1,884 2,197 1,880 1,061 2,449 2,017 5,607 4,857 3,193	27	1,206	31	42			
20 21 22 23 32 4 25 26 27 28 29 30 31 34 4 5 6 7 7	1, 328 818 431 147 1, 286 2, 915 5, 067 3, 628 4, 394 2, 047 1, 630 702 785 792 2, 000 2, 262 2, 264 4, 281 5, 309 7, 170 8, 291							

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1932								
Aug 10	7,510							
11	5,077							
12	4,462							
13	5,889							
14	5, 212							
15	2, 346							
16	1,982							
17	2, 565							
18	2,428							
19	1, 223							
20	979							
21	691							
22	295							
23	310							
24	392							
25	148							
26	414							
27	39							
28	831							
29	163							
30	100							
31	55							
Sept 1								
2	33							
3								
4	15							
5	55							
6	27							
7	18							
Total	131,551	80	2,015	15	93			



ADF STAT. No. WR 16

Previous No. 19

FROSTY CREEK

141-20 56°03.3' N. 131°57.3' W.

MAIOR SPECIES Pink.

WRANGELL, SEWARD PASSAGE, FROSTY BAY, Head.

OTHER SPECIES Chum.
ESCAPEMENT MAGNITUDE

ESCAPEMENT TIMING Middle. Aug. -Sept.
SPAWNING FACILITIES Poor.

STREAM TEMPERATURES Normal range. Observed temperatures: 52°F., 9/3/52; 50.5°F., 9/15/52; 52.5°F., 9/19/52; 54°F., 9/4/53; 53°F., 9/13/53.

VALLEY DESCRIPTION A stream-cut valley.

DRAINAGE 15 square miles (polar planimeter). Drains three small lakes three-fourths mile above the falls.

Numerous scattered ponds are also found in the drainage area.

STREAM MOUTH IDENTIFICATION A short rapids with large boulders is just above the tidal flats. ANCHORAGE Two rocks lie 150 yards northward of the S. point of the entrance. Anchor in 6 fathoms in the SW. part of the bay.

TRAILS AND SURVEY ROUTES Can be waded in most places. A fair game trail follows the right

AERIAL SURVEY NOTES Difficult due to brushy overstory.

INTERTIDAL ZONE

LENGTH 150'.

AVERAGE WIDTH/DEPTH 601/10".

GRADIENT AND VELOCITIES Steep.

BOTTOM Large boulders.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Schooling occurs off the mouth and in several pools in this zone.

SPAWNING AREAS Limited spawning facilities.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.2 mile.

AVERAGE WIDTH/DEPTH 30'/6"-24".

GRADIENT AND VELOCITIES Variable -- slight to very steep.

BOTTOM Gravel, coarse sand, and boulders.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A series of falls 300 yards above the high tide mark are impassable to salmon.

TRIBUTARIES

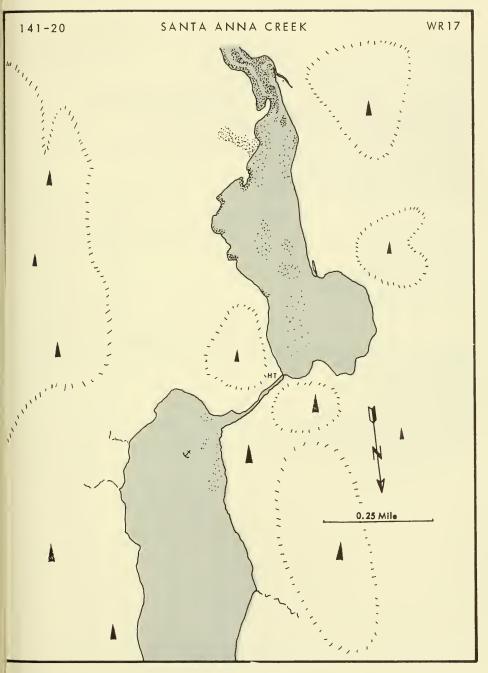
SCHOOLING AREAS Holes just below the falls.

SPAWNING AREAS The best spawning area is just above the high tide mark.

GENERAL NOTES

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SURVEYED		PIN		сни		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
July 11	G 0. 2	FRI						No fish observed
Sept 15	G 0. 1	FRI	1,225	388	8	3		Excellent pink showing
1950			-,					. 3
Sept 26		FWS	300		200			
1951								
July 14	G 1.2	FR1	10,780	42	20	0		
Sept 3	0. 2	FWS	50				3 reds	
Sept 24	G 0. 2	FRI	1,400	200	100	0		
1952		rm r			1.0	0		
5ept15	G 0. 2	FRI	56 46	S 9	16 1	0		
5ept19 1953	G 0. 2	FRI	40	9	1	U		
July 20	A 0.5	FWS						No salmon observed
Aug 5	A 0. 5	FW5						No salmon observed
Sept 4	A 0.5	FWS	150	0	103	0		
Sept13	A 0. 2	FRI	55	2	25	2		Poor visibility
1954								
Aug 8		FW5						No salmon observed
1955								
Sept 1	G 0. 2	FW5						1 dead pink on bank
1956			2 000					
Sept11	A to lake		3,000				100 reds	
Sept 17	A lengtl G falls	FWS	4,000		500		100 reds	
Sept 21 1957	Gians	L W 3	4,000		300			
Aug 13	G 0. S	FW5	30					
Sept 4	G 0. 2	FWS	230		10			
1958								
Aug 9	G mouth	r FWS						No salmon observed
Sept19	A 1.0	FWS						No salmon observed
1959								
Aug 14	G to falls							No salmon observed
Oct 7	G to falls	FW5	11S	70				
1960	Maria							
1961	Not surv	eyeu						
Aug 2	A lengt	h ADF						No salmon observed
1962	e.igu							
July 8	G mouth	h ADF						Jumps at mouth
5ept 4	A	ADF						No salmon observed
1963								
July27	G 0.7	ADF						No salmon observed



ADF STAT. No.

SANTA ANNA CREEK

141-20 55°58.5' N. 131°56' W. WR 17 Previous No. 20

WRANGELL, SEWARD PASSAGE, SANTA ANNA INLET, Head.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle, Aug. -Sept.

OTHER SPECIES Trout, coho.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Poor.

STREAM TEMPERATURES Observed temperatures: 48.5° F., 9/24/S1.

VALLEY DESCRIPTION

DRAINAGE Drains Lake Helen, a small lake 0.25 mile upstream. Several other small lakes drain into Lake Helen.

STREAM MOUTH IDENTIFICATION
ANCHORAGE Anchor at the head of the inlet.
TRAILS AND SURVEY ROUTES Wadeable.
AERIAL SURVEY NOTES

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 30'/14".

LENGTH 100 feet.
GRADIENT AND VELOCITIES Steep
BOTTOM Boulders.
LOW TIDE LOCATION
HIGH TIDE LOCATION Edge of woods.
SCHOOLING AREAS Off mouth.
SPAWNING AREAS Poor.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.2 mile. AVERAGE WIDTH/DEPTH 201/12".
GRADIENT AND VELOCITIES Steep; cascades.
BOTTOM Small and large rocks in creek.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS None.
TRIBUTARIES None.
SCHOOLING AREAS Series of pools.
SFAWNING AREAS A limited amount of spawning ground is found near the mouth, but from there to the lake the bottom is coarse.

GENERAL NOTES This stream has had a poor run for a number of years.

[Counts made by ground surveys are designated by G; aerial surveys by A]

Date	SUR VEYED Miles	Ву	PINK Live Dead	CHUM Live Dead	OTHER SPECIES Live	REMARKS
19 35 Sep [‡] 19	G	FWS				This stream has had a poor run for a number of years
19S1 Sept 24 19S3	A 2.0	FRI	200			Few chums. Some dead pinks
July 20 Aug 24	A 2. 0 A 2. 0	FWS FWS				No salmon observed No salmon observed in mouth of stream, lake, tributaries of lake or inlet
Sept 9 Oct 6 19S4	A 2. 0 A 0. 1	FWS FWS				No salmon observed High water. No dead fish
Sept 10 1955		FWS				Good
Aug 24 Sept 9	0.5	FWS FWS				No salmon observed No salmon observed
Oct 6 1986	0. 1	FWS				No salmon observed
Sept 11 Sept 21 1987	A to lake G to lake		3,000 800			Cohos off mouth. No dead
Sept 14 1988	G to lake	FWS	200			
Sept 19 1989	A 2.0	FWS	150			
1960	Not surv					
1961	Not surv	,				No salmon observed
Aug 2 1962 July 8	A length					No salmon observed
Sept 4	A mouth					S00-600 at mouth

ADF STAT. No. WR 18 Previous No. 21

SUNNY CREEK

SS*S7.7' N. 131*S7.9' W.

WRANGELL, SEWARD PASSAGE, SUNNY BAY, Head.

MAIOR SPECIES Coho. ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES VALLEY DESCRIPTION STREAM MOUTH IDENTIFICATION OTHER SPECIES Pink, chum. ESCAPEMENT MAGNITUDE

DRAINAGE A small lake one-fourth mile from the beach is the source of this stream.

AVERAGE WIDTH/DEPTH

ANCHORAGE TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 50 yards. GRADIENT AND VELOCITIES Steep. BOTTOM Large boulders. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.2 mile. GRADIENT AND VELOCITIES Steep. BOTTOM Bedrock and sand. MARKER DISTANCE MARKER IDENTIFICATION BARRIERS TRIBUTARIES SCHOOLING AREAS

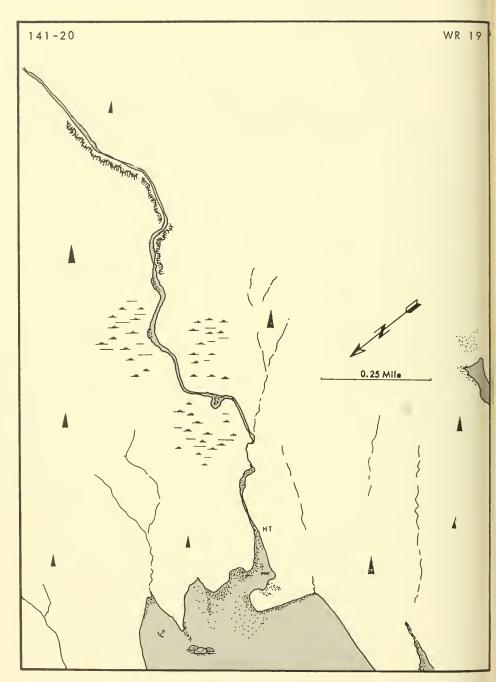
SPAWNING AREAS

GENERAL NOTES

AVERAGE WIDTH/DEPTH 41/8".

[Counts made by ground surveys are designated by G; aerial surveys by A]

S Date	UR VEYED Miles	Ву	PINK Live D	ead I	CHU Live	M Dead	OTHER SPECIES Live	RI	MARKS
19 4 9 Sept 16	G 0. 2	FRI						Apparently stream	not a salmon
1951								Stream	
Sept 17-	27 1.0	FWS	8,000	2	200		5 cohos		
19S3 Sept 27 19S4		FWS	2,050						
Sept 15	mark		800		15				
Sept 27 1955	mark	FRI	2,050						
Aug 24		FWS						No salmon	observed
Sept 16	A mark		400						
Sept 23	A mark	FRI	1,500						
Sept 29 1956	A mark	FRI	600						
Sept 9	A mark	FRI	3,000					>7,000 at 1	mouth
Sept 10	A 1.0	FWS	2,500					,	
Sept 21	G 1.0		155,000	1	.00			Many dying	
Sept 28 1957	A mark	FRI	10,000					Many dead	
Sept 13	G 1.5	FWS	52		24				
Sept 22	A mark		500						
Sept 27 1958	A mark							No salmon	observed
Sept 7	G mark		300						
Sept 19	A 2.0	FWS	350						
Sept 26 1959	G 0. 3	FWS	11		3				
	Not surv	eyed							
1960									
	Not surv	eyed							
1961	Not surv	eyed							



ADF STAT. No. WR 19 Previous No. 22

141 - 2055°57.8' N. 132°00.5' W.

WRANGELL, SEWARD PASSAGE, I.S miles E. of Watkins Pt.

MAIOR SPECIES Pink.

OTHER SPECIES Chum. ESCAPEMENT TIMING Middle. Aug. - Sept. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Poor.

STREAM TEMPERATURES Normal range. Observed temperatures: 48°F., 9/12/50; 54°F., 9/17/51; 45°F., 9/27/S1; 50°F., 10/8/S1; 51°F., 7/3/52; 48°F., 9/8/52; 50.5°F., 9/15/52; 52.5°F., 9/19/52; 48°F., 10/6/52; 54°F., 9/4/53; S3°F., 9/13/53; 50.5°F., 9/18/53.

VALLEY DESCRIPTION Glacial origin. There are large open muskeg areas along both sides of the

DRAINAGE Numerous ponds are scattered throughout the valley. Drains a large area of muskeg. STREAM MOUTH IDENTIFICATION Lies at the head of the first large bight W. of Change Island. The stream course almost parallels the beach in its lower reaches and the mouth is barely visible from the bay.

ANCHORAGE Good anchorage can be found in any of the small bays on either side of the creek mouth or just off the mouth.

TRAILS AND SURVEY ROUTES Easy to travel at normal water levels. Ill-defined game trails follow the margins.

AERIAL SURVEY NOTES Good visibility.

INTERTIDAL ZONE

LENGTH 450 yards.

AVERAGE WIDTH/DEPTH 20'-30'/6"-10".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Large rocks and gravel.

LOW TIDE LOCATION HIGH TIDE LOCATION

SCHOOLING AREAS A small deep pool at the midtide mark.

SPAWNING AREAS The upper 300 yards is a good gravel riffle, while the lower portion is mainly large rock and some gravel.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE

AVERAGE WIDTH/DEPTH 15'/4"-6".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Large rock, rubble, gravel, and bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None reported.

TRIBUTARIES None.

SCHOOLING AREAS A few pools are found throughout the distance surveyed.

SPAWNING AREAS Spawning areas are limited to the small pockets between the boulders and to a few fast riffles.

GENERAL NOTES One-half mile upstream, the stream enters a bedrock canyon. There are no spawning facilities available in this area.

ADF STAT. No. WR 19 Previous No. 22

ESCAPEMENT RECORD

[Counts made by ground surveys are designated by G; aerial surveys by A]

		Į	ounts made	by grou	and sur vey	Jare	actignated by 6, act	in surveys by it
	SURVEYED		PINE		CHUI		OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Sept 12	G 1.0	FRI	628	41	11	3		
Sept 16	G 1.0	FRI	2,400	53	97	8	6 cohos	Excellent showing
Sept 25	G 0.6	FRI	122	12	3	0		
1951								
Sept 17	G 1.0	FRI	1,070	30	60	2		Half spawning. 3,500 off mouth
Sept 27	G 1.0	FRI	7,400	215	150	20	S cohos	75 per cent pinks spawning
Sept 27	G 1.2	FRI	700	0	0	0		
Oct 8	G 1.0	FRI	1,650	235	17	2		All pinks and chums spawning
1952								
Sept 3	G 1.0	FRI	48	0	28	0		
Sept 8	G 1.0	FRI	6S	0	0	0		
Sept 15	G 1.0	FRI	102	0	4	0		
Sept 19	G 1.0	FRI	99	4	0	0		
Oct 6	G 1.0	FRI	0	1	4	0		
1953								
Aug 5	A 1.0	FWS			57	0		No salmon observed
Sept 4	G 1.0	FRI	147	1	57	0		Description
Sept 13	G 1.0	FRI	90	0	62	1 2		Poor visibility
Sept 18 1954	G 1.0	FRI	90	2	70	2		
Sept 15	G 1.0	FRI	800	0	15	0		2,000 off mouth
Sept 27	G 1.0	FRI	2,050	0	15	U		Few pinks and chums. None off
1955	0 1.0	1111	2,030	Ü				mouth
Sept 16	G 1.0	FRI	400	0	0	0		
Sept 23	G 1.0	FRI	1,500		ō	ō		Some dead pinks
Sept 28	G 1.0	FRI	600		-	_		Some dead pinks. Few live chums
1956			-					•
Sept 9	A 1.0	FRI	3,000	0	0	0		>7,000 at mouth
Sept 23	A 1.0	FRI	10,000		0	0		Few dead pinks
Sept 28	A 1.0	FRI	10,000	0				Some chum present. Few at mouth
1957			·					
Sept 7	A 1.0	FRI	4,007					None observed off mouth
Sept 22	A 1.0	FRI	500	0				Few chums observed
Sept 27	A 1.0	FRI						None observed off mouth
1958								
Sept 7	A 1.0	FWS	200					Poor visibility. Spawning in inter-
1959								tidal zone
Aug 19	A 0.5	FWS						No salmon observed
196 0								
	Not surv	eyed						
1961								
	Not surv	eyed						

ADF STAT. No. WR 20

Previous No. 24

EMERALD CREEK

141-30 55°53.0' N. 132°02.3' W.

WRANGELL, ERNEST SOUND, EMERALD BAY, Head.

MAJOR SPECIES Pink. ESCAPEMENT TIMING

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES

VALLEY DESCRIPTION A broad, flat valley with open muskeg areas.

DRAINAGE Two miles upstream, the creek breaks into many muskeg creeks.
STREAM MOUTH IDENTIFICATION Flows through a tidal flat 0. 4 mile long, constricted at its entrance to salt water.

ANCHORAGE Emerald Bay is used during E. winds, but it is a poor anchorage.

TRAILS AND SURVEY ROUTES Should be surveyed on a floodtide when a skiff can be taken about 0.5 mile upstream.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH Q4 mile.
GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE 2 miles.

AVERAGE WIDTH/DEPTH 201/10".

GRADIENT AND VELOCITIES Moderate BOTTOM Gravel.
MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SPAWNING AREAS GENERAL NOTES

SCHOOLING AREAS Very few pools deep enough to allow fish to school.

SPAWNING AREAS The entire stream is reported to have good spowning facilities.

GENERAL NOTES

ESCAPEMENT RECORD

S	UR VEYED		PIN	K	CHUI	M	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1947								200
Aug 21	1.0	FWS						300 chums
Oct 7	Α	FWS						Pink excellent
1954								
Sept 10	А	FWS	300					
1955		F71.10						Managara aliana d
Aug 24	A length		500					No salmon observed
Sept 9 1956	G 1. 2	FWS	600					
Sept11	A 0.5	FWS	300					
Sept 21	G 0.7	FWS	8,500		450			
1957								
Aug 13	G 1.0	FWS						No salmon observed
Aug 27	A 1.0	FW5			1			
Sept13	G 1.5	FWS	46		68			
1958								
July 31	G mouth							No salmon observed
Aug 30		FWS						No salmon observed
Sept26	G mouth	1 FWS						No salmon observed
1959								
	Not surv	eyed						
1960								
10.61	Not surv	eyed						
1961	27							
10.62	Not surv	eyed						
1963	4	ADF						1,000 in intertidal zone;
Aug 7	А	ADF						500 at mouth

Previous No. 26

WRANGELL, ERNEST SOUND, VIXEN INLET, Head.

OTHER SPECIES Chum.

ESCAPEMENT TIMING SPAWNING FACILITIES Fair to good.

STREAM TEMPERATURES

MAJOR SPECIES Pink.

VALLEY DESCRIPTION Glacial origin. Surrounded by snow-capped mountains.

DRAINAGE Drains a lake 2.3 miles upstream. The lake has numerous tributaries which appear to be fed by snowmelt.

STREAM MOUTH IDENTIFICATION

ANCHORAGE The inlet affords good anchorage. Use the channel southward of Sunshine Island when entering. The head of the inlet dries for a good distance.

TRAILS AND SURVEY ROUTES Easily surveyed at any stage of the tide, but at high tide a skiff may be taken upstream.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

UPSTREAM

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

LENGTH ACCESSIBLE 1 mile.

AVERAGE WIDTH/DEPTH 50'-70'/12".

GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel and shale.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS A 25' stepped falls I mile above the mouth is a total block to salmon passage.

TRIBUTARIES None reported.

SCHOOLING AREAS A large pool below the falls.

SPAWNING AREAS Almost the entire area from the high tidemark to the falls offers good spawning facilities.

GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED		PINK		CHU	М	OTHER SPECIES	REMARKS
Date	Miles	Ву	L i ve	Dead	Live	Dead	Live	
1942								
Oct 6	0.2	FWS	1,000		200			Showing
1947								
Oct 7	Α	FWS						Pink excellent Poor visibility
Oct 10 1951		ASI						FOOT VISIOITITY
Sept 2	0.5	FWS	261		6		4 reds	
1953								
Aug 5 1954	A length	FWS						100 below falls
Aug 7-								Maria I. a. alamani
Sept 10 1955		FWS						No salmon observed
Aug 24		FWS						No salmon observed
Sept 8		FWS	350		350			
1956		F71.10	40.000					
Sept 11 Sept 20	A 1.0 G 1.0	FWS FWS	10,000 20,000-3	000	500			
1957	G 1. 0	1.44.2	20,000-3	5,000	300			
Aug 13	G 0. S	FWS	34					
Sept 13 1958	G to falls	FWS	600		200	150		
Sept 19	A length		3,500		1,000			
Sept 26	A 1.0 G 0.5	FWS FWS	500					No salmon observed
Sept 26 19 5 9	G 0.5	FW2						No satisfoil observed
Aug 19	A to falls	FWS						No salmon observed
Sept 3	A to falls	FWS						No salmon observed
1960 1	Not surveyed							
1961								
	Not surveyed							
1963	4 1 0	ADE						Few pinks; few at mouth
Aug 7 Aug 21	A 1.0 G to lake	ADF AD F						2 jumps at mouth; I jump
Aug 21	o to take	,,,,,						in lake; low water makes falls impossible to jump

ADF STAT. No. WR 23 Previous No. 31

142-60 56°20.4' N. 132°08' W.

WRANGELL, EASTERN PASSAGE, in cove 2 miles SE. of Channel L.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES Chum and coho. ESCAPEMENT MAGNITUDE

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 15'-20'/12".

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate --swift,
BOTTOM Fair gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS

GENERAL NOTES A large, rocky stream with numerous large boulders.

142-60

WR 23 Previous No. 31

	SUR VEYED		PINI	ζ	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead		Dead	Live	
1951								
Aug 24	0.5	FWS	2, 750	71	1			
1953								
Aug S	A 1.0	FWS						No salmon observed
Sept10	A 1.0	FWS						No salmon observed, water black
1955								
Aug 24	A 0.7	FWS						No salmon observed
Aug 31 1956	G 0.7	FWS						No salmon observed
	G 0.7	FWS						No salmon observed
Aug 14			300					No sutmon observed
Sept 12 1957	A length	FWS	300					
July 30	A 5.0	FWS						No salmon observed
1958								No salmon observed
July 13	G mouth							
Aug 27	A 2.0	FWS						No salmon observed
1959		P7.10						Managharan abassas d
Aug 4	A 0.5	FWS						No salmon observed
Aug 19 196 0	A 0.7	FWS						No salmon observed
	Not surv	eved						
1961		,						
	Not surv	eyed						

ADF STAT. No. WR 24 Previous No. 32

141-10 56°13.8' N. 132°02.5' W.

WRANGELL, ERNEST SOUND, FOOLS INLET, E. head.

MAJOR SPECIES Pink.

SCAPEMENT TIMING Middle. Aug. - Sept (est.) ESCAPEMENT MAGNITUDE SPAWNING FACILITIES Good, but limited.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Glacial origin.

DRAINAGE 0.65 square mile (polar planimeter).

STREAM MOUTH IDENTIFICATION Small stream entering at high tide line. Easily missed at low water. ANCHORAGE Anchorage may be had southward of the two small islands near the head of the inlet.

TRAILS AND SURVEY ROUTES Easily surveyed. Good game trails along the banks. Take a skiff upstream as far as possible, but beware of being stuck on an outgoing tide.

AERIAL SURVEY NOTES Poor for gerial survey due to heavy overstory.

INTERTIDAL ZONE

LENGTH 0.1 mile.
GRADIENT AND VELOCITIES Slight.
BOTTOM Gravel, rock, and sand.
LOW TIDE LOCATION
HIGH TIDE LOCATION

SCHOOLING AREAS At the upper limits of the intertidal area.

SPAWNING AREAS The upper one-eighth has good spawning gravel; this section is heavily utilized by pinks.

GENERAL NOTES The entire section to marker is affected by extreme high tide of 161 and over.

UPSTREAM

LENGTH ACCESSIBLE O.l mile.

AVERAGE WIDTH/DEPTH 10'-20'/8"-16".

AVERAGE WIDTH/DEPTH 50'/3"-36".

GRADIENT AND VELOCITIES Slight

BOTTOM Coarse grave and sand grading into hard shale rock LS miles up.

MARKER DISTANCE

MARKER IDENTIFICATION

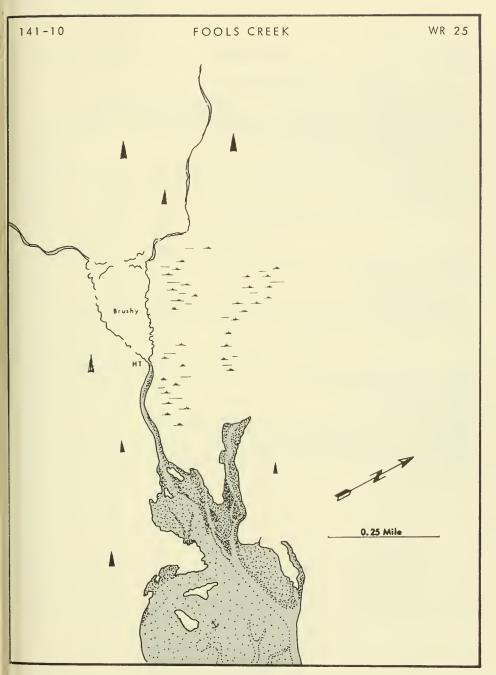
BARRIERS

TRIBUTARIES The intertidal zone joins that of a neighboring stream near the high tide mark.

SCHOOLING AREAS The entire area surveyed consists largely of pool areas.

SPAWNING AREAS Very little spawning area available upstream. Left fork has 1.5 miles spawning area. GENERAL NOTES

	SURVEYED		Pi	NK	СНИ	М	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
19\$1								
July 30	G 0. 1	FR1 FRI	90	0				
Aug 6 Aug 14	G 0. 1 G 0. 1	FRI	300 200	0				
Aug 22	G 0. 1	FRI	225	10				
Sept 4	G 0. 1	FRI	700	40				
Sept 14	G 0. 1	FRI	1,300	130				
Sept 23	G 0. 1	FR1	750	180				
Sept 28	G 0. 1	FRI	1,250	0				
1954 Aug 9		CALC	3,000					
Sept 7	mark	FRI	4, 200					
Sept 10	mark		20,000					
Sept 15	mark		4, S00					
1988								
Aug 24		FWS	500		100			
Sept 1	G	FWS	S00					
Sept S 1986		FRI	7,000					
Aug 10	G 1. S	FWS	30					
Aug 14	A 0.7	FWS	200					
Sept 4	A length		200					
Sept 11	A 0. S	FWS	200					
Sept 17	A length	FWS	300					
1957	4 1 6	ETAC						NT- ('-1 -1)
Aug 7 Aug 14	A 1. S G 0. 2	FWS FWS						No fish observed No fish observed
Aug 18	A length		100					NO IISII ODSEIVEG
1958	, rengen	1 110	100					
July 30	A 2.0	FWS						No fish observed
Aug 2	G	FWS	500					
Aug 14	G 0. 7	FWS	400					
Aug 16	G 0.1	FWS	200					
Aug 20 Aug 22	G 0. S A 0. 2	FWS FWS	S00 S00					
Aug 30	A 2. 0	FWS	300					S00 pinks at mouth
1959								7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Aug 1	G 0. 2	FWS						No fish observed
Aug 19	A 2.0	FWS						No fish observed
Sept 17		FWS	250					None seen above intertidal
Oct 5	G 0. 2	FWS						No fish observed
1960	Not surve	eved						
1961	1400 301 46	yeu						
Sept 13	G 0. S	ADF	300	many	few		1 red	Old fish, mostly spawned
1962								
Aug 21	A 1.0		1,500					S,000 in intertidal zone
Aug 30	A 2. C	ADF	8,000					20,000 in intertidal zone
1963 July 27	G 0.7	ADF	0		2			Spawning
July 27	0 0. /	ADE	Ü		2			- Farming



ADF STAT. No.

FOOLS CREEK

141-10

S6°14' N. 132°03.7' W.

Previous No. 33

WR 2S

WRANGELL, ERNEST SOUND, FOOLS INLET, W. head.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho.

ESCAPEMENT TIMING Middle. Aug. -Sept.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Excellent in the area below the forks. Poor above the forks.

STREAM TEMPERATURES Normal range. Observed temperatures: S3°F., 8/23/S2; S4°F., 8/26/52; 48°F., 9/8/52; S1°F., 9/17/S2; 55°F., 8/14/S3; S4.S°F., 8/21/S3.

VALLEY DESCRIPTION Stream-cut.

DRAINAGE 17.4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters Fools Inlet W. of WR 25. The mouth lies very close to that of WR 25.

ANCHORAGE Refer to WR 24.

TRAILS AND SURVEY ROUTES An easy stream to walk. Bear trails follow the banks.

AERIAL SURVEY NOTES Aerial visibility is very good.

INTERTIDAL ZONE

LENGTH 0.5 mile.

AVERAGE WIDTH/DEPTH 30'-S0'/12"-24".

AVERAGE WIDTH/DEPTH 60'/10".

GRADIENT AND VELOCITIES Slight to moderate.

BOTTOM Gravel and sand.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Two pools just below the high tide mark offer schooling facilities.

SPAWNING AREAS The upper 500 yards is used extensively by pinks and offers excellent spawning facilities.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 2.5 miles.

GRADIENT AND VELOCITIES Slight.

BOTTOM Broken rock and gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS The S. fork has an impassable falls 1 mile from the high tidemark.

TRIBUTARIES The stream splits near the upper end of the intertidal zone.

SCHOOLING AREAS Several excellent deep holes.
SPAWNING AREAS Both forks consist largely of boulders and rock and do not provide the excellent spawning gravel available in the intertidal zone. Fish do spawn heavily just above the forks.

GENERAL NOTES

ESCAPEMENT RECORD

		•		, ,	,			
	SURVEYED)	PIN	'K'	CHU	TM.	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	REMERING
Date	Milles	Бу	Live	Dedd	Live	Dead	Live	
1040								
1949								
July 11	G 0. 1	FRI						Too early
Sept 11	G 0. 1	FR1	2, 300	500	0	0		
1950								
July 11	G 0.7	FRI	0	0	0	0		
July 31	G 0.7	FR1	0	Э	0	0		
Aug 17	G 0.7	FRI	781	2	114	2		
Sept10	G 0. 7	FRI	2,452	262	49	3	1 coho, 1 red	
Sept 24	G 0.7	FRI	158	914	1	0		Many dead washed out
1951								
July 30	G 0.7	FRI	4,000	0	0	0		
Aug 6	G 0.7	FRI	2,800					Some dead pinks. Few chums
Aug 14	G 0.7	FRI	3,750	20	21	10		Schooled
Aug 22	G 0. 7	FRI	5,515	80	14	12		
Aug 24	1.0	FWS	8,000	00	30	12		1,000 at mouth, left branch
	0. 2	FWS	780	46	10			Right branch
Aug 24		FRI	700	40	10			-
Aug 25	A 1.0		7 050	2 225	25	27		Some pinks present
Sept 4	G 0.7	FRI	7,850	2, 325	25	37	00 1	Some fresh pinks
Sept 14	G 0. 7	FRI	6,000	2,000	50	0	30 cohos	
Sept 17	G 0.7	FRI	14,000		200	0	85 cohos, 1 red	Many dead pinks
Sept 17	G 1.0	FRI	700		25	0	5 cohos	Few dead pinks
Sept 23	G 0. 7	FRI	1,680	1,700	15	0		
Sept 28	G 0.7	FRI	9,050	1,500	115		25 cohos	Dead chums. 60% spawning
Oct 8	G 0.7	FRI	830	290	0	0	11 cohos	Pinks spawning
1952								
Aug 23	G 0.5	FRI	386	0	40	0		Visibility poor
Aug 26	G 0.5	FR1	1, 171	0	106	0		
Aug 30		FWS	1,670	0	25	0		
Sept 17	G 0.5	FRI	264	17	10	0		
Sept 8	G 0.5	FRI	715	0	0	0		
1953								
July 24	G 0.5	FWS						500 at mouth of stream #33
July 30	G 0.5	FR1	700	0	100	0		
Aug 5	G 0.5	FWS	75	0	75	0		
Aug 5	G 0.5	FW5	,,,	Ü	,,,			No salmon observed
Aug 14	G 0. 7	FRI	855	0	113	0		110 Salmon Observed
	G 0.7	FRI	822	6	313	12		
Aug 21					104	0		
Sept 10	G 0.7	FRI	516	13				
Sept 21	G 0.7	FRI	890	18	137	13		
1954		m.16						
Aug 9	1.2	FWS	4		1			F 1 1-1-1
Sept 7	G 0.5	FRI	4, 200		0			Few dead pinks
Sept15	G 0.5	FRI	4,640	130	20	1		
Sept17	G 0.5	FRI	400		0			Some dead pinks. None off
1955								mouth
Aug 24	A 0.5	FRI	1,000	0	0	0		2,000 at mouth
Aug 25	A 0.5	FWS	500	0	100	0		300 salmon in intertidal zone
Sept 1	G 1.5	FW5	200	0	25	0		

ESCAPEMENT RECORD

SURVEYED PINK CHUM OTHER SPECIES REMARKS Date Miles By Live Dead Live Dead Live

Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1956								
Aug 10	G 1.5	FWS	200					
Sept 4	A 1.5	FWS	1,000					
Sept 6	G 1.0		15,000					
Sept 7	A mark		17,000					
Sept11	A 0.5		12,000					
Sept 17	A lengt		3,000					
1957	-							
Aug 14	G 1.0	FWS			10			
Aug 18	A lengt	h FWS			100			
Aug 25	A mark	FRI	300					
Aug 30	G 0.7	FRI-FW	S 145		130			
Sept 2	A mark	FRI	3:00					
Sept 11	G 0.7	FRI-FW	S 90		29			
1958								
Aug 2	G	FWS	500					
Aug 11	G 1.0	FRI						None seen off mouth
Aug 14	G 0.7	FWS	400					
Aug 16	G 0. 1	FWS	200					
Aug 20	G 0.5	FWS	500					
Aug 22	A 0, 2	FWS	500					
Aug 25	A 1.0	FRI	1,000		0			None seen off mouth
Sept 17	A 1.0	FRI						None seen off mouth
1959								
Aug 1	G 0. 2	FWS						No salmon observed
Aug 10	A 0.5	FWS			50			
Aug 19	A 1.0	FWS			300			200 1 1 1 1 1
Sept 17	G 0.5	FWS	2, 100					900 in intertidal zone
Oct 5	G 0.5	FWS	120					
1960	AT .							
1961	Not sur	veyed						
Aug 26	A 1.0	ADF	few					Water very dark
Sept 13	G 1. 0	ADF	2,000		few			2, 200 pinks in intertidal
36br13	G 1. 0	ADI	2,000		1C W			zone. All old fish mostly
								spawned out
1962								Sparried Cat
Aug 21	A 1.0	ADF						5,000 in intertidal zone
1963								,
July 7	G 0.7	ADF	800		20			380 pinks in intertidal zone
July 27	G 0.7	ADF						No salmon observed
,/								

ADF STAT. No.

141-10 56°09.0' N. 132°03.5' W. SOUTHEAST CREEK

OTHER SPECIES

ESCAPEMENT MAGNITUDE

WR 26 Previous No. 34

WRANGELL, CLARENCE STRAIT, ERNEST SOUND, SOUTHEAST COVE, Head.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 5.7 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH

GRADIENT AND VELOCITIES

BOTTOM Very rocky. Many large boulders for first 0. 25 mile.

HIGH TIDE LOCATION

LOW TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS Above falls stream levels off into a series of good to excellent spawning areas.

GENER AL NOTES

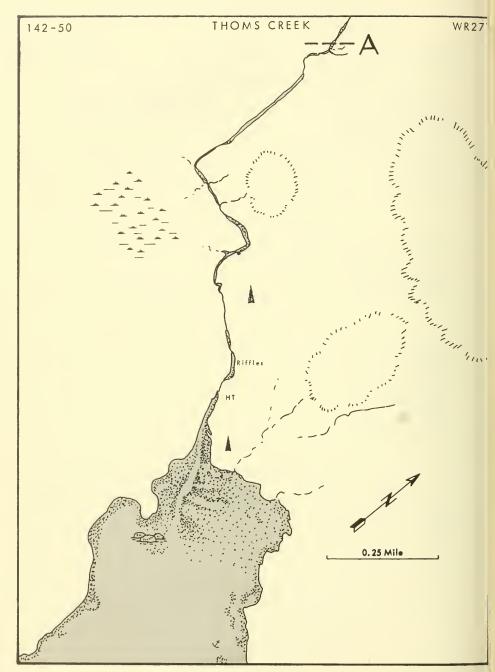
UPSTREAM

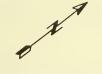
LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

ESCAPEMENT RECORD

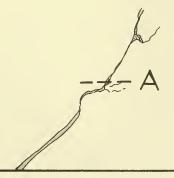
Date	SURVEYED Miles	Ву	PIN Live	K Dead	CHU Live	M Dead	OTHER SPECIES Live	REMARKS
19\$1 Sept 3 1960	G 0. 7	FRI	171	33	12	2	4 reds	
	Not surve	eyed						
1961	Not surve	eyed						





0.25 Mile

Good Spawning Entire Stream Length To Lake (5 Miles)



ADF STAT. No. WR 27

Previous No. 35

THOMS CREEK

142-50 56°11.1' N. 132°08.81 W.

ACE Hood

WRANGELL, ZIMOVIA STRAIT, THOMS PLACE, Head.

MAJOR SPECIES Pink. OTHER SPECIES Chum, red.

ESCAPEMENT TIMING Middle Aug. -Sept. ESCAPEMENT MAGNITUDE Est. 15,000 8/1S.

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Warm range. Observed temperatures: 63°F., 8/15/50; 6l.5°F., 8/2/52; 67°F., 8/14/52; 56°F., 9/2/52; 51°F., 9/11/52; 68°F., 8/2/53; 55°F., 8/10/53; 59.5°F., 8/20/53; 55.5°F., 9/1/53.

VALLEY DESCRIPTION

DRAINAGE 15.8 square miles. Drains Thoms Lake. Fed also by several other small lakes.

STREAM MOUTH IDENTIFICATION A broad tideflat with a heavily wooded margin.

ANCHORAGE When entering, pass between the wooded islands in the entrance. The head of the bay is foul. Anchor just inside the islands.

TRAILS AND SURVEY ROUTES During periods of low and normal water levels, the stream margin is easy to travel; however, during high water traveI is difficult. A trail follows the left bank to the lake. Bear toward the stream when crossing the muskeg.

AERIAL SURVEY NOTES Aerial survey difficult due to overstory, meandering streambed, and rushing water.

INTERTIDAL ZONE

LENGTH 0.2 mile. AVERAGE WIDTH/DEPTH 40'-S0'/8".

GRADIENT AND VELOCITIES Slight to moderate.

BOTTOM Broken shale and boulders.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Large pool middle of intertidal area is used extensively.

SPAWNING AREAS The upper 200 yards seems to be suitable for spawning, but spawning has not been reported to take place in this zone.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 6 miles. AVERAGE WIDTH/DEPTH 40'-50'/6"-12".

GRADIENT AND VELOCITIES Moderate.

BOTTOM Broken shale, boulders, and gravel.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS Forks 1.8 miles upstream. The W. fork drains a lake about 3 miles above the confluence.

TRIBUTARIES None reported.

SCHOOLING AREAS Very few schooling areas. Above the 1 mile mark, there are occasional pools. SPAWNING AREAS Spawning occurs in all riffle areas. Spawning area is somewhat limited.

GENERAL NOTES

142-50

ESCAPEMENT RECORD

Date	SUR VEYED Miles	Ву	PII Live	NK Dead	CHU Live	JM Dead	OTHER SPECIES Live	REMARKS
1949								
July 11	G 2.0	FRI						Too early
Sept 13	G 2.0	FRI		146	0	0		High water
1950								
July 26	C 0 5	FWS					5,000 reds	Р
Aug 15	G 0.5	FRI	0		0			Exploratory survey
1952	G 2.0	FRI	0		Э		200 reds	24 dead reds
Aug 2 Aug 14	G 2. 0	FRI	0		0		200 reds	24 dead reas
Aug 23	G 0. 6	FRI	ő		Ö		Loo reas	
Aug 30	0. 3	FW5	195		_			
Sept 2	G 2. 0	FRI	39		0			
Sept 11 1953	G 2.0	FRI	45		0			
July 26	G 0. 2	FWS	200		0			Fish going up
Aug 2	G 2.0	FRI	725		0		18 reds	
Aug 10	G 2. 0	FRI	2,322		4		704 reds	
Aug 20	G 2.0	FRI	1,073		40	0		
Sept 1	G 2. 0 A 2. 0	FRI FW5	1,469	55	15	0		Few bright cohos
Sept 23 1954								
July 6- 1955		FW5			0			No salmon observed
July 29		FW5 FWS	0		0 0			Fair
Aug 2 Sept 2		FW5	50		U			
1956	0 1. 2	1 113	30					
July 9	A	FW5					2,000 reds	Off mouth
Aug 1	G	FWS					3,500 reds	
Aug 15	G	FWS						2,000 fish in bay
Aug 24	A	FRI	300					
Aug 26		FW5					5,000 reds	40.000 15.000 1.1056
Aug 30	G	FW5						12,000-15,000 red 1956 escapement. Poor spawning
								facilities
Sept 17	A lengtl	FWS	300					Stream low
Sept 21	G 0. 7	FW5	2,500					750 dead
1957			-,					
Aug 30 1958	G 1.0 F	WS-FR	I 504	0	13	0		Fair
July 23	G 1.0	FW5						Good showing at mouth
July 25	G 1.2	FWS						800 fish present
July 27	G 1. 2	FW5						1,000-1,500 at head of inlet
Aug 25	A mark	FW5	200					
Aug 30	A 4.0	FWS	300					

ADF STAT. No. WR 27
THOMS CREEK - Continued Previous No. 35

142-50

ESCAPEMENT RECORD

	SUR VEYEL)	PINI	<	CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1959								
July 7	G 0.7	FWS					500	1,000 reds in bay
July 10	G 0.7	FWS					1,000	
July 12	G 0.7	FWS					500	1,000 reds in bay
July 26	G 1.0	FWS					200	
Aug 12	G 0.7	FWS	1,200					
Aug 17	G 0.7	FWS	300					
Sept 17	G 0. 2	FWS	400					Intertidal spawning
1960								
	Not surv	reyed						
1961								
July 23	A	ADF	1,000					Stream very low
,								All fish at mouth
July 27	A lengt	h ADF	1,000					Stream very low
,,			,					All fish at mouth
Aug 8	G 0, 5	ADF						2,500 mixed fish at
								mouth. 25 dead reds
1963								
July 5	Α	ADF						No fish observed
July 15	A mout							Few jumps off mouth
,,	1110 441							

ADF STAT. No. WR Previous No. 27

142-50 DOG SALMON CREEK \$6°1\$.4' N. 132°24.2' W.

WRANGELL, ZIMOVIA STRAIT, ANITA BAY, N. shore of entrance.

MAJOR SPECIES Chum. ESCAPEMENT TIMING Middle. SPAWNING FACILITIES Fair. STREAM TEMPERATURES

OTHER SPECIES Pink, coho, steelhead. ESCAPEMENT MAGNITUDE

VALLEY DESCRIPTION Drains Anita Lake which lies in a small, steep-sided valley at 1, 362 feet.

STREAM MOUTH IDENTIFICATION Marked by small tidal lagoon and flats.

ANCHORAGE In Anita Bay.

TRAILS AND SURVEY ROUTES

DRAINAGE Approximately 2 square miles.

AERIAL SURVEY NOTES Fair for surveys.

LENGTH ACCESSIBLE 0.25 mile to falls.

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH GRADIENT AND VELOCITIES Average discharge estimated 62 c. f. s. BOTTOM LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS

SPAWNING AREAS

GENERAL NOTES

UPSTREAM

AVERAGE WIDTH/DEPTH

GRADIENT AND VELOCITIES Steep near lake. воттом MARKER DISTANCE None. MARKER IDENTIFICATION BARRIERS 8' falls 0.25 mile from mouth, may be passable. Small falls in upper 1 mile of stream. TRIBUTARIES SCHOOLING AREAS

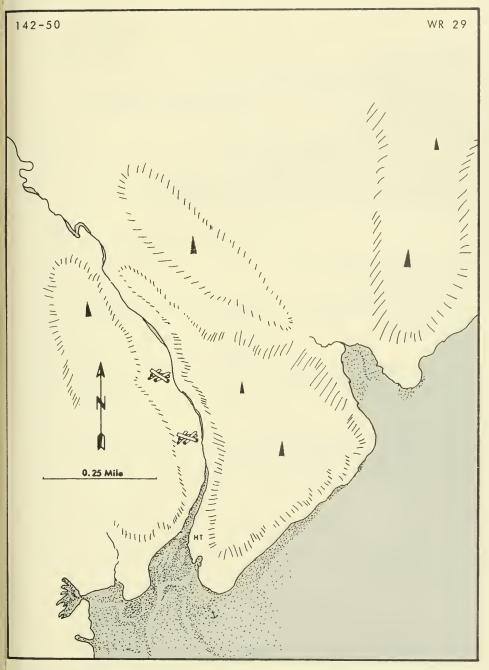
SPAWNING AREAS

GENERAL NOTES Reported to have been good producer in past. 1931 to 1934 FWS annual reports state extremely heavy seedings for this stream. The stream is quite rapid with cascades and small falls in upper 1 mile of stream.

DOG SALMON CREEK

ESCAPEMENT RECORD

	SURVEYED		PIN	ľK	СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1953								
Aug 9	G length	FWS	20		105			
Aug 20	G length		200		700			
1954								
Sept 16 1955		FWS	150					
Aug 2 1956	G 0. 2	FWS	100					
July 26	G	FWS			105			
July 27	G	FWS			250			
July 28	G	FWS			1,000			
Aug 7-8		FWS			1,500			
Aug 13	G	FWS			6,000			
Sept 8	G A 2.0	FWS FWS			4,000 3,000			
Sept 12 1957								
July 28	G	FWS			100			
Aug 9	A 2.0	FWS	200		150			
Aug 14	G 0. 7	FWS	200		2,000 5,000			
Aug 17 1958	A length				,			
Aug 11	A 0. 2	FWS	3, 250		100			
Aug 14	G 0.5	FWS	000		1,500			
Aug 17	G 1.0	FWS	900		300			
Aug 22	A length		1,000		2,500			200 pinks, 50 chums at mouth
Aug 23	G mouth G 0. 7	FWS	1,500		700			200 pinks, so chamb at means
Aug 25 Aug 27	A length		2,500		150			
Aug 29	G length		2,000		500			
Sept 7	G 1.0	FWS	360		120	75		
1959								
Aug 2	G 0.7	FWS						No fish observed
Aug 10	A 0.7	FWS						No fish observed
Sept 2 1960	G 0.5	FWS	350		30			
1961	Not surve	eyed						
Aug 7	Skiff mouth	ADF						2,000 chums at mouth
Aug 8 1962	Skiff mouth							600 chums at mouth
July 30	A mouth	ADF						No fish observed
July 30	Skiff mouth							350 at mouth
Aug 7	A mouth							300 at mouth



ADF STAT. No. WR 29 Previous No. 40

142-50 56° 12' N. 132° 29.8' W.

WRANGELL, ZIMOVIA STRAIT, ANITA BAY, Head.

MAJOR SPECIES Pink. ESCAPEMENT TIMING SPAWNING FACILITIES Fair. STREAM TEMPERATURES

OTHER SPECIES Chum, coho. ESCAPEMENT MAGNITUDE

VALLEY DESCRIPTION A shallow, heavily timbered valley. DRAINAGE 11.1 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters on the N. side of the large mudflat. A wooded point is found just S. of the mouth. Grass flats at mouth.

ANCHORAGE The head of the bay affords fair anchorage in 13 to 17 fathoms.

TRAILS AND SURVEY ROUTES No trails except bear trails follow the streambanks. Wadeable. Downed timber is found along the banks, but the stream is not difficult to wade.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 200 yards. GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel and coarse rubble.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS School off the mouth in Anita Bay.

SPAWNING AREAS Spawning has not been observed in this zone, but it appears to be suitable for such activities.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile.

AVERAGE WIDTH/DEPTH 15'/8"-12".

AVERAGE WIDTH/DEPTH 15'-20'/6"-8".

GRADIENT AND VELOCITIES Moderate - swift. BOTTOM Small gravel, coarse sand, and boulders.

MARKER DISTANCE

MARKER IDENTIFICATION BARRIERS

TRIBUTARIES

SCHOOLING AREAS Only very small pockets are available for schooling.

SPAWNING AREAS Some fair spawning areas are found in the distance surveyed. The spawning areas are broken by stretches of rubble and boulders.

GENERAL NOTES The stream meanders a good deal and is turbulent in places.

Previous No. 40

Date	SUR VEYED Miles	Ву		NK Dead	CHU	JM Dead	OTHER SPECIES	REMARKS
		2,	2.70	Deud	2110	Deud	2.110	
1950								
Sept 10		FWS	50		1, 20S			
19S1 Sept 6	0.3	FWS	S00		1,000			
19S3	0. 3	1 113	300		1,000			
Sept 6	A 0.4	FWS						Few live chums
								5,000 dead chums at
1954								mouth
Aug 19	A	FWS			300			
1988					300			
Aug 2	G 0, 2	FWS	100					
1986								
Aug 1S	A 3.0	FWS	2 000		400			2 000 1 - 1
Sept 12 1987	A 4.0	L AA 2	3,000					3,000 dead
July 22	G 0. 2	FWS			50			
Aug 7	G 0. 2	FWS			375			
Aug 7	A mouth	FWS			400			
Aug 14	G 1.0	FWS	25		298			
Aug 18	A length	FWS			6,000			1,500-2,000 at mouth
1958								
Aug 11	G 0. 2	FWS			300			
Aug 14	G 0.5	FWS			500			
Aug 21	G 1.0	FWS			400			
Aug 22	A length				1,500			500 dead fish
Aug 25	G 1.0	FWS			250			
Aug 27	A length				1,000			
Sept 6	G 1. S	FWS	10		50	100		
Sept 9	A	FWS	300					Few live chums
Sept 19 19S9	A length	FWS	S00					
Aug 2	G 0.7	FWS						No fish observed
Aug 9	G 0. 7	FWS			50			No iish observed
Aug 10	A 0.7	FWS			80			
Sept 10	G 0. 2	FWS	65		20			
Sept 30	G 1.0	FWS	00		20			No fish observed
1960	0 2.0							110 (13)1 00301700
	Not surve	eyed						
1961								
	Not surv	eyed						
1962								
July 30	A	ADF			1,000			In intertidal zone
Aug 7	A	ADF						No fish observed

ADF STAT. No. WR 30 Previous No. 41

142-S0 S6°11.1' N. 132°30.6' W.

WRANGELL, ZIMOVIA STRAIT, ANITA BAY, W. head.

MAJOR SPECIES Pink. OTHER SPECIES Chum. ESCAPEMENT TIMING Middle. Aug-Sept (est.) ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION The stream runs through rolling hills. Largely a muskeg area with some forestation.

DRAINAGE 2.7 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters the bay from the S. and lies at the E. end of the mudflats. Meanders through the upper intertidal zone.

ANCHORAGE Refer to WR 29.

TRAILS AND SURVEY ROUTES No trails. The stream may be waded after you get above the intertidal zone.

AERIAL SURVEY NOTES Poor for aerial survey due to heavy overstory. Intertidal area good.

INTERTIDAL ZONE

LENGTH 200-300 yards. AVERAGE WIDTH/DEPTH 15'-18'/6"-8".
GRADIENT AND VELOCITIES Moderate.
BOTTOM Mud, large rubble.
LOW TIDE LOCATION

LOW TIDE LOCATION

SCHOOLING AREAS The main schooling area is off the mouth.

 ${\tt SPAWNING}$ AREAS No areas suitable for spawning are found below the high tide mark.

GENERAL NOTES This zone lies partially in a long lagoon.

UPSTREAM

LENGTH ACCESSIBLE 0.7 mile.

GRADIENT AND VELOCITIES Moderate.

BOTTOM Some boulders with scattered gravel areas.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None in the first mile.

TRIBUTARIES None.

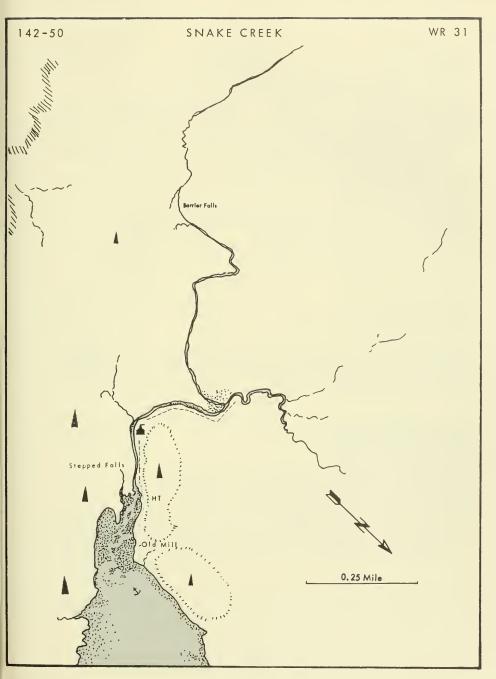
SCHOOLING AREAS No pools of substantial size are found.

SPAWNING AREAS Some fair spawning areas are found throughout the distance surveyed.

GENERAL NOTES

ESCAPEMENT RECORD

SURVEYED PINK CHUM OTHER SPECIES	REMARKS
Date Miles By Live Dead Live Dead Live	
1983	
July 21 A O. S FWS	No fish observed in streams
Aug 28 A 0. S FWS 0 0 100	
1960	
No surveys	
1961	
No surveys	
1962	
Aug 7 A ADF	No fish observed



ADF STAT. No.

SNAKE CREEK

142-50 56°10.8' N. 132°19.5' W.

WR 31 Previous No. 42

WRANGELL, ZIMOVIA STRAIT, OLIVE COVE, Head.

ESCAPEMENT TIMING Middle. Aug. -Sept.

MAJOR SPECIES Pink.

OTHER SPECIES Chum, coho, steelhead.

ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Good.

STREAM TEMPERATURES Normal range. Observed temperatures: 55°F., 7/30/50; 56°F., 8/15/50; S3°F., 9/10/S0; S1°F., 9/23/S0; S7°F., 8/2/S2; 61.5°F., 8/14/S2; S7°F., 8/23/S2; S2.5°F., 9/2/52; S0°F., 9/11/52; 61°F., 8/2/53; S9.5°F., 8/10/53; S7.5°F., 8/20/53; S6°F., 9/1/53; 54°F., 9/10/53; 52°F., 9/17/53.

VALLEY DESCRIPTION Flows through a flattened valley in its lower reaches. The valley walls become steep near the lake.

DRAINAGE 12.4 square miles (polar planimeter). The stream originates in five mountain lakes, with a total area of 2. S square miles.

STREAM MOUTH IDENTIFICATION The mouth lies to the S. of the old mill site, head of bay. ANCHORAGE Anchorage may be found inside the entrance to Olive Cove. Float has been

TRAILS AND SURVEY ROUTES A somewhat overgrown trail may be followed from the mill to the weir site. The trail follows the left bank.

AERIAL SURVEY NOTES Fair for aerial survey on lower reaches. Poor in upper stream area.

INTERTIDAL ZONE

LENGTH 0.5 mile.

removed.

AVERAGE WIDTH/DEPTH 1001/12".

GRADIENT AND VELOCITIES Gentle.

BOTTOM Small rock and sand.

LOW TIDE LOCATION

HIGH TIDE LOCATION Head of lagoon, rapids.

SCHOOLING AREAS In the bay off the mouth of the stream. Two large pools at head of tidewater. SPAWNING AREAS Some favorable spawning gravel is found in the upper part, just below the falls. GENERAL NOTES At the upper limit of this zone there is a 4' falls and cataract which present a partial block to salmon during low water levels.

UPSTREAM

LENGTH ACCESSIBLE 1.2 miles.

AVERAGE WIDTH/DEPTH 40'-S0'/10"-18".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Mostly sand and good spawning gravel.

MARKER DISTANCE 1.2 miles.

MARKER IDENTIFICATION

BARRIERS A series of falls 1.7 miles upstream blocks the ascent of salmon.

TRIBUTARIES The stream splits 1 mile upstream and the smaller fork goes towards the S. while the main branch continues to a small lake.

SCHOOLING AREAS Many pools are found throughout this stream.

SPAWNING AREAS The bottom is largely sand and debris from the mouth to the first bend; however, above this excellent spawning areas appear.

The Bureau of Fisheries and the U.S. Fish and Wildlife Service have maintained GENERAL NOTES a weir on this stream in the past. It was last maintained in 1949. Alaska Department of Fish and Game weir maintained in 1961 and 1962.

SNAKE CREEK

ESCAPEMENT RECORD

		•		, ,			, , ,	
	SURVEYED		PIN	ſΚ	CH	UM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead		Dead	Live	
		-/						
1928								
Sept 22	Weir	USBF	49, 1\$6				385 cohos	Final total. Weir installed July 16
1929	***************************************		,				500 00.105	Time totals were installed july 10
Sept 10	Weir	USBF	35, 381		31		72 cohos	Final total Wais installed June 10
1930	44.611	CODI	33, 361		31		7 2 CO1103	Final total. Weir installed June 19
	347 - 1 -	HEDE	124 002		172		20 - 1 -0	E: 1 1 Mr 11 17 1 10
Aug 16	Weir	USBr	134, 083		1/2		38 cohos	Final total. Weir installed July 13
1931	745 1		110 155					
Sept 5	Weir	OSBr	110,477		325		396 cohos, 2 reds	Final total. Weir installed July 9
1932								
Sept 7	Weir	USBF	19, 0 96		1,038		80 cohos, 6 reds	Final total. Weir installed July 18
1933								
Aug 24	Weir	USBF	130,582		98		61 cohos	Final total. Weir installed July 15
1949								
Aug 16	Weir	FWS	178, 363					Final total. Weir installed July 14
1950								
Aug 26	Weir	FWS	28,346					Final total. Weir installed July 15
1951								•
Sept 8	Weir	FWS	67,179		203			Final total. Weir installed July 20
1952								,, <u></u>
Aug 14	G 0.3	FWS	9,755	0	47	0		
Aug 23	G 0.3	FW5	25, 243	0	453	0		
Aug 27	Weir	FWS	25, 629	•	463	•		Final total. Weir installed July 20
Sept 2	G . 3	FWS	35	1	0	0		That totals wen historied july 20
1953	0.5	1 113	33	1	·	U		
	347-1-	FW5	12 762		293			Pinal secol Mate to seall at July 45
Sept 5	Weir		13, 763	774				Final total. Weir installed July 15
Sept 10	G 1.0	FWS	1,935	774	0	6	64 1 .	Spawning count
Sept 17	G 1.0	FWS	1, 200	1,001	0	0	64 cohos	
1954								
Aug 24	G 1.0	FWS	1,000	0	0	0		500 pinks schooled
Aug 31	Weir	FWS	48,788		132		2 cohos	Final total. Weir installed July 1
Sept 9	A 1.0	FWS	3,000	0	0	0		Fish mostly schooled
Sept 17	A 1.0	FWS	4,500	0		0		Some chums
1955								
Sept S	Weir	FWS	33, 180		33		I reds	Final total. Weir installed July 2
1986								
Aug 18	Weir	FWS	212,380				4, 300 cohos	Final total. Weir installed July 17
Season		FWS	57,486		1, 347		23 cohos	
1957								
	G abv weir	FWS	1,500					
July 28	A fork	FRI	8,000					
July 30	A 2. 0	FRI	8,000					
Aug 2	G 0. 7	FWS	10,000					
Aug 7	A 1.5	FWS	10,000					
Aug 8	G 0. 5		11,000-12	. 000				
Aug 19	G 0. 7	FWS	28,000	,				
	G 0. 7	FWS	35,000					
Aug 23			,					Some chums. Few dead pinks
Aug 25	G 2, 0 F				1.00			Joine Chains. Tew dead pinks
Aug 31	A 2.0 F	W3-FK	1 4,000		180			

Date	SUR VEYED Miles	Ву	PINK Live	Dead	CHI Live	JM Dead	OTHER SPECIES Live	REMARKS
1958 July 12 July 13	A 1.5 G 0.1	FWS FWS						No fish observed No fish observed
July 14 July 15 July 17	G G	FWS FWS	50 50 100					200 pinks at mouth
July 18 July 19 July 20	G G	FWS FWS	170 250 500					
July 22 July 25 July 26	G G 0. 5 G 0. 5	FWS FWS	560 650 700					
July 28 July 30	G 0. 5 G 0. 2 A 1. 0	FWS FWS	700 750 1,000					
July 30 Aug 1 Aug 5	G G	FWS FWS	800 900					
Aug 25 Aug 27	A falls mark A mark G abv mark	FWS FRI	8,000 4,000 17,000	7	13 10	4	15 cohos	
Sept 7 Sept18 Oct 5	G 2.5 A	FWS FRI FWS	3, 900 200		10		150 cohos	3,000 dead pinks
1959 July 17 July 21	G 0.5 G 0.7	FWS FWS FWS	500 1,500 2,500					
July 23-2 July 30 Aug 2	G 0. 5 G 0. 5 G 0. 5 G 0. 5	FWS FWS FWS	5,000 4,000 5,000					300 pinks at mouth
Aug 2 Aug 7 Aug 9	G 0. 5 G 0. 5 G 0. 5	FWS FWS FWS	8,000 8,000 10,000					
Aug 10 Aug 10 Aug 11	A 1.0 G 0.5 G mouth	FWS FWS	15,000 10,000 10,000					
Aug 15 Aug 25 Aug 28 Sept 3	G 1. 5 G 1. 0 A 0. 2	FWS FWS FWS	20,000 20,000 20,000					Above weir
Sept 30 1960	G 1.5	FWS ADF	2,000				100 cohos	3,000 at mouth
July 23 July 30 Aug 8	A A		present 12,000 13,500					3,000 at mouth
1961 July 12 July 13	G 0. 5 G 1. 2	ADF	400 2,700 >4,000					1,000 pinks at mouth 1,000 pinks at mouth
July 21 July 27 Aug 1	A length A length A length	ADF	>5,500 15,000					200 pinks at mouth
Aug 3 Aug 12	G 1.0 G 1.0	ADF ADF	15,000 13,000	3,000			35 cohos	Weir estimate 18,000 Heavy spawning

SNAKE CREEK - Continued

Previous No. 42

	SUR VEYED	PIN	IK	СНИМ		OTHER SPECIES	REMARKS
Date	Miles By	Live	Dead	Live	Dead	Live	
1962							
July 6	A length ADI	7					1,500 at mouth
							1,000 in intertidal zone
July 16	G 0. 2 ADI	17,500					1,500 at mouth
7 1 00							500 in intertidal zone
July 25	A length ADI						3,000 at mouth
July 25	G length ADI						1 500 1 1
July 30	A length ADI						1,500 below weir 500 below weir
Aug 5	G length ADI						
Aug 9	A length ADI						100,000 in lower stream 95,000 in lower stream
Aug ?	A length ADI						95,000 in lower stream
Aug ?	A length ADI						
Aug ?	A length ADE	30, 200					
1963	G mouth ADF						No fish observed
July 10	A 0.5 ADI						
July 15 July 20	G above ADI						
July 20	cabin	-,					
July 29	A length ADI	45,000					2,000 in intertidal
Aug 7	G to 2nd ADI			24			400 in intertidal
riug /	falls	,					
Aug 16	A length ADI	112,000					1,500 in intertidal
Aug 16	A length ADI						helicopter
-1-910		,					

ADF STAT. No.

WR 31

Previous No. 42

U. 5. Bureau of Fisheries Weir Counts

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1928 J uly 16	3, 783							
17	2, 405							
18	3, 286							
19	1,837							
20	1, 249							
21	707							
22	415							
23	2, 186 2, 258							
24 25	4, 331							
26	5,348							
27	3,733							
28	2, 745							
29	1,920							
30	1,325							
31 Aug 1	1,340 360							
Aug 1	1, 260							
3	868							
4	972							
5	615							
6	668							
7 8	593							
9	197 948							
10	255							
11	187							
12	272							
13	181							
14	189							
15 16	272 239		4					
17	52		7					
18	106		7					
19	365		5					
20	114							
21 22	42 50		3 6					
23	121		6					
24	153		9					
25	85		2					
26	110		9					
27	141		3					
28 29	43 37		1 3					
30	51		1					
31	61		1					
Sept 1	31							
2	45		1					
3	31							
4 5	36 34							
6	19							
7	15							

142-50				5 N A	KE CR	EEK - Conti	nued	Previous No. 4
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1928 Sept 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 Total	29 13 59 54 139 81 16 22 15 5 6 7 8 49,156		2 44 46 31 54 58 21 15 21 19 6 385					
1929 July 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Aug 1 2 3 4	400 221 500 1, 754 1, 148 1, 295 2, 176 2, 203 2, 601 1, 450 1, 452 1, 362 2, 333 1, 359 1, 603 8, 400 2, 504 1, 492 672 358 267 198 270 385	7						
5 6 7 8 9 10 11 12 13 14 15	397 325 175 275 265 88 212 31 18 43 17	6						

SNAKE CREEK - Continued

Previous No. 42

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1929 Aug 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Sept 1 2 3 4 5 6 7 8 9 10 11 Total	1,088 29 11 87 16 46 21 21 74 63 32 83 36 34 18 12 21 12 56 67 16 18 47 21 20 35,381	18	72					Estimated 1,000 below weir
1930 July 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Aug 1 22 3 4 5 6 7	4, 648 1, 469 1, 775 4, 194 6, 907 4, 078 5, 447 2, 610 3, 695 4, 279 3, 975 1, 113 7, 643 9, 246 3, 714 4, 881 9, 167 9, 134 4, 881 4, 882 4, 881 9, 167 9, 134 4, 625 3, 900 4, 025 2, 024 2, 219 2, 257	4 7 17 10 5 5 6 20 6 6 5 5 5 4 14 6 8 6 3	1			284		

ADF STAT. No. WR 31 Previous No. 42

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1930 Aug 8 9 10	2, 710 2, 805 2, 372	4 10						Weir closed for scientific
12 13 14 15	4,086 1,470 1,916 560	7 8 6	10 9 12 6					purpose
16 Total	510 134,083	172	38					Weir closed for season
July 9 10 11 12 13 14 15 16 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	350 1,078 2,845 2,133 5,227 5,568 3,522 6,161 3,689 3,000 2,611 10,108 9,237 4,587 5,440 4,282 1,690 2,750 2,485 1,840 600 257 138 362 257	1 3 2 2						
16 17 18 19 20 21	192 348 154 162 128 50	9 15 10 4	3 5					

142-5	0			5 N A	KE CR	EEK - Conti	inued	Previou
Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1931 Aug 22 23 24 25 26 27 28 29 30 31 Sept 1 2 3 4 5	151 1,950 1,138 230 81 5 571 365 137 105 155 180 56 73 1,000	13 89 31 18 13 5 18 11 27 15 7 15 7	1 3 21 1 13 73 36 30 6 13 68 13 10 100 296	2				
1932 July 17 18 19 20 21 22 23 24 25 26 26 27 28 29 30 31 Aug 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	104 92 311 34 170 1, 228 2, 491 1, 204 841 832 654 635 641 418 481 116 334 46 115 52 121 481 699 244 605 118 108 33 302 17 90 72 73 68	111 77 2 5 8 100 18 200 8 8 555 29 22 230 21 44 49 97 75 103 91 566 73 466 32 24 452 14 21 21 21 21 23 8	1 2 1 5					

WR 31 Previous No. 42

Date Pink Chum Coho Red King Stream gage Water temp. Remarks	142-50				5 N A	KE CR.	LEK - Conti	nueu	rrevious
Aug 22 162 2 1 23 829 4 25 24 57 4 2 Total 130,582 98 61 1949 July 14 3,600 16 3,498 17 1,968 18 3,642 19 5,786 20 2,465 21 3,730 22 9,261 23 8,541 24 5,900 25 5,475 26 7,880 27 12,363 28 9,203 29 9,375 30 5,615 31 3,182 Aug 1 304 2 2 Aug 1 304 2 7 6 8,643 7 9,862 8 4,475 9 3,509 10 1,743 11 2,736 12 6,938 13 7,583 14 2,361 15 3,276 16 5,742 Total 178,363	Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
July 14	Aug 22 23 24	829 57	4	25 2					
1950 July 20	July 14 15 16 16 17 18 19 20 20 21 22 23 24 25 26 27 30 31 Aug 1 5 6 7 8 9 10 11 12 13 14 15 16	2,500 3,498 1,968 3,642 5,786 2,465 3,730 9,261 8,541 5,900 12,363 9,203 3,140 5,820 3,140 5,820 3,140 5,820 3,140 1,743 2,736 6,938 7,583 2,361 3,276 5,742							
	1950 July 20 21 22 23 24 25 26 27 28 29 30 31 Aug 1	40 2, 255 1, 323 857 812 350 551 3, 139 2, 499 1, 988 1, 219 574							

Date	Pink	Chum	Coho	Red	King	Stream gage	Water t	emp.	Remarks
1950 Aug 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 Total	989 798 900 261 461 802 2,527 750 113 117 1,349 64 46 9 33 11 48 34 21 23 122 1 28,346								
	,								
1951 July 25 26 27 28 29 30 31 Aug 1 2 3 4 5 6 7 7 8 9 10	2, 046 1, 994 2, 232 4, 778 4, 381 3, 386 2, 488 4, 582 3, 002 6, 322 7, 600 6, 187 3, 365 3, 208 1, 556 1, 597 1, 116 779 670 532 1, 209	2 1 3 3 1 5 10 6							
15 16 17 18 19 20 21	471 509 323 336 91 266 318 75	5 4 7 5 2 17 9							

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1951	40	1						
Aug 23 24	40 69	1						
25	251	1						
26	21	1						
27	143	3						
28	12							
29	37							
30	19	6						
31	9							
Sept 1	29	4						
2								
4								
5								
6								
7								
8	398	18						
9	372	50						
Total	67, 179	203						
1952								
July 21	67							
22	1,989	4						
23	1,884							
24	1,678	1						
25	1,496	1						
26	1,949	2						
27	2,039	2						
28 29	1,556 2,354	8						
30	1,634	2						
31	1,727	4						
Aug 1	865	4						
2	1, 104	11						
3	761							
4	567	4						
5 6	818 507	7 12						
7	798	32						
8	241	15						
9	159	19						
10	161	6						
11	150	12						
12	179	24						
13	42	13						
14 15	155 68	15 12						
16	83	24						
17	259	88						
18	193	66						
19	87	41						
20								
21	12	9						
22 23	15 19	12 6						
24	19	4						
Total	25, 629	463						
	,	100						

Total 13,763 293

1,320

1,618

ADF STAT. No. WR 31 Previous No. 42

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1956								
July 23	1,432	14						
July 24	3, 197	0						
July 25	3, 350							
July 26	908							
July 27	1,936							
July 28	2, 108							
July 29	1,286							
July 30	1,455							
July 31	2,043							
Aug 1	899							
Aug 2	1, 280	1						
Aug 3	903	8						
Aug 4	902	8						
Aug 5		water - no c	ount					
Aug 6	1,528	27						
Aug 7	664	31						
Aug 8	251	6 3						
Aug 9	214 315	5						
Aug 10 Aug 11	297	12						
Aug 12	152	14						
Aug 13	137	8						
Aug 14	261	11						
Aug 15	157	6						
Aug 16	67	19						
Aug 17		8						
Aug 18	136	34						
Au g 19	90	98						
Aug 20	201	52	3					
Aug 21	170	164	4					
Aug 22	102	63	2					
Aug 23	72	54	3					
Aug 24	67	60						
Aug 25	33	24	1					
Aug 26	18 22	16 3 1						
Aug 27 Aug 28	24	24						
Aug 29	74	29						
Aug 30	6	11						
Aug 31	190	68	7					
Sept 1	66	21	3					
Sept 2	55	14						
Sept 3	21	4						
Total	57,486	1,347	23					

SNAKE CREEK - Continued

ADF STAT. No.

WR 31

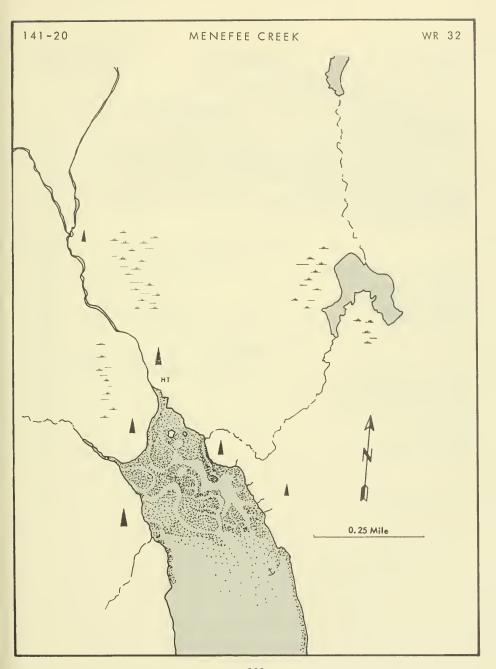
Previous No. 42

						Stream	116010	us 'No. 42
Data	Pink	Chum	Calca	D . J	V:		Water	D 1
Date	TINK	Chum	Coho	Red	King	gage	temp.	Remarks
1961								
July 27	15,000	12						
		12						
July 28	74							
July 29	561							
July 30	210							
July 31	844							
Aug 1	918							
Aug 2	807							
Aug 3	1, 176	1						
Aug 4	352							
Aug 5	1,284							
Aug 6	797							
Aug 7	1, 293	18						
Aug 8	793	2						
Aug 9	371	5						
Aug 10	283	4						
Aug 11	895	20						
Aug 12	421	2						
Aug 13	261	5						
Aug 14	155							
Aug 15	299	3						
Aug 16	184	4						
Aug 17	155	3						
Aug 18	97	3						
Aug 19	31	1						
Aug 20	48	2						
Aug 21	22	1						
Aug 22	17	5						
Aug 23	27	9						
Aug 24	175	21						
Aug 25								
Aug 26								
Aug 27								
Aug 28								
Aug 29	6	1						
Aug 30	2							
Sept 1	26							
Sept 2	4	2	15					
Sept 3	4	1	1					
Sept 4	14	8	10					
Totals	27,552	133	26					
1962								
July 6								
July 7	145							
July 8	474	4						
July 9	12, 216	8						
July 10	2,065							
July 11	1,763							
July 12	2,587							
July 13	4,536							
July 14	5,445							
July 15	2,854							
July 16	4,338	4						
July 17	3,557							

SNAKE CREEK - Continued

ADF STAT. No. WR 31 Previous No. 42

Date	Pink	Chum	Coho	Red	King	Stream gage	Water temp.	Remarks
1962								
July 18	5,457							
July 19	6,740							
July 20	2,974							
July 21	6,166							
July 22	7, 204							
July 23	3,437							
July 24	6, 174							
July 25	8,062							
July 26	2,881	5						
July 27	3,057							
July 28	1,508							
Totals	93,644	21						



Previous No. 44

MENEFEE CREEK

141-20 56°08.4' N. 132°15.2' W.

WRANGELL ERNEST SOUND, MENEFEE INLET, Head.

MAJOR SPECIES Pink, ESCAPEMENT TIMING SPAWNING FACILITIES STREAM TEMPERATURES

OTHER SPECIES Chum.
ESCAPEMENT MAGNITUDE

VALLEY DESCRIPTION The valley wall rises sharply W. of the stream, snowfields border this side of the valley. To the E. the velley has a gentle gradient and numerous open muskeg areas. DRAINAGE 5.2 square miles (polar planimeter). Precipitation-fed. Large snowfield to the W. contributes snowmelt at certain times of the year. Also drains a large muskeg area.

STREAM MOUTH IDENTIFICATION
ANCHORAGE Anchorage may be had 1.2 miles from the head of the bay in 14 fathoms.
TRALIS AND SUBJECT OF THE PROPERTY OF THE PROPERT

TRAILS AND SURVEY ROUTES AFRIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Excellent gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 151/12".

Previous No. 44

141-20

MENEFEE CREEK ESCAPEMENT RECORD

Date Miles By Live Dead D		•		•	_	,	, .	, , ,
Sept 27			Ву					REMARKS
Sept 27	1950							
Sept 7-21	Sept 27		FWS	31			74 cohos	
1954	Sept 7-2	1 0.7	FWS	11,000		S00	200 cohos	
Aug 8- Sept 10 FWS 2,000 19SS Sept 7	,	A 0. 6	FWS					Fish observed at head
1955 Sept 7								
1956 Aug 15			FWS	2,000				
Sept 6 G length FWS 5,000 S0 Sept 6 G 1.2 FWS 15,000 100 Sept 11 A 1.5 FWS 8,000-10,000 1957 July 28 G 0.2 FWS 750 S0 Aug 7 A 2.0 FWS 400 Aug 12 G 3.0 FWS 1,040 350 Aug 29 G 0.5 FWS 354 354 1958 Aug 8 A length FWS 175 Sept 27 G 0.1 FWS 11 1959 July 31 G 0.2 FWS 40 Aug 10 A 1.5 FWS 350 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		G 2. S	FWS	1,300	SO	12		
Sept 6 G 1. 2 FWS 15,000 100 Sept 11 A 1. 5 FWS 8,000-10,000 1957 July 28 G 0. 2 FWS 750 50 Aug 7 A 2. 0 FWS 400 Aug 12 G 3. 0 FWS 1,040 350 Aug 29 G 0. 5 FWS 354 354 1958 Aug 8 A length FWS 175 Sept 27 G 0. 1 FWS 11 1959 July 31 G 0. 2 FWS 40 Aug 10 A 1. 5 FWS 350 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i	Aug 15	A 2.0						
Sept 11	Sept 6	G length	FWS	S,000		50		
1957 July 28	Sept 6	G 1.2	FWS	15,000		100		
Aug 7 A 2.0 FWS 400 Aug 12 G 3.0 FWS 1,040 350 Aug 29 G 0.5 FWS 354 354 1958 Aug 8 A length FWS 175 Sept 27 G 0.1 FWS 11 1959 July 31 G 0.2 FWS 40 Aug 10 A 1.5 FWS 350 No surveys 1960 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		A 1. S	FWS	8,000-10	,000			
Aug 12 G 3.0 FWS 1,040 350 Aug 29 G 0.5 FWS 354 354 1958 Aug 8 A length FWS 175 Sept 27 G 0.1 FWS 11 1959 July 31 G 0.2 FWS 40 Aug 10 A 1.5 FWS 350 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i	July 28	G 0. 2	FWS	750		50		
Aug 29 G 0. S FWS 354 354 1958 Aug 8 A length FWS 175 Sept 27 G 0. 1 FWS 11 1959 July 31 G 0. 2 FWS 40 Aug 10 A 1. S FWS 350 1960 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i	Aug 7	A 2.0	FWS	400				
1958 Aug 8	Aug 12	G 3.0	FWS	1,040		350		
Sept 27 G 0.1 FWS 11 1989 July 31 G 0.2 FWS 40 Aug 10 A 1.5 FWS 350 1960 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		G 0. S	FWS	354		354		
1989 July 31 G 0.2 FWS 40 Aug 10 A 1.S FWS 350 1960 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i	Aug 8	A length	FWS	175				
Aug 10 A 1. S FWS 3S0 1960 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		G 0. 1	FWS	11				
1960 No surveys 1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i	July 31	G 0. 2	FWS			40		
1961 No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		A 1. S	FWS			3S0		
No surveys 1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		No survey	s					
1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i	1961	•						
1962 Aug 30 A length ADF 8,000 300 at mouth, 12,000 i		No survey	/S					
	1962	,						
		A length	ADF	8,000				300 at mouth, 12,000 in intertidal zone

ADF STAT. No.
WR 33
Previous No. 45

141-20 56°03.2' N. 132°13' W.

WRANGELL, ERNEST SOUND, CANOE PASSAGE, NW. of Brownson Island.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING Middle. Aug-Sept.
SPAWNING FACILITIES

OTHER SPECIES Chum. ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES Normal range. Observed temperatures: 48°F., 9/3/52; 47.5°F., 9/11/52; 51°F., 9/17/52; 53°F., 9/4/53; 50.5°F., 9/13/53.

VALLEY DESCRIPTION

DRAINAGE 4.3 square miles (polar planimeter). Drains a lake 1.2 miles long and 0.4 mile wide, lying 1.5 miles above the mouth.

STREAM MOUTH IDENTIFICATION Enters Canoe Passage directly opposite the middle of its N. entrance. Heavily wooded at the mouth. A short tidal area.

ANCHORAGE Canoe Passage, eastward of Brownson Island, widens and affords anchorage.

TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Good aerial visibility.

INTERTIDAL ZONE

LENGTH 0.4 mile.

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Mostly gravel.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS Very few pools.

SPAWNING AREAS Good spawning gravel is found in the upper 0.2 mile.

GENERAL NOTES This zone meanders through a grass flat.

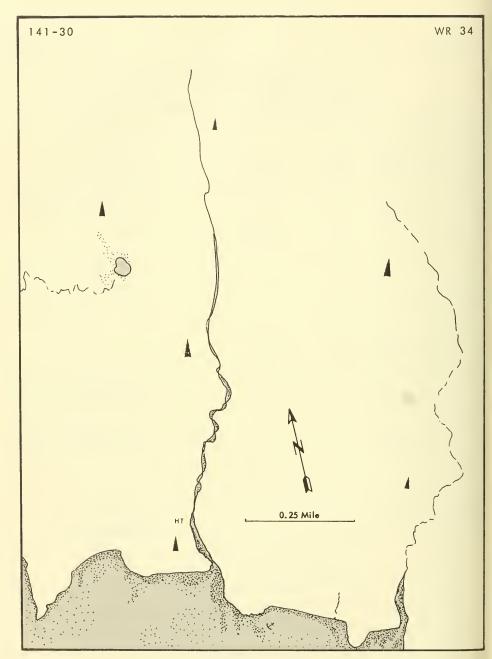
UPSTREAM

LENGTH ACCESSIBLE 1.5 miles to lakeGRADIENT AND VELOCITIES ModerateBOTTOM Small rock--fair spawning gravel.
MARKER DISTANCE 0.5 mile.
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 10'/6".

ESCAPEMENT RECORD

							,	•	
	SURVEYED		PIN	K	CH	UM	OTHER SPECIES	REMARKS	
	Date	Miles	By	Live	Dead	Live	Dead	Live	
			•						
	1952								
4	Aug 31	0.4	FWS	175	50				
5	Sept 3	G 0.5	FRI	162	15	9	39		Exploratory survey
5	Sept 11	G 0, 4	FRI	274	9	20	15		- , ,
5	ept 19	G 0.5	FRI	259	21	18	0		
	1953								
J	uly 28	A 0.5	FWS						No fish observed
I	Aug 17	A 0.6	FRI	0	0	0	0		
1	Aug 26	A 0.6	FWS	25	0	75	0		
S	ept 4	A 0.6	FRI	62	1	36	38		Same terminal as for 1952
S	ept 13	A 0.6	FRI	105	4	62	38		200 at mouth
	1954								
	ug 7	0.5	FWS						1,000 mixed off mouth
A	ug 7-10		FWS	2,000					
٨	1955		TTILC						
	ug 26 1956		FWS						No salmon observed
	ept 11	A 1.0	FWS	3,000					
	ept 21	G 1.0	FWS	10,600	300				
	1957	0 1.0	1 11 3	10,000	300				
	ly 28	G	FWS	75		25			
	ug 9	G	FWS	12		13			
	ug 12	G 0. 2	FWS	125		80			
	ug 29	G 0. 2	FWS	40		20			
	1958	0 0. 2	1 110	40		20			
	uq 27	G 0.5	FWS			30			
	ug 30	A length				30			No salmon observed
	ept 27	G 0.5	FWS						No salmon observed
	1959								No salmon observed
Ju	ly 23	G 0. 2	FWS						No salmon observed
Ju	ly 31	G 0. 2	FWS						25 pinks at mouth
A	ug 7	G 0. 2	FWS						No salmon observed
	ug 14	G 0. 2	FWS	40		30			140 Satinon Suservea
	1960								
		No surve	ys						
	1961								
		No survey	ys						
	1962								
Ju	ty 25	A length	ADF						300 at mouth
A	ug 30	A length		3,000					150 at mouth, 1,500 in
									intertidal zone



ADF STAT. No. WR 34 Previous No. 47

141-30 S5°56.2' N. 132°15.7' W.

WRANGELL, ERNEST SOUND, I mile W. of entrance to Canoe Passage.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle. Aug. -Sept.

SPAWNING FACILITIES

STREAM TEMPERATURES Cold range. Observed temperature: 44.5° F., 9/30/S3.

VALLEY DESCRIPTION

DRAINAGE 2.7 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE

TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

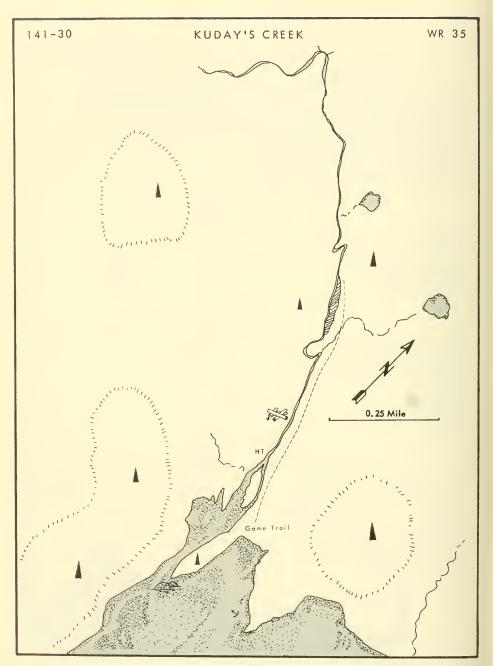
LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Swift.
BOTTOM Excellent gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 12'/6".

AVERAGE WIDTH/DEPTH

ESCAPEMENT RECORD

SURVEYED		PINK		СНИМ		OTHER SPECIES	REMARKS	
Date	Miles	By	Live	Dead	Live	Dead	Live	
1951								
Sept 22	G 0.5	FRI	660	118	200	1,056		
1983								
July 28	A 0. 2	FWS	300					Fish at mouth
Aug 25	G 0. 2	FWS	0	0	2,000	0		
Sept 3	G 0. 2	FWS	0	0	400	0		
1960								
	No surve	eys						
1961								
	No surve	eys						



ADF STAT. No. WR 3S

Previous No. 48

KUDAY'S CREEK 141-30

SS°56.3' N. 132°16.5' W.

WRANGELL, ERNEST SOUND, 2 miles W. of entrance to Canoe Passage.

MAJOR SPECIES Pink ESCAPEMENT TIMING Middle. Aug-Sep. OTHER SPECIES Chum, coho ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES Fair.

STREAM TEMPERATURES Cold range. Observed temperatures: S0.5°F., 9/12/S0; 41°F., 10/3/S0; 50°F., 9/16/S0; 45°F., 9/26/50; 47°F., 10/7/S1; 51°F., 9/22/52; 46.5°F., 10/5/52; 48.5°F., 9/17/53; 43.5°F., 9/30/53.

VALLEY DESCRIPTION The valley is broad and nearly flattened near the mouth. Upstream the valley narrows.

DRAINAGE 12 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Stream enters the left corner of the first bight W. of the entrance to Canoe Pass. Must proceed to the most westerly point in the bay before the stream is

ANCHORAGE Anchorage is available in the right-hand side of the bight or in the lee of Stone Island. The W. shore at the bight has several submerged rocks which present a hazard to boats.

TRAILS AND SURVEY ROUTES A fair game trail follows the right bank.

AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH 0.5 mile. AVERAGE WIDTH/DEPTH 15'-30'/6"-12".

GRADIENT AND VELOCITIES Gentle to moderate.

BOTTOM Good gravel between larger rock in the upper part; gravel and boulders in the lower part.

LOW TIDE LOCATION

HIGH TIDE LOCATION

SCHOOLING AREAS

SPAWNING AREAS The upper 300 yards has good spawning gravel and is heavily used by pinks. The lower portion has poor spawning facilities.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE O.S mile.

AVERAGE WIDTH/DEPTH 10'-25'/S"-8".

GRADIENT AND VELOCITIES Moderate to steep. BOTTOM Large rock and rubble, broken rock, gravel, and much bedrock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS None reported.

TRIBUTARIES None reported.

SCHOOLING AREAS

SPAWNING AREAS The lower part is the only area with a bottom suitable for spawning. Most of the spawning is limited to pockets behind boulders.

GENERAL NOTES A small stream with fast riffles and nearly continuous rapids. One-half mile upstream the creek enters a canyon. The bottom is nearly all bedrock in this area.

ESCAPEMENT RECORD

			,	-	ŕ			, , -
	5UR VEYED		PINE	(CHU	IM	OTHER SPECIES	REMARK5
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
		- /						
1949								
Sept 16	G 0.7	FRI	4,475	235	37	12		Excellent to excessive
Sept 29	G 0.7	FRI	6,400	1,472	14	24		Excellent to excessive
1951			,					
Sept 16	G 0. S	FRI	11,100	800	180	125	3 cohos	30 per cent pinks spawning
Sept 26	G 0.5	FRI	19,400	>400	200			60 per cent pinks spawning
Oct 7	G 0.5	FRI	2, 200	450	0	3		
1952			,					
Sept 1	G 0.3	FWS	850	20	120			
Sept 22	G 0.3	FRI	305	21	53	33		
1953								
July 5	G 0.2	FW5	S,000	0	0	-0		1,000 on ground above
Aug 25	G 0. 2	FW5	2,000	0	0	0		_,
Aug 27	G 0. 5	FW5	20	0	50	0		1,800 at mouth
Sept 17	G 0. 1	FRI	50	0	few			Visibility zero
Sept 30	G 0. 3	FRI	30	0	100	5		
1954	0 0. 0				100			
Aug 7	1.0	FWS						Salmon observed,
riug	1.0	1 110						Pink school off mouth
Sept 15	G 0.5	FRI	3, 100	50	0	0		3,000 off mouth
Sept 27	G 0.5	FRI	3,900	500	5	0		Few dead chums
1955	0 0.5	11(1	3,500	300	3			i cii dedd enams
Aug 26	A 1.0	FWS	500	0	0	0		
Sept 10	G 1. S	FWS	450	7	25	0		3,500 fish in mouth
Sept 16	A 0.5	FRI	1,500	ó	0	0		Some at mouth
Sept 10	A 0.5	FRI	9,000	300	0	O		Few live, few dead chums
1956	A 0. 3	1.1/1	3,000	300				iew nive, iew acad chamb
Aug 15	A longth	FWS	200					
	A length A 0. S	FRI	1,500					Few live chums, 3,000 at
Sept 9	A 0. 3	IMI	1,300					mouth
Foot 11	A 1.0	FWS	2,500					mouth
Sept 11	G 1. 0	FWS			100			
Sept 12	A 1. 0	FWS	1,700		100			
Sept 17					4 000		2 cohos	
5ept 20	G 2. 0		21,600		4,000		2 001103	Some dead
Sept 28	A mkr	FRI	20,000					Solle dedd
1957	۸ ۵ ۶	FRI	200	0	0	0		
Sept 9 Sept 22	A 0.5 A 0.5	FRI	700	U	U	U		Four dead minks 50mg
Septez	A 0. 5	1111	, 00					Few dead pinks. 50me
Sept 27	A 0.5	FRI	100	few				
-	A 0. 5	11(1	100	1ew				Few live chums
1958	4.0.5	TTD T	400	0	0	0		None off mouth. Poor
Sept 7	A 0.5	FRI	400	0	U	U		visibility
1050								VISIDITITY
1959	4.0.2	EMC						No salmon observed
Aug 4	A 0. 2	FWS						No salmon observed
Aug 14 1960	G 0. 2	FWS						No samon observed
1500	No survey	7.C						
1960	No survey	/ 3						
1500	No sure	***						
1963	No survey	/ 3						
July 26	A mouth	ADF						No fish observed
Aug 21	A	ADF						200 in intertidal zone
rag El	4.6	1 60.7 1						

REGULATORY DISTRICT NO. 8

154-94 \$6°\$4.8' N. 132°49.5' W. MUDDY RIVER

EASTERN, FREDERICK SOUND. S. of Pt. Agassiz.

MAJOR SPECIES Chum.

OTHER SPECIES Pink, coho, steelhead, trout.

AVERAGE WIDTH/DEPTH 150'/36".

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES

STREAM TEMPERATURES

VALLEY DESCRIPTION Long, wide valley with several clear water sloughs and streams.

DRAINAGE 76.4 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION

ANCHORAGE Poor anchorage. Can be reached by skiff from Petersburg or Thomas Bay.

TRAILS AND SURVEY ROUTES Stream can be run for quite a length in shallow-draft skiff.

AERIAL SURVEY NOTES The main stem is discolored and impossible to survey. Two clear water streams are present about 7 or 8 miles from tidewater.

INTERTIDAL ZONE

LENGTH GRADIENT AND VELOCITIES Swift. BOTTOM 15% sand, 80% gravel, 5% small rock. LOW TIDE LOCATION HIGH TIDE LOCATION SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 12 miles. GRADIENT AND VELOCITIES Moderate. BOTTOM MARKER DISTANCE MARKER IDENTIFICATION None. BARRIERS TRIBUTARIES Two clear water tributaries and several small clear water sloughs. SCHOOLING AREAS SPAWNING AREAS GENERAL NOTES

AVERAGE WIDTH/DEPTH

ESCAPEMENT RECORD

	SURVEYED		PINK		CHU	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1950								
Aug 9	1. S	FRI						No salmon observed
Aug 19 19\$8		FRI						No salmon observed
Aug 29 1962	A 0, 2	FWS						No salmon observed
July 24	A 10.0	ADF						Too muddy for survey Several hundred chums
								in clear water tribu- taries

142-70 \$6°\$2.9' N. 134°\$8' W.

FIVEMILE CREEK

EASTERN, FREDERICK SOUND, W. of Sukhoi Islets.

MAIOR SPECIES Pink.

OTHER SPECIES Chum, coho, steelhead,

ESCAPEMENT TIMING Middle.

SPAWNING FACILITIES Generally good spawning facilities.

and cutthroat trout.

STREAM TEMPERATURES Cold range. Observed temperatures: 49.5° F., 9/4/S2; 47° F., 9/15/S2. VALLEY DESCRIPTION Narrow valley, bounded by high peaks.

DRAINAGE Steep, timbered slopes, muskeg valley. Originates in small, clear lake.

STREAM MOUTH IDENTIFICATION Sandy beach at N. shore; cabins and warehouse at mouth.

ANCHORAGE Only available anchorage is off the mouth of the stream. This is poor anchorage as there is very little shelter and the 12 fathom shelf is narrow. Small skiff can be anchored in stream and drifted out at any tide. Stream can be worked out of Petersburg easily by skiff.

TRAILS AND SURVEY ROUTES There is a forest trail that follows the musked to the right of the stream and crosses the stream at the terminal marker.

AERIAL SURVEY NOTES Water usually dark and light in stream poor due to dense timber-stand.

INTERTIDAL ZONE

LENGTH 0. S mile at low tide.

AVERAGE WIDTH/DEPTH SS'/8".

GRADIENT AND VELOCITIES

Gentle.

BOTTOM Gravel and small boulders; sand in lower part. LOW TIDE LOCATION Mudflats.

HIGH TIDE LOCATION First, small, grassy island in stream.

SCHOOLING AREAS Limited schooling area.

SPAWNING AREAS Upper tidal zone offers excellent spawning facilities while the lower portion contains sand and many barnacle-covered boulders.

GENERAL NOTES Pink salmon generally do not appear to school in the intertidal area of this stream in large numbers, but instead move quickly into the stream.

UPSTREAM

LENGTH ACCESSIBLE

AVERAGE WIDTH/DEPTH 301/12"

GRADIENT AND VELOCITIES Gentle. BOTTOM Gravel, small boulders, and some sand.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES

SCHOOLING AREAS

SPAWNING AREAS The first 0.7 mile above high tide is generally good spawning area. The stream has continuous riffles with numerous pools. Above the terminal marker, the stream gently cascades over large boulders and bedrock offering very poor spawning facilities.

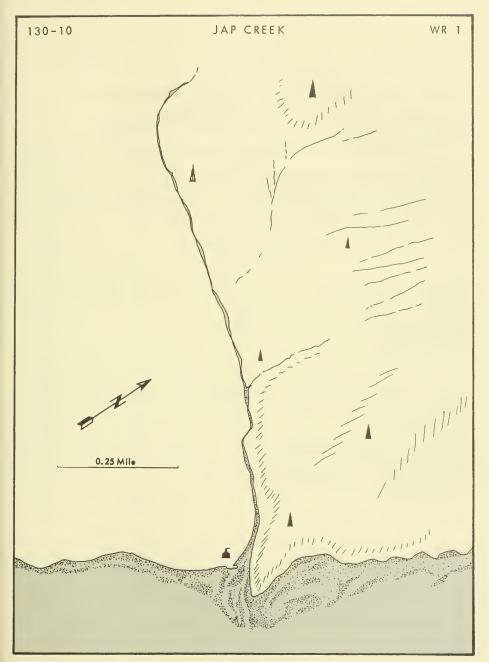
GENERAL NOTES

142-70

FIVEMILE CREEK

ESCAPEMENT RECORD

	SURVEYED		PINK		СНИМ	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	L ve Dead	Live	
1952							
Sept 4		FW5	600	1			
Sept 15		FW5	151	22			
1958							
Aug 25	A 1.0	FW5					No fish observed
1959							
Aug 17	A 0.5	FW5					No fish observed
1961							
Aug 8	A 0.2	ADF	1,500				1,500 in intertidal
1962							
July 27	Ğ	ADF					No fish observed
Aug 15	A 1. S	ADF					A few pinks



ADF STAT. No.

WR 1
Previous No. 1

JAP CREEK

130-10

56° 4.6.4' N. 132°.36' W.

WRANGELL, FREDERICK SOUND, LE CONTE BAY, 3.5 miles N. of entrance to Le Conte Bay.

MAJOR SPECIES Pink. ESCAPEMENT TIMING

OTHER SPECIES ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH

SPAWNING FACILITIES Fair. STREAM TEMPERATURES

VALLEY DESCRIPTION Stream-cut. The valley is steep-sided and rises sharply away from the stream along both forks.

DRAINAGE 6.5 square miles (polar planimeter). Precipitation-fed.

STREAM MOUTH IDENTIFICATION NW. of the mouth steep cliffs rise up from the shoreline.
A small tidal area, heavily wooded around its margin.

ANCHORAGE The great depths prevent anchoring in the bay proper, but anchorage for small craft is obtainable in Thunder Cove. Beware of icebergs.

TRAILS AND SURVEY ROUTES A cabin is reported to be near the mouth.

AERIAL SURVEY NOTES

GENERAL NOTES ADF personnel advise staying out of Le Conte Bay.

INTERTIDAL ZONE

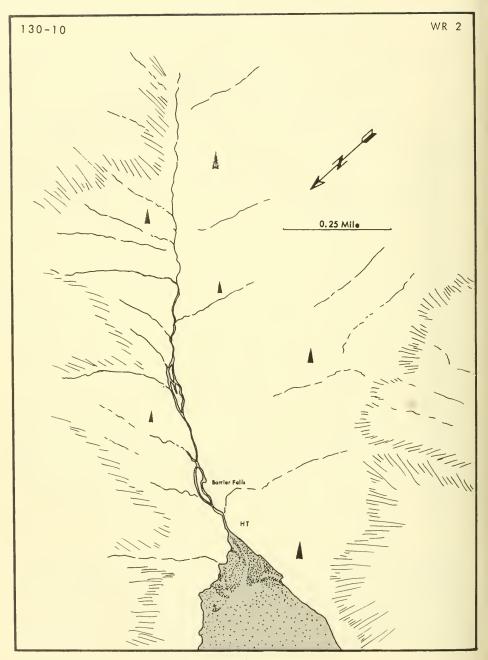
LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1 mile. AVERAGE WIDTH/DEPTH 40"/24":
GRADIENT AND VELOCITIES Moderate.
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES One tributary enters the lake.
SCHOOLING AREAS
SPAWNING AREAS Good spawning grounds in the lower reaches.
GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED		PIN	JK	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	Kemmikko
1950								
Aug 9		FW5			18			
1951								
July 24	A	FRI						700 to upper tidal hole
1953		PARC	1 000					
Aug 4	A G 0. 12	FWS FWS	1,000 10		3			In schools
Aug 31 1954	G 0. 12	L W 3	10		3			
July 21	G 1.0	FWS			310			
July 29	G 0. 5	FWS			2,000			
Sept 2	G 0. 2	FW5	72		2,000			
1955	00.2	1 113	, ,					
July 26	G 0.2	FWS			7			
Aug 20	G to falls	FWS	3,000		50			
Aug 24	G to falls	FWS	2,000					
1956			_,					
July 30	G	FWS	1		30			
Aug 8	G	FWS	300		1,000			
Aug 13	G	FWS	1,500		700-800			
Aug 14	A 0.5	FWS	900					
Aug 15	G 0.3	FWS	2,000					
Aug 27	G 0.3	FWS	2,500					
1957								
July 29	G 0.2	FWS	1		85			
Aug 3	G 0.5	FWS	700		3,000			
Aug 7	A 0.2	FW5			300			
1958								
July 24	G 0.5	FW5			800			
July 24	A 1.0	FWS			1,000			
Aug 8	A	FWS	100		100			
Aug 13	A 0. 2	FW5	3,000		900			
Aug 16	A 1. 0	FWS FWS	F00		15			
Aug 28 1959	A 1.0	r vv S	500					
Aug 3	G 0, 5	FWS	250					
Aug 10	A 0.5	FWS	230					No solmon observed
Sept 3	G to folls	FWS	110					15 pinks intidal zone
1960	O to lotts	1 110	110					15 plins in tiddt zone
1500	No surveys							
1961	210 01170,0							
	No surveys							
1962								
July 29	A mouth	ADF						No solmon observed
1963								
July 29	A	ADF						No jumps
								, .



ADF STAT. No. WR 2 Previous No. 3

130-10 56°46.1' N. 132°26' W.

WRANGELL, FREDERICK SOUND, LE CONTE BAY, SE. corner.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES Good to excellent.
STREAM TEMPER ATURES
VALLEY DESCRIPTION Glacial origin.
DRAINAGE 12.4 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES

AERIAL SURVEY NOTES Good aerial visibility. Aerial survey preferable.

GENERAL NOTES Stream is inaccessible until mid-July and then it is not a good idea to survey on foot. ADF personnel advise staying out of this area.

INTERTIDAL ZONE

OTHER SPECIES

ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS

GENERAL NOTES Enters Le Conte Bay through an estuary.

UPSTREAM

LENGTH ACCESSIBLE S miles. AVERAGE WIDTH/DEPTH 75'/30". GRADIENT AND VELOCITIES Steep to moderate.

BOTTOM Gravel, small and large rock.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS The right branch has a 30' falls a short distance above the confluence. The left branch has a steep cascade just above the fork. The cascade forms a partial block.

TRIBUTARIES

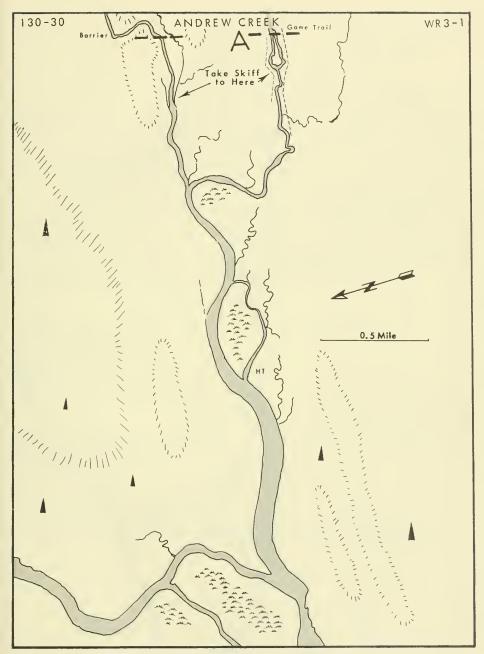
SCHOOLING AREAS

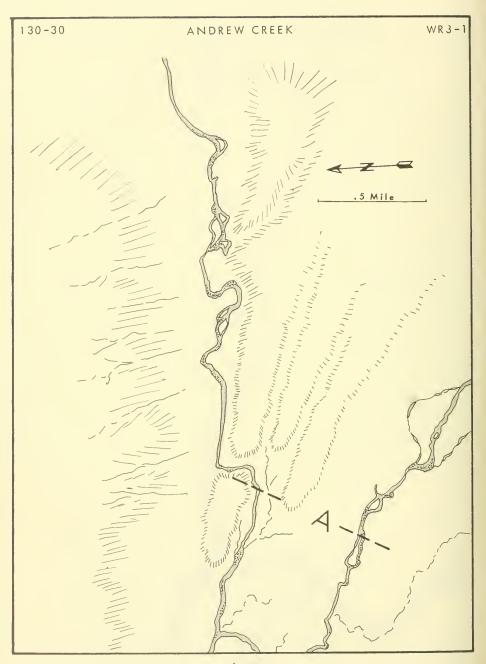
SPAWNING AREAS A good spawning stream.

GENERAL NOTES The stream forks three-fourths of a mile upstream.

WR 2 Previous No. 3

Date Miles By Live Dead Live Dead Live		SURVEYED		PIN	K	СНИМ		OTHER SPECIES	REMARKS
Aug 9 FWS 213 July 27 A 0.7 FRI None observed 1953 Aug 4 A FWS Few pinks Aug 8 0.5 FWS 100 200 July 29 G 0.12 FWS 50 1,000 July 29 G 0.7 FWS 300 Sept 7 A 1.0 FWS Sept 12 G 0.5 FWS 45 1955 July 26 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 45 1955 July 29 G 0.1 FWS 3,000 Aug 23 G 0.1 FWS 3,000 Aug 24 G 0.2 FWS 2,000 1956 July 29 G FWS 100 Aug 24 G 0.2 FWS 3,000 Aug 24 G 0.2 FWS 3,000 Aug 25 G 0.2 FWS 2,000 Intertidal zone	Date	Miles.	Ву	Live	Dead	Live D	Dead	Live	
Aug 9 FWS 213 July 27 A 0.7 FRI None observed 1953 Aug 4 A FWS Few pinks Aug 8 0.5 FWS 100 200 July 29 G 0.12 FWS 50 1,000 July 29 G 0.7 FWS 300 Sept 7 A 1.0 FWS Sept 12 G 0.5 FWS 45 1955 July 26 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 45 1955 July 29 G 0.1 FWS 3,000 Aug 23 G 0.1 FWS 3,000 Aug 24 G 0.2 FWS 2,000 1956 July 29 G FWS 100 Aug 24 G 0.2 FWS 3,000 Aug 24 G 0.2 FWS 3,000 Aug 25 G 0.2 FWS 2,000 Intertidal zone	1950								
July 27 A 0.7 FRI None observed 1953 Few pinks Aug 4 A FWS Few pinks Aug 8 0.5 FWS 100 200 1954 July 29 G 0.12 FWS 50 1,000 July 29 G 0.7 FWS 300 Sept 7 A 1.0 FWS None observed Sept 12 G 0.5 FWS 45 1985 July 28 G 0.2 FWS 0 350 July 28 G 0.2 FWS 0 Some pinks off mouth No salmon observed Aug 15 A No salmon observed Aug 23 G 0.1 FWS 3,000 A few rugged chum Aug 24 G 0.2 FWS 2,000 5,000 estimate in fresh and salt water 1956 July 29 G FWS 5 100 Intertidal zone Intertidal zone Aug 18 G 0.3 FWS 5 Intertidal zone Intertidal zone Aug 28 G 0.3 FWS < 100			FWS			213			
1953									
Aug 8		A 0. 7							
1984									Few pinks
July 29 G 0.7 FWS 300 Sept 7 A 1.0 FWS None observed Sept 12 G 0.5 FWS 45 1955 1955 Some pinks off mouth July 26 G 0.2 FWS Some pinks off mouth Aug 15 A No salmon observed Aug 23 G 0.1 FWS 3,000 A few rugged chum Aug 24 G 0.2 FWS 2,000 S,000 estimate in fresh and salt water 1956 July 29 G FWS 100 Intertidal zone Intertidal zone Intertidal zone Aug 18 G 0.3 FWS 5 Aug 18 G 0.3 FWS 5 Aug 28 G 0.3 FWS < 100									
Sept 7				50		,			
Sept 12 G 0.5 FWS 45 19SS July 26 G 0.2 FWS 0 350 July 28 G 0.2 FWS Nosalmon observed Aug 15 A Aug 23 G 0.1 FWS 3,000 Aug 24 G 0.2 FWS 2,000 1956 July 29 G FWS 100 July 29 G FWS 100 Intertidal zone Aug 13 FWS 5 Aug 18 G 0.3 FWS 5 Aug 28 G 0.3 FWS <100						300			M
1988 July 26 G 0.2 FWS 0 350 July 28 G 0.2 FWS No solmon observed Aug 15 A No solmon observed Aug 23 G 0.1 FWS 3,000 A few rugged chum Aug 24 G 0.2 FWS 2,000 S,000 estimate in fresh and salt water 1986 July 29 G FWS 100 Intertidal zone Aug 13 FWS S Aug 18 G 0.3 FWS 5 Aug 28 G 0.3 FWS <100				45					None observed
July 28	1988								
Aug 15 A Aug 23 G 0. 1 FWS 3,000 A few rugged chum Aug 24 G 0. 2 FWS 2,000 S,000 estimate in fresh and salt water 1956 July 29 G FWS 100 Intertidal zone Aug 13 FWS S Aug 18 G 0. 3 FWS 5 Aug 28 G 0. 3 FWS <100				0		350			Came mindes off mouth
Aug 23 G 0. 1 FWS 3,000 A few rugged chum Aug 24 G 0. 2 FWS 2,000 S,000 estimate in fresh and salt water 1956 July 29 G FWS 100 Intertidal zone Aug 13 FWS S Aug 18 G 0. 3 FWS 5 Aug 28 G 0. 3 FWS <100			FWS						
Aug 24 G 0. 2 FWS 2,000 S,000 estimate in fresh and salt water 1956 July 29 G FWS 100 Intertidal zone Aug 13 FWS S Intertidal zone Aug 18 G 0. 3 FWS 5 Aug 28 G 0. 3 FWS <100			PTATE	2 000					
1956 July 29 G FWS 100 Intertidal zone Aug 13 FWS S Intertidal zone Aug 18 G 0.3 FWS 5 Aug 28 G 0.3 FWS <100									
July 29 G FWS 100 Intertidal zone Aug 13 FWS S Intertidal zone Aug 18 G 0. 3 FWS 5 Aug 28 G 0. 3 FWS <100		G 0. 2	L W 3	2,000					
Aug 13 FWS S Intertidal zone Aug 18 G 0.3 FWS 5 Aug 28 G 0.3 FWS <100		_				100			T. Access A. J. America
Aug 18 G 0.3 FWS 5 Aug 28 G 0.3 FWS <100		G				100			
Aug 28 G 0. 3 FWS <100									Intertidat zone
	1957								
July 29 G O. 2 FWS O 11				0					
Aug 9 A 2. 0 FWS 200 1958		A 2.0				200			
Aug 8 A length FWS No salmon observed	Aug 8								
Aug 28 A 4.0 FWS No salmon observed 1959		A 4.0	FWS						
Aug 10 A 0.5 FWS No salmon observed	Aug 10	A 0.5							
Sept 3 G 0.1 FWS No salmon observed 1960		G 0. 1	FWS						No salmon observed
No surveys		No survey	'S						
1961 No surveys	1961	No survey	'S						





ADF STAT. No.

WR 3-1 Previous No. S

130-30 AN 56°40' N. 132°14.9' W.

ANDREW CREEK

WRANGELL, FREDERICK SOUND, DRY STRAIT, Stikine River tributary, S. bank. SE. of Limb I.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Middle, Aug. -Sept. (est.)

ESCAPEMENT MAGNITUDE 700,000 good.

SPAWNING FACILITIES Excellent.

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Glacial origin in lower part; stream-cut in the upstream area. The valley is wide near the mouth and narrows progressively up each fork.

DRAINAGE 13.6 square miles (polar planimeter). Precipitation-fed.

STREAM MOUTH IDENTIFICATION Enters the Stikine River from the S., about 5 miles upstream.

The mouth of this stream is continually changing.

The stream itself enters what is locally known as Andrew Slough. The slough in turn enters the main Stikine about 0.2 mile below the entrance of the creek. There is a large, clear water slough area extending approximately 0.5 mile before one actually gets into the stream. There is a large island just upstream from the mouth and a small one just off the mouth.

ANCHORAGE Vessels with <3' of draft can navigate the Stikine River. Larger vessels should be left in Wrangell and a skiff taken up.

TRAILS AND SURVEY ROUTES When entering the Stikine River, use the S. channel. The mudflats at the mouth shift with every freshet. Therefore, directions should be obtained from boatmen in Wrangell. At moderate water levels, a river skiff can be taken upstream a good distance.

AERIAL SURVEY NOTES Aerial visibility is very good.

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES Andrew Creek has no intertidal zone

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 501/18"-24"

UPSTREAM

LENGTH 4 miles (W. fork).
GRADIENT AND VELOCITIES Moderate.

BOTTOM Gravel, sand, and boulders.

MARKER DISTANCE

MARKER IDENTIFICATION

BARRIERS O.S mile up the E. fork, a barrier is impassable to salmon.

TRIBUTARIES None.

SCHOOLING AREAS A large lagoon and clear water slough form the lower part of the stream. Good pool areas are found throughout this section.

SPAWNING AREAS Salmon spawn throughout the distance surveyed. Excellent spawning areas.

GENERAL NOTES This stream does not have a lake as its source, but it has a red run. Fair population of brown bear. Easily surveyed by foot due to wide streambed. This stream is an excellent pink stream,

ANDREW CREEK ESCAPEMENT RECORD

130-30 ANDREW CR

	SUR VEYED		PIN	K	CHU	M	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Aug 25 19 53	A 3.0	FRI	25,000					Run beginning
July 26 19 54	A							Poor
Aug 4	G	FWS			200			
Aug 15	A 0. S	FRI	>100	0	0	0	500 kings	Few chums
Sept 7 1955	A 0. S	FRI	0	O.	0	U		Run over
Aug 1	A 0.5	FRI	10,000	0	0	0	3,000-4,000 kin	φs
Aug 12	G 0.5		15,750	0	0	0	6 kings	3 dead kings, few dead pinks
Aug 1S	G 1.0	FWS	10,000					Some chums
Aug 19 19 5 6	A 0.5	FRI	25,000	200			6,000 kings	Kings spawning
July 24	A 0.5	FRI						500 kings upstream
July 24		FWS	15		200			
July 28	4.1	FWS	20		30		20 kings	1 - 6 - 6 - 1
July 28	A length	FWS FWS	400		200		500 kings	Left fork
Aug 9 Aug 14	A length A 6.0	FWS	4:00				\$90 kings 4,000-5,000 kin	Right fork
Aug 30	A 0.0	FWS	3,500				2, S00 other spec	
Sept 2	A marker	FRI	>100				=, ₁	
Sept 4	A 3.0	FWS	>1,000					Right arm
Sept 13	A 3.0	FWS						None observed, both forks
1957								
July 29	G	FWS					1,000 kings	10 400 :1 455 - 155-1
July 30	A 8.0 G	FWS	10,000		6,000		3,000 kings	18,400 unidentified fish
Aug 1 Aug 9	A 4. 0		25,000		0,000		3,000 kings	
Aug 9	A to falls	FWS	3,000					
Aug 1S	G 1. S	FWS	1,000				1,000 reds	
Aug 15	G to falls	FWS					500 reds	
Aug 19	G 1. S	FWS	1,500		200			Right fork
Aug 19	G to falls	FWS	S00				SOO reds	Left fork
Sept 2	A marker	FRI	300	300				
1958 July 11	G 0. 3	FWS	2					Left fork
July 13	G 3. 0	FWS	2		S5		30 kings	Lett 1018
July 17	G 2. 0	FWS	150		30		30 11119	
July 17	A 3.0	FWS			30		S kings	
July 26	G 2.0	FWS	150		S		1SO kings	
July 28	G	FWS					S00 kings	
July 29	G	FW5					200 kings	
Aug 8	G 2. 0	FWS			2 000		2,500 kings	
Aug 8 Aug 2S	A length A length	FWS	,		2,000		500 kings	
Aug 25	G 2. 0	FWS			50		300 kings	1,000 dead salmon
Aug 26	A 0. S	FWS			0		300 11119	-,
Aug 30	A length				100	400	17S kings	
Sept 17	A marker	FWS	200					400 schooled in intertidal

130-30

ESCAPEMENT RECORD

Date	SUR VEYED Miles	By	PINI Live	C Dead	CHU Live	JM Dead	OTHER SPECIE	S REMARKS
Date	ivities	Бу	Live	Deau	Live	Dedu	Live	
1959								
July 18	G mouth	FWS	50				1 kings	
July 25	G 2.0	FWS	20,000					Pink in S. fork, none
								in N. fork
Aug 4	A 1.5	FWS	8,000	50				
Aug 10 Aug 16	A 4.0 G 0.3	FW5	26,000		4,500		150 1-1 10	20 1-
Aug 16 Aug 18	G 0. 5	FWS	50		4,300		150 kings, 10 1 kings	Water high
Aug 16	G 0. 3	FWS	3,000				1 Kings	Left fork
Aug 27	G 2. 0	FWS	6,000				300 reds, 50	
Sept 3	A 4.0	FWS	15,000				300 1045, 50	20% dead fish
1960			,					
July 17	A length	ADF	0	0	0	0	34 kings	No fish in E. fork
July 19	G 4.0	ADF	0	0	5	0	55 kings	
July 19	G length	ADF						No fish observed
July 31	A length	ADF	1,000	0	40	0	75 kings	
Aug 7	G 3. 0	ADF	300	0	38	0	287 kings	
Aug 7	G length	ADF	100		30		30 kings	
1961	A 1 +1-	ADF	700		few			
July 21 July 23	A length A 4.0	ADF	800		200		few kings	
Aug 1	G 2. 0	ADF	7,800		100		17 kings 103 kings	2,500 mixed at mouth
Aug 2	A length	ADF	13, 400		500		few kings	2,500 mixed at mouth
Aug 9	A length	ADF	8,500		2,000		iew kings	
1962	3		,		,			
July 16	A mouth	ADF						No salmon observed
July 24	G falls	ADF						Few pinks, chums, kings
July 25	A length	ADF						Very few fish
July 30	A length	ADF					300 kings	
Aug 30 1963	A length	ADF	900				12 kings	Few dead
July 29	A length	ADF	3,000					
July 20	1 length	AUT	3,000					500 at mouth; 4,000 in
Aug 16	A length	ADF	4,900				500 kings, 500	left fork
Aug 16	A length	ADF	14,000				500 kings, 500	
Aug 17	G length	ADF	4,700		8		402 kings, 551	
			,				1141193, 331	LCUS

ADF STAT. No.

WR 3-2 FWS No. 4

NORTH ARM CREEK

130-30 56°41.4' N. 132°19' W.

WRANGELL, CLARENCE STRAIT, STIKINE RIVER, 1 mile NE. of Form I., N. shore.

MAJOR SPECIES Pink, chum. ESCAPEMENT TIMING Middle. SPAWNING FACILITIES Good. STREAM TEMPERATURE OTHER SPECIES King, coho.

VALLEY DESCRIPTION

DRAINAGE Approximately 3 square miles.

STREAM MOUTH IDENTIFICATION Enters Stikine River approximately two miles N. of the combined entrances to North Arm and Eulachon Slough.

ANCHORAGE Use skiff out of Wrangell.

TRAILS AND SURVEY ROUTES No trails. Difficult to walk at high water stages.

AERIAL SURVEY NOTES Fair for aerial survey.

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES No intertidal zone.

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE 1.5 miles. AVERAGE WIDTH/DEPTH 40'/16".

GRADIENT AND VELOCITIES Moderate to 1.5 miles, then swift.

BOTTOM Sand, some boulders, and gravel.

MARKER DISTANCE None.
MARKER IDENTIFICATION

BARRIERS Falls in garge at about 2 miles.

TRIBUTARIES None.

SCHOOLING AREAS Large lagoon at confluence with Stikine River and large pool about 100 yards upstream.

SPAWNING AREAS Throughout stream to the gorge.

GENERAL NOTES Quite a few brown bear inhabit this stream.

ESCAPEMENT RECORD

Date	SURVEYED Miles	By L	PINK ive	Dead	CHU Live	JM Dead	OTHER SPECIES	REMARKS
1955 July 24 Aug 14 Aug 15	G 0. 5 G 0. 2 A	FWS 1,	000		100 S		1 king	A few pink No fish observed
1956 July 24 Aug 14 Sept 4 Sept 13	G A 1.2 A 1.5 A	FWS FWS 5,00 FWS	00-10,	000	3,000 15,000	500		No fish observed 8,000-10,000 fish seen
Sept 15 Sept S 1987	G 1.0 G	FWS 20,0	000 15	,000	4 19,000	4,000		Season estimate
July 19 July 27 July 28	G G G 0. 2	FWS FWS FWS						Pinks and chums present 1,000 mixed salmon 2,000 in mouth 3,000 in creek
July 29	G	FWS						5,000 at mouth 3,000 in creek
July 30 July 30	G A S. 0	FWS 8,0	000		15,000		500 kings	7,000 salmon; 4,000 in first half mile
Aug 1 Aug 5 Aug 9	G G 0. 5 A	FWS 10,0	500 500 500		500 20,000 15,000		500 kings 2,500 kings	iirst naii mite
Aug 9 Aug 21 Aug 27	A G 0. S G	FWS FWS	000		ŕ			75% spawning; 30,000 fish 2,000 pinks moving up
Sept 2 Oct 10 1958	A G 0. S	FWS	300				7S cohos	
1959	No record							
July 18 Aug 4	Mouth A 0. 2	FWS 2,0	50 000		100			
Aug 10 Aug 27 1960	A 1.0 0.5		500 800		200 100			
July 19 July 30	G 1.0 A length	ADF ADF	S		43 700			1,200 mixed at mouth
Aug 7 Sept 8 1961	G length G length		500 500 3	, 500	500 2			Pink old
July 23 July 27	A 1. S A 0. S	ADF ADF			500			1, 200 at mouth
Aug 1 Aug 2 Aug 9	G to rapids A length A length	ADF	100 200 000		200		38 kings	3,900 mixed at mouth 3,000 at mouth
Aug 26	To canyon	ADF						23,000 mixed

130-30

NORTH ARM CREEK - Continued

ADF STAT. No. WR 3-2 FWS No. 4

ESCAPEMENT RECORD

SURVEYED			PIN	K	CHUM		OTHER SPECIES	REMARKS
Date	Miles	By	Live	Dead	Live	Dead	Live	
1962								
July 24	G 0.7	ADF			100		20 kings	3,000 mixed at mouth
July 25	A length	ADF			1,000			1, 200 at mouth
July 30	A length	ADF			3,000			3,000-4,000 at mouth

Previous No. 38

KUNK (KONKE) CREEK

142-50 56°17.2' N. 132°23.6' W.

WRANGELL, ZIMOVIA STRAIT, W. of Nemo Point.

MAJOR SPECIES Fink. OTHER SPECIES Chum, coho, red. ESCAPEMENT TIMING Middle. Aug. -Sept. (est.) ESCAPEMENT MAGNITUDE SPAWNING FACILITIES

STREAM TEMPERATURES Normal range. No observed temperatures.

VALLEY DESCRIPTION Short, stream-cut valley. The valley branches 0.5 mile upstream. Tributary valleys are divided by a steep ridge.

DRAINAGE 4.4 square miles. Drains Konke Lake which is 1.5 miles long and 0.5 mile wide.

STREAM MOUTH IDENTIFICATION

ANCHORAGE Temporary anchorage is found close into the mouth of the creek in 6 to 7 fathoms.

TRAILS AND SURVEY ROUTES A Forest Service trail follows the right side of the creek and lake, A shelter cabin is found at the end of the trail.

AERIAL SURVEY NOTES Poor for aerial survey due to heavy overstory.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 251/10".

AVERAGE WIDTH/DEPTH 201/12".

LENGTH 0.1 mile.
GRADIENT AND VELOCITIES Swift.
BOTTOM Large boulders.
LOW TIDE LOCATION Beginning of timber.
HIGH TIDE LOCATION
SCHOOLING AREAS Off mouth.
SPAWNING AREAS None.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE 1 mile to lake.
GRADIENT AND VELOCITIES
BOTTOM Small and large rock.
MARKER DISTANCE
MARKER IDENTIFICATION

BARRIERS Several partial barriers throughout length.

TRIBUTARIES The stream forks 0.5 mile upstream and the S. fork goes to Konke Lake.

SCHOOLING AREAS

SPAWNING AREAS Only a limited amount of spawning area, the bottom being for the most part coarse gravel and rock. The lake has patches of good gravel, but no spawning tributaries.

GENERAL NOTES

ADF STAT. No.

WR 28

KUNK (KONKE) CREEK Previous No. 38

ESCAPEMENT RECORD

	SURVEYED		PIN		СНИМ	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	
1950							
Sept 10 1951		FWS				300 reds, 150 co	phos
1951 Sept 6	0.7	FWS	400		200	55 reds, 100 coh	nos
1953	017	1 110	100		200	00 1040, 1	
July 6	G 1.5	FWS					No fish observed
Aug 3	G 1.5	FW5					Creek low, 40 jumps
Aug 6 1954	G 1.5	FW5					Pink in mouth
Sept 16		FWS					No fish observed
1955 Aug 2	G 0. 2	FWS					No fish observed
1956	G 0. 2	r w 3					No fish observed
Sept 8 1957	G to lake	FWS					No fish observed
July 28	G length	FW5				2 reds	2 jumps off mouth
Aug 9 1958	A mouth	FWS					No fish observed
Aug 14	G 0.5	FWS					No fish observed
Aug 23	G mouth	FWS					50 red jumps at mouth
Sept 10	G 0.5	FW5					No fish observed 200 pinks off mouth
1960							•
	No surve	ys					
1961							
	No surve	ys					
1962					700		1 000 1 11
July 30	A mouth		300		700		1,000 at mouth 200-300 at mouth
Aug 7	A mouth	ADF					200-300 at mouth

142-40 56°19.2' N. 132°32.8' W.

WRANGELL, SUMNER STRAIT, STIKINE STRAIT, 2 miles SW. of NW. tip of Etolin I.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES

OTHER SPECIES ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH

VALLEY DESCRIPTION Stream-cut. Near the mouth there are open muskeg areas a short distance from both streambanks.

DRAINAGE 9. 2 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Enters into the SE. corner of a small bay. This is the first bay N. - NE. of Quiet Harbor.

ANCHORAGE The cove into which the creek enters offers protection for small craft from SE, weather. TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVER
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES Large stream, extremely rocky and swift.

AVERAGE WIDTH/DEPTH 75'/24".

ESCAPEMENT RECORD

	SURVEYE		PINK		СН	JM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1953								
Aug 11	A 0.5	FWS						No fish observed
19 5 6								
Aug 15	A 0.7	FWS						No fish observed
1959								
Sept 4	G 0.5	FWS	64					
1960								
	No surv	eys						
1961								
	No surv	eys						

ADF STAT. No. WR 44

Previous No. 58

142-40 56°20.8' N. 132°41.2' W.

WRANGELL, CLARENCE STRAIT, STIKINE STRAIT, METER BIGHT, 4 miles SW. of S. Craig Pt.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES

OTHER SPECIES ESCAPEMENT MAGNITUDE

VALLEY DESCRIPTION Glacial origin. Large patches of open muskeg areas on both sides of the stream.

DRAINAGE 22.5 square miles (polar planimeter). Precipitation-fed.

STREAM MOUTH IDENTIFICATION Heavily wooded near the mouth. Lies at the N. end of the tidal flat into which WR 4S enters. Enters Meter Bight.

ANCHORAGE The bight offers poor anchorage because of the large tidal flat. Temporary anchorage is available in Deep or Fritter Coves to the N.

TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

GRADIENT AND VELOCITIES
BOTTOM Good gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS

LENGTH ACCESSIBLE

GENERAL NOTES

AVERAGE WIDTH/DEPTH 65'/1S".

Previous No. 58

	SURVEYED		PIN	IK	CHUM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live Dead	Live	
1951							
Sept 11	0.2	FWS	100				
1953							
Aug 11	A 0. S	FWS					Good stream but no
							fish observed
1955							
Aug 31	G 0.7	FWS	1,250				
1956							
Aug 15	A 1.0	FWS					No salmon observed
Sept 17	G 1.0	FWS	1,600				
1957							
Aug 15	A 2.0	FWS					No salmon observed
1958							
Aug 8	A 2.0	FWS					No salmon observed
Aug 28	G 0. 2	FWS	500		100		
Sept 14	G 1.0	FWS	1,500	100			
Sept 19	A 2.0	FWS	2,500				
1959							
Aug 30	G 0. 2	FWS	200				
1960							
	No survey	rs .					
1961							
	No survey	rs					
1962							
July 25	A 2.0	ADF					No salmon observed
- /							

ADF STAT. No. WR 45 Previous No. 59

142-40 56°20.4' N. 132°40.7' W.

WRANGELL, CLARENCE STRAIT, STIKINE STRAIT, METER BIGHT, 4.5 miles SW. of S. Craig Pt.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES

OTHER SPECIES ESCAPEMENT MAGNITUDE

STREAM TEMPERATURES

VALLEY DESCRIPTION The lower 2 miles of stream runs through a generally flat area with scattered patches of muskeg. Above this the valley lies between two mountain ridges.

DRAINAGE 6.5 square miles (polar planimeter). Precipitation-fed. Snowmelt from the surrounding snow-fields and rainfall, along with muskeg drainage, feed this creek.

STREAM MOUTH IDENTIFICATION Enters the S. end of Meter Bight, about 400 yards from its S. point. This is the same flat into which WR 44 enters.

ANCHORAGE Refer to WR 44.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 50'/15".

	SURVEYED		PIN	ľK	CHU	M	OTHER SPECIES	REMAR KS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
19 S 1								
Sept 11 1956	0.1	FWS	19	0				
Aug 15	A 0. S	FWS						No salmon observed
Sept 17 1957	G 1.0	FWS						No salmon observed
Aug 15 1988	A 2.0	FWS						No salmon observed
Sept 14	G 0. 2	FWS	1					1 pink spawned out
Sept 19 1959	A 0.5	FWS						No salmon observed
Aug 30 1960	G 0. 2	FWS						No salmon observed
1000	No survey	s						
1961	,							
	No survey	'S						

ADF STAT. No. WR 50 Previous No. 66

130-10 \$6°46.2' N. 132°47.9' W.

WRANGELL, FREDERICK SOUND, 2 miles SE. of Frederick Pt.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE 6.5 square miles (

OTHER SPECIES ESCAPEMENT MAGNITUDE

 $\begin{array}{ll} \texttt{DRAINAGE} & 6.8 \text{ square miles (polar planimeter)}. \\ \texttt{STREAM MOUTH IDENTIFICATION} \end{array}$

ANCHORAGE This shoreline offers no overnight anchorages, only temporary. Petersburg, about 8 miles NW., offers excellent facilities for moorage or anchoring.

TRAILS AND SURVEY ROUTES AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH

AVERAGE WIDTH/DEPTH 10'/10".

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES
BOTTOM Boulder and bedrock, with little gravel.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED		PIN	IK	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Sept 3	0.5	FWS	650	123	0	0		
1960	No surv	10115						
1961	140 2017	reys						
1001	No surv	/eys						

130-10 56°45.5' N. 132°46.7' W.

WRANGELL, FREDERICK SOUND, 3 miles SE. of Frederick Pt.

MAJOR SPECIES Pink. OTHER SPECIES
ESCAPEMENT TIMING Middle. Aug. -Sept (est.) ESCAPEMENT MAGNITUDE
SPAWNING FACILITIES
STREAM TEMPERATURES Normal range. No observed temperatures,
VALLEY DESCRIPTION
DRAINAGE 4 square miles (polar planimeter).
STREAM MOUTH IDENTIFICATION Enters the second bight S. of WR SO.
ANCHORAGE Refer to WR SO.
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

INTERTIDAL ZONE

LENGTH AVERAGE WIDTH/DEPTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS A few good spawning areas are found within this zone.
GENERAL NOTES

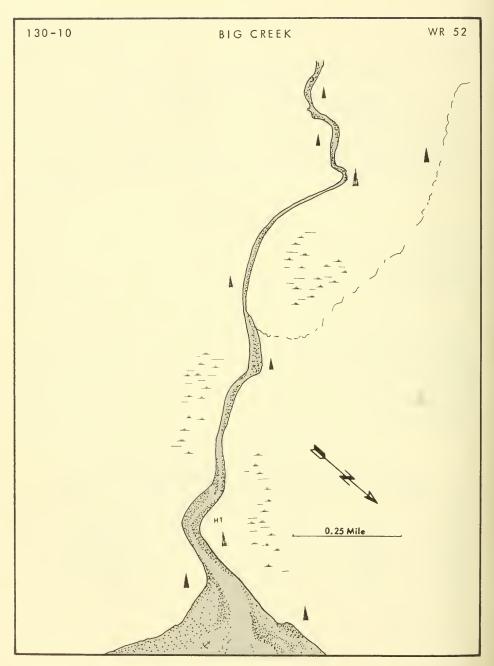
UPSTREAM

AVERAGE WIDTH/DEPTH 101/6".

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Swift.
BOTTOM Bedrock, boulders, and small rock.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED		PIN	ľK	CHUI	M	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1953 Aug 11 1955 July 26	A 0. S G 0. 2	FWS						No salmon noted in stream
Aug 12	G 1.0	FWS						No salmon observed
Aug 26	G 1. 0	FWS						Poor visibility - water high
Aug 30	G 1.0	FWS	700	0	0	0		1001 visibility - water mgm
Sept 4	A 1.0	FWS						No salmon observed - poor visibility
1960								,
	No survey	s						
1961								
	No survey	s						



130-10 56°42.1' N. 132°42.6' W.

Previous No. 69

WRANGELL, FREDERICK SOUND, 8 miles SE. of Frederick Pt.

MAJOR SPECIES Pink.
ESCAPEMENT TIMING Middle.
SPAWNING FACILITIES Good.
STREAM TEMPERATURES
VALLEY DESCRIPTION Flat, muskeg valley.

OTHER SPECIES Chum, coho. ESCAPEMENT MAGNITUDE Fair.

DRAINAGE 23.5 square miles (polar planimeter).

STREAM MOUTH IDENTIFICATION Lies at the head of a small bight W. of Coney Island.

ANCHORAGE Ideal Cove, 1.2 miles S. of Coney Island, furnishes good anchorage for small vessels.

in 7 fathoms.

TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES Water usually too dark for survey.

INTERTIDAL ZONE

LENGTH
GRADIENT AND VELOCITIES Moderate.
BOTTOM Gravel and bedrock.
LOW TIDE LOCATION Mudflats.
HIGH TIDE LOCATION
SCHOOLING AREAS Several pools.
SPAWNING AREAS A good spawning area.
GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE
GRADIENT AND VELOCITIES Moderate.
BOTTOM Boulders and gravel mixed with sand.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS None.
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

AVERAGE WIDTH/DEPTH 30'/12"

AVERAGE WIDTH/DEPTH 801/12".

ESCAPEMENT RECORD

	SUR VEYED		PIN	ľK	CHU	IM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1951								
Sept 3	1.0	FWS	3, 230	153	11	6	2 reds	
1953			-,					
Aug 11	A 0. S	FWS						Few salmon present
1954								
Sept 10	A 1. S	FWS	5,000					
Sept 12	G 7.0	FWS	1,000				Few cohos	
1955	005	EMC						No evidence of salmor
July 12	G 0.5 A 0.5	FWS FWS						No salmon observed
Aug 19	A 0. S	FWS						None observed
Sept 6 19S6	A 0.3	LWS						None observed
Aug 2-8	8 G	FWS						No salmon observed
Aug 9	G	FWS	100					
Aug 14	G 0. 3	FWS	75					
Sept 3	G 1.0	FWS	1,500					
Sept 13	A 3.0	FWS	5,000					
Sept 20	A 3.0	FWS	2,000					
1957								
	No record	ł						
1958								
Aug 8	A 2.0	FWS						No salmon observed
Aug 28	A 4.0	FWS						No salmon observed
1959	600	EMC	30					
Aug 3	G 0. 2	FWS FWS	225					
Aug 10	A 1. 0 G 0. S	FWS	35					
Sept 3 1960	6 0. 3	L W 2	23					
1900	No survey	15						
1961	110 302 46							

ADF STAT. No. WR S3 Previous No. 72

130-40 S6°37.4' N. 132°36.3' W.

WRANGELL, FREDERICK SOUND, DRY STRAIT, 3. S miles SE. of Cosmos Pt.

MAJOR SPECIES
ESCAPEMENT TIMING
SPAWNING FACILITIES
STREAM TEMPERATURES
VALLEY DESCRIPTION
DRAINAGE S square miles (Aerial).
STREAM MOUTH IDENTIFICATION
ANCHORAGE
TRAILS AND SURVEY ROUTES
AERIAL SURVEY NOTES

OTHER SPECIES
ESCAPEMENT MAGNITUDE

AVERAGE WIDTH/DEPTH

INTERTIDAL ZONE

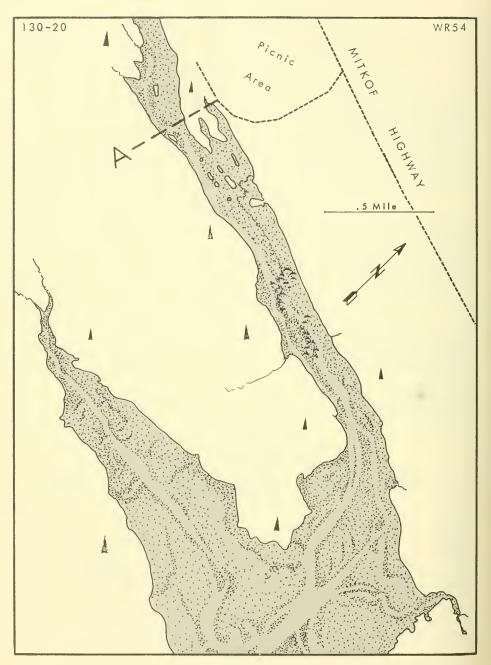
LENGTH
GRADIENT AND VELOCITIES
BOTTOM
LOW TIDE LOCATION
HIGH TIDE LOCATION
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

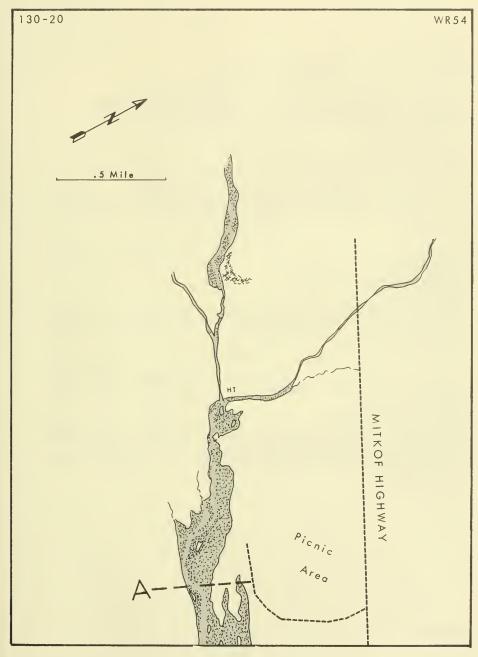
UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 10'/6".
GRADIENT AND VELOCITIES Swift.
BOTTOM Boulders and bedrock with little spawning area.
MARKER DISTANCE
MARKER IDENTIFICATION
BARRIERS
TRIBUTARIES
SCHOOLING AREAS
SPAWNING AREAS
GENERAL NOTES

ESCAPEMENT RECORD

	SURVEYED)	PIN	K	CHI	JM	OTHER SPECIES		REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live		
1951									
Sept 4	0.2	FWS	300						
1953									
Aug 11	A 0.5	FWS						No sali	mon
1955									
Jul 12	G 0.·S	FWS						No sign	n of salmon
Aug 19	A 0. S	FWS						No sali	mon
Sept 6	A 0. S	FWS						No sali	mon
1960									
	No surve	ys							
1961									
	No surve	ys							





ADF STAT. No. WR 54 Previous No. 73

130-20 56°35.2' N. 132°44.5' W.

WRANGELL, SUMNER STRAIT, BLIND SLOUGH, head of N. arm.

MAJOR SPECIES Pink.

ESCAPEMENT TIMING Early: July-Aug.

OTHER SPECIES Chum, coho, red.
ESCAPEMENT MAGNITUDE

SPAWNING FACILITIES West fork - fair; east fork - good.

STREAM TEMPERATURES Cold range. Observed temperatures: 55.5° F., 8/13/50; 48° F., 9/8/50; 44° F., 9/30/50.

VALLEY DESCRIPTION

DRAINAGE 10 square miles (polar planimeter).

 ${\tt STREAM\ MOUTH\ IDENTIFICATION} \quad {\tt The\ stream\ lies\ in\ the\ NE.\ corner\ of\ the\ slough\ and\ flows\ through\ a\ long\ grass-bordered\ tidal\ area.}$

ANCHORAGE The slough is very shallow and should be used only by small craft.

TRAILS AND SURVEY ROUTES Travel along the stream is easy at normal water levels. Leave skiff secured to the bank and follow the W. bank. Can be reached from Petersburg by road.

AERIAL SURVEY NOTES Dark water makes surveys impossible.

INTERTIDAL ZONE

AVERAGE WIDTH/DEPTH 30'/3".

LENGTH 1 mile.
GRADIENT AND VELOCITIES Gentle.
BOTTOM Good gravel.
LOW TIDE LOCATION
HIGH TIDE LOCATION

SCHOOLING AREAS Several holes are utilized throughout this zone.

SPAWNING AREAS Evidence of spawning has been observed in the upper one-fourth mile. The upper three-fourths mile appears well suited for spawning.

GENERAL NOTES

UPSTREAM

LENGTH ACCESSIBLE AVERAGE WIDTH/DEPTH 10'/3".
GRADIENT AND VELOCITIES Moderate.

BOTTOM VELOCITIES Moderate

MARKER DISTANCE
MARKER IDENTIFICATION

BARRIERS

TRIBUTARIES The stream forks just above the high tide mark. The left fork is the most important SCHOOLING AREAS Holes and riffles occur alternately.

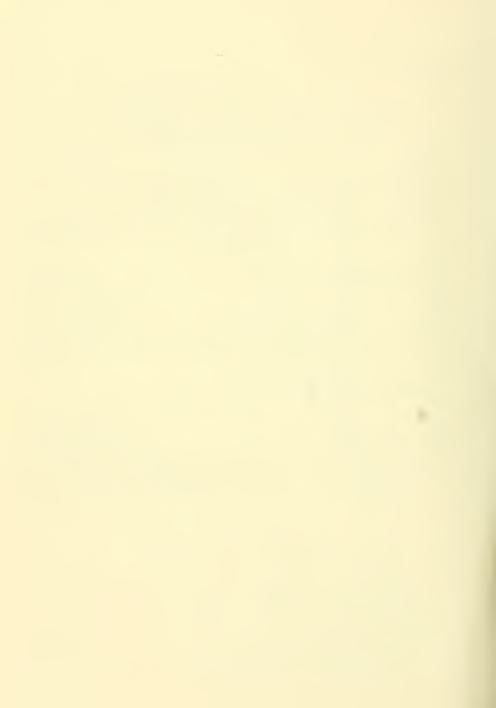
SPAWNING AREAS The right fork has good clean gravel for three-fourths mile; at this point larger rocks begin to show up and spawning facilities become poorer.

GENERAL NOTES

[Counts made by ground surveys are designated by G; aerial surveys by A]

	SURVEYED		PINI	K	CHI	UM	OTHER SPECIES	REMARKS
Date	Miles	Ву	Live	Dead	Live	Dead	Live	
1949								
Sept 11 1950	G 0.7	FRI	2, 455	315	2	10		Pink still in holes
Aug 13	G 0.7	FRI	293	0	742	12	2 reds	
Sept 8	G 0.7	FRI	29	5	0	0	94 cohos	
Sept 18		FWS	299				94 cohos	
Sept 30 1953	G 0.7	FRI	0	0	0	0	16S cohes	
July 20	A 0.5	FWS						No salmon observed
Sept 8 1954	A 0.5	FWS						Poor on pinks and chums
July 22	G mouth	FWS						Few chums in slough
Sept 10 1955	A length	FWS						No salmon observed
July 9	A 0.5	FWS						No salmon observed
Sept 6 1956	G 0.7	FWS	0	200	0	0		
Aug 7	bay	FW5						No salmon observed
Aug 30	· ·	FWS	20,000					
Sept 10 1957	A length	FWS						No salmon observed
July 22	G mouth	FWS						No salmon observed
Aug 7 1958	G 0. 2	FWS			100			
Aug 8	A 1.0	FWS	200					
Aug 28	G 0.5	FWS	400		50			
Sept 11 1959	G 0.5	FWS	250		50			
Aug 4	A 0.5	FWS						No salmon observed
Aug 15	G 0.5	FW5	100		20			
Sept 1 1960	G 0. 2	FWS						No salmon observed
	No survey	rs .						
1961								
	No survey	'S						

MS #1468





Created in 1849, the Department of the Interior—America's Department of Natural Resources—is concerned with the management, conservation, and development of the Nation's water. fish, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.

