PRELIMINARY LAKE SURVEY DATA FORM

Name *Reflection Lake* Date *7-20-78 and 7-21-78*

Code No. *101-80-84*

Location *Short Bay* Weather Conditions *Sunny, Clear, Windy*

I. Physical Data

1. Lake bathymetry a) Completed /X/ b) No. of Transects *12*

2. Temp.
   a) Surface Inlet °C. *#2-9.5 #1-10.0*
   b) Surfact Outlet °C. _____
   c) Bottom *(44')* °C. *5.5*
   d) Mid-depth *(22')* °C. *12.5*
   e) Air °C. _____

3. Temp. Profile Taken /X/

   Location *See map*

4. Secchi disc reading (Time _____)

   No measurement taken

Location	Out Depth	In Depth	Overage

5. Discharge cfs

   Inlet *45* *77' wide, 13" deep, 0.54 feet/sec.*

   Outlet *37* *15' wide, 9" deep, 3.3 feet/sec.*

II. Chemical Data

1. Dissolved Oxygen
   a) Surface Inlet *#2-10.5 #1-10.6*
   b) Surface Outlet _____
   c) Bottom (deepest) _____
   d) Mid Depth _____

   D.O. Profile Completed /No/

   Location *Meter malfunctioned See map*

2. pH *7.5* Location Sampled *See map*

3. Conductivity *15 umHOS* Location Sampled *See map*

4. Hardness *17 mg./L* Location Sampled *See map*

5. Alkalinity *7 mg./L* Location Sampled *See map*

III. Biological Data

1. Plankton - Vertical Tow
   No measurement taken

   Net & Cup Size _____
   Depth of Tow _____
   No. of Samples _____
   Location _____

2. Benthos:

   Type of Gear _____
   No. of Samples _____
   Depth _____
   Bottom Type _____

3. Rooted Aquatic Plants

Species Present	Location

4. Fish

		7-20-78 Set	7-21-78 Pulled
	GN#1	7:00 p.m.	3:25 p.m.
	GN#2	7:20 p.m.	3:50 p.m.
	GN#3	7:40 p.m.	4:15 p.m.

Gillnet # Set *3* Length of Time _____

Minnow Trap # Set *4* Length of Time _____

MT#1	6:45 p.m.	3:40 p.m.
MT#2	7:15 p.m.	4:00 p.m.
MT#3	7:30 p.m.	4:25 p.m.
MT#4	8:00 p.m.	9:35 p.m.

5. REMARKS:

Gillnet #1, Cutthroat 7, Dolly Varden 1, Coho 4, Kokanee 1

Gillnet #2,Cutthroat 1, Dolly Varden 2

Gillnet #3, Cutthroat 3, Coho 3 & 2 adults

Minnow Trap #1, Sticklebacks 5

Minnow Trap #2, Sticklebacks 8, Coho 3

Minnow Trap #3, Sticklebacks 9, Coho 2, Sculpins 7

Minnow Trap #4, Coho 11

Adult salmon have access to lake

REFLECTION LAKE 101-80-84 7/21/78
BACK BEHM CANAL (Mainland & Revilla Island)

Elevation: 293' Size: 759 acres Vol.: 77,798 acre/feet
Max. Depth: 360' Average Depth: 157.8'

WATER QUALITY: Temp: Surface inlet 10.0°C
Mid Depth (22')12.5°C
Bottom (44') 5.5°C

$D.O._2$: Surface Inlet #1) 10.6 ppm
10.5 ppm

4 mHOS

Spec. Cond.: 15 umHOS

pH: 7.5

Secchi Disc: no reading

Plankton Tow: no sample

FISHERIES: Anadromous - escapement - 11 year average - pink 6,927; chum 10,000 in 1943. Coho also present.

Resident - Gillnet #1: 20.5 hours - 7 cutthroat
1 dolly varden
4 coho
1 kokanee
Gillnet #2: 20.5 hours - 1 cutthroat
2 dolly varden
Gillnet #3: 21 hours - 3 cutthroat
3 coho
Minnow trap #1: 21 hours - 5 stickleback
Minnow trap #2: 21 hours - 8 stickleback
3 coho
Minnow trap #3: 21 hours - 9 stickleback
2 coho
7 sculpin
Minnow trap #4: 25.5 hours - 11 coho

Cutthroat 192 mm - 370 mm
Dolly Varden 167 mm - 184 mm

LAKE AND STREAM INVENTORY FORM

Name: REFLECTION LAKE

Catalog no.: 101-80-84

USGS map: BRAD A-5

Former no(s).: K 52

Latitude: N 56° 00' 13"

Drainage area: 25.5 mi²

Longitude: W 131° 31' 40"

No. lakes in system: 3 (Reflection & 2 smaller Lakes)

Location description: W. Behm Canal, 1.8 miles from head of Short Bay.

SIZE AND ELEVATION OF LAKES IN SYSTEM:

Lake Identification	Reflection Lake	#1	#2					
Size	960	10	15					
Elevation	293	3200	2800					

LENGTH AND GRADIENTS OF STREAMS IN SYSTEM:

Stream Identification	ITZ → REFLECTION	REFLECTION → #1	REFLECTION → #2					
Length								
Gradient								

SPECIES OF FISH PRESENT: Pink, chum, coho, cutthroat, steelhead, stickleback, cottids, sockeye, rainbow

SPAWNING DATA:

Species	Pink	Chum		
Escapement	'43 - 20,000 '68 - 191,700 '75 - 1,000	'43 - 10,000		
Timing	Mid-August - September			

PROMINENT PHYSICAL FEATURES OF STREAM: Pink barrier falls (6') on Short creek, appx 2 miles upcreek from ITZ

LAND USE OF AREA: Some hand logging; traditional recreational area.

Name *Reflection Lake*

Date *7-21-78*

Code No. *101-80-84*

Weather Conditions *Sunny, Clear, Warm*

Location *Head of Short Bby*

Sample Number	Species	(cm) Length	(gm) Weight	Sex	Scale Taken	Otolith Taken	Stomach Sample	Mark Code	Hou Tck
1	CT	36.8	522	F	X	X	X		GN
2	CT	37.0	544	M	X	X	X		GN
3	CT	34.9	426	F	X	X	X		GN
4	CT	29.9	309	M	X	X	X		GN
5	CT	29.5	248	F	X	X	X		GN
6	CT	31.0	289	M	X	X	X		GN
7	CT	20.0	82	F	X	X	X		GN
8	CT	20.6	93	F	X	X	X		GN
9	CT	21.2	81	F	X	X	X		GN
10	CT	19.2	68	F	X	X	X		GN
11	DV	16.7	71	F	X	X	X		GN
12	DV	18.4	67	F	X	X	X		GN
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									

LOCATION: Reflection Lake

DATE : 7-21-78

CREW: Rahe, Beattie, Shelton

TEMPERATURE AND DISSOLVED OXYGEN PROFILE DATA

DEPTH	TEMPERATURE (C)	Meter Malfunction DISSOLVED OXYGEN (p.p.m.)
Surface	15.5	10.1
2		
4		
6		
8		
10		
12		
14		
16		
18		
20		
22	12.5	12
24		
26		
28		
30		
32		
34		
36		
38		
40	6.5	
42	6.0	
44	5.5	14.0
46		