1980 INVESTIGATIONS OF DOWNSTREAM MIGRATIONS AND REARING DISTRIBUTIONS IN JUVENILE SALMONIDS OF THE KITIMAT RIVER, B.C.

APPENDICES

BY

G.J. BIRCH, T.L. SLANEY, AND M. MILKO

PREPARED FOR

DEPARTMENT OF FISHERIES AND OCEANS
FISHERIES OPERATIONS

PREPARED BY

F.F. SLANEY & COMPANY LIMITED
VANCOUVER, B.C.

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LIST OF ABBERVIATIONS

FISH SPECIES

AS - Coast range Sculpin *(Cottus aleuticus)*
EP - Eel pout *(Lycodes diapterus)*
FL - Flounder - Pleuronectidae
H - Herring *(Clupea harengus pallasi)*
Pb - Prickleback *(Lumpenus sagitta)*
Pk - Pink *(Oncorhynchus gorbuscha)*
Ps - Prickly Sculpin *(Cottus asper)*
Sc - Sculpin - Cottidae
Sl - Sandlance *(Ammodytes hexapterus)*
Sp - Shiner Perch *(Cymatogaster aggregata)*
Ss - Staghorn Sculpin *(Leptocottus armatus)*
St - Stickleback *(Gasterosteus aculeatus)*
Cl - Fin clipped Chinook fry (from pilot hatchery)
Lamp - Lamprey; Aminocoete *(Lampetra sp.)*

SAMPLING METHODS

BS - Beach Siene
DP - Dip net
ES - Electroshocker
MT - Minnow ('Gee") trap.

APPENDIX I

WEATHER RECORD AT KITIMAT TOWNSITE
Sorce: Department of Environment

April

Date	Air Temperature (°C)		Precipitation (mm)	Sunshine (hours)
	Max	Min		
1	12	-10	0	9.6
2	15	-6	0	10.2
3	15	-6	0	8.8
4	16	-2	0	4.0
5	14	1	0	0
6	13	3	9.8	4.0
7	11	2	15.6	7.2
8	12	3	0	5.8
9	14	3	4	3.9
10	15	3	3.6	4.1
11	15	3	7.0	0
12	15	3	8.2	0
13	14	3	12.8	5.4
14	14	3	6.4	0
15	10	5	5.6	0
16	9	5	11.4	0
17	12	4	1.0	9
18	12	2	40.3	0
19	12	2	3.0	6.0
20	N.D.	N.D.	0	2.9
21	12	2	0.4	4.9
22	10	3	13.6	0
23	10	2	2.3	1.3
24	9	4	6.5	1.8
25	9	3	0.8	0
26	11	3	2.0	1.3
27	11	3	10.6	0
28	11	3	12.2	0
29	11	4	2.0	2.4
30	N.D.	4	2.0	4.1
				N.D.

May

Date	Air Temperature (°C)		Precipitation (mm)	Sunshine (hours)
	Max	Min		
1	10	7	3.8	0
2	10	3	8.4	7.2
3	8	3	0.4	11.7
4	21	1	0	0
5	20	9	0	3.3
6	16	7	12.8	0.5
7	16	5	2.1	2.1
8	12	6	5.1	0.8
9	20	4	4	6.1
10	24	2	0	13.2
11	24	7	0	0
12	12	6	2	8.7
13	13	5	2.4	N.D.
14	13	5	2.4	N.D.
15	16	5	0	N.D.
16	14	9	0	0
17	16	10	2.0	4.1
18	17	5	8.6	N.D.
19	15	5	11.0	N.D.
20	15	4	5.0	N.D.
21	13	4	5.0	7.8
22	17	3	3.2	9.3
23	17	8	0	9.5
24	20	5	0	13.5
25	22	5	0	12.2
26	23	9	0	7.7
27	23	13	0	6.5
28	-	-	0	0
29	24	7	0	14.0
30	20	8	0	3.7
31	18	10	2.2	8.3

APPENDIX I continued

WEATHER RECORD AT KITIMAT TOWNSITE

June

Date	Air Temperature (°C)		Precipitation (mm)	Sunshine (hours)
	Max	Min		
1	13	7	2.0	4.9
2	21	5	0	0.2
3	28	8	0	7.3
4	28	11	0	2.0
5	28	11	0	0
6	27	11	0	0.2
7	-	10	0	9.3
8	28	10	0	2.2
9	19	10	21.4	2.8
10	19	9	0	6.2
11	17	12	0	12.5
12	20	11	0	10.5
13	22	12	0	0
14	22	11	0	1.8
15	21	11	0	0
16	21	11	0	1.9
17	19	10	0	3.1
18	20	10	0	6.7
19	23	10	0	0
20	25	10	0	0.3
21	24	13	0	6.6
22	20	12	0	6.5
23	22	5	0	4.9
24	24	12	0.6	0
25	30	11	0	2.7
26	28	15	0	0.7
27	19	10	3.4	0.9
28	18	8	0.2	5.1
29	19	9	0	0.3
30	23	14	0	0
				0

July

Date	Air Temperature (°C)		Precipitation (mm)	Sunshine (hours)
	Max	Min		
1	18	10	0	0
2	16	12	9.0	10.8
3	23	11	3.0	14.6
4	22	10	22.2	13.9
5	12	9	15.2	14.2
6	15	10	1.0	12.6
7	20	11	0	14.6
8	19	12	0	12.8
9	17	11	12.7	0
10	17	11	1.4	9
11	23	13	1.8	0
12	23	13	0	7.2
13	21	10	4.6	1.0
14	16	12	1.4	14.2
15	16	11	0.8	9.9
16	17	11	0	4.0
17	20	11	0	13.1
18	22	12	1.2	10.7
19	21	12	0	12.7
20	18	13	2.0	14.4
21	23	14	3.0	12.8
22	23	15	4.2	6.8
23	23	11	0.6	8.9
24	23	11	2.8	5.4
25	21	11	6.6	14.2
26	16	10	4.7	7.5
27	17	12	0.8	2.6
28	18	12	1.4	9.6
29	18	12	0.3	1.7
30	17	12	0	13.0
31	15	11	3.4	NA

APPENDIX II

STREAM TEMPERATURE AND DISCHARGE, KITIMAT RIVER, 1980

April

Date	Temperature (°C) [1]				Streamflow [2]	
	time	max	min	prsnt	level	discharge
1					0.530	40.6
2					0.534	41.1
3					0.558	44.2
4					0.588	48.1
5					0.612	51.3
6					0.804	82.4
7					0.876	95.9
8					0.774	76.4
9	0830	4.5	2.5	4.0	0.711	66.0
10	0845	7.5	2.5	4.5	0.773	76.0
11	0830	6.5	4.0	4.0	0.807	82.5
12	0820	6.5	4.0	4.5	0.823	85.6
13	1740	8.0	2.0	6.0	1.091	146.0
14	0910	7.0	3.5	4.0	1.076	142.0
15	0745	6.0	4.5	4.5	1.145	160.0
16	0825	6.5	3.5	4.5	1.082	144.0
17	0920	5.5	3.0	4.0	1.028	131.0
18	0905	7.0	3.5	4.5	1.007	126.0
19	1230	5.5	3.0	4.0	1.317	207.0
20					1.063	140.0
21	0830	6.5	3.75	4.5	0.906	102.0
22	0925	7.0	4.0	5.0	0.904	102.0
23	0855	7.0	3.5	4.0	0.917	105.0
24	0855	6.0	3.5	5.0	0.871	94.9
25	0800	7.0	4.0	4.5	0.837	88.2
26	0830	6.5	4.0	5.0	0.871	95.0
27	0845	7.5	4.5	4.5	0.997	123.0
28					1.094	147.0
29	1110	8.0	3.5	5.5	1.018	128.0
30	0845	6.0	5.0	5.0	0.967	116.0
31						(m^3/sec)

May

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0820	9.0	5.0	5.0	1.179	169.0
2	0845	8.0	4.0	4.0	1.331	210.0
3	2155	-	N.D.	-	1.071	141.0
4	0845	8.5	5.0	5.0	0.963	115.0
5	0855	8.5	5.0	5.5	1.068	141.0
6	0835	7.0	5.0	5.5	1.392	229.0
7	0750	7.5	4.5	5.0	1.379	224.0
8	0630	7.0	4.5	5.5	N.D.	N.D.
9	1045	7.0	5.0	6.0	N.D.	N.D.
10	0800	8.0	5.0	5.0	N.D.	N.D.
11	0820	9.0	5.0	5.0	N.D.	N.D.
12	0840	7.0	5.0	5.0	1.783	358.0
13	0735	9.5	5.0	5.5	1.731	340.0
14	0745	5.5	3.0	5.0	1.316	206.0
15	2000	9.0	5.0	9.0	1.157	163.0
16	0740	9.5	6.0	7.0	1.275	194.0
17	0655	8.5	6.0	6.5	N.D.	N.D.
18	0740	9.0	5.0	6.0	N.D.	N.D.
19	0840	9.0	6.5	6.5	N.D.	N.D.
20	0845	8.0	5.0	5.5	N.D.	N.D.
21	0820	8.0	5.5	6.5	N.D.	N.D.
22	0910	10.0	6.0	7.0	N.D.	N.D.
23	0830	9.5	6.0	6.5	N.D.	N.D.
24	0805	10.0	6.0	7.0	N.D.	N.D.
25	0820	11.5	6.5	7.0	N.D.	N.D.
26	0720	11.0	7.0	7.0	N.D.	N.D.
27	0555	10.5	6.5	7.5	N.D.	N.D.
28	0830	9.5	5.5	6.5	N.D.	N.D.
29	0840	10.5	6.0	6.5	1.391	228.0
30	0750	11.0	6.0	7.0	1.293	199.0
31	0910	9.5	7.5	8.0	1.359	219.0

[1] Recorded near IPT site

[2] DOE, Water Survey of Canada

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

STREAM TEMPERATURE AND DISCHARGE, KITIMAT RIVER, 1980

JUNE

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0845	10.0	6.0	6.0	1.294	201.0
2	0715	8.0	6.0	6.0	1.014	128.0
3	0855	11.0	6.0	8.0	1.044	135.0
4	0530	12.0	7.0	8.0	1.420	236.0
5	0615	12.0	7.5	8.0	1.551	278.0
6	0635	10.5	6.5	6.5	1.468	252.0
7	0815	11.0	6.5	7.5	1.340	213.0
8	0655	12.5	7.5	8.0	1.372	222.0
9	0810	12.5	6.0	8.0	1.596	293.0
10	0655	10.0	7.0	7.0	1.349	216.0
11	0630	10.0	7.0	8.5	1.236	183.0
12	0650	9.5	8.0	8.0	1.250	187.0
13	0720	12.0	8.0	8.5	1.303	202.0
14	0650	10.5	7.0	8.5	1.316	205.0
15	0710	12.5	8.0	9.5	1.331	210.0
16	0640	17.0	7.0	8.5	1.237	184.0
17	0650	11.5	8.5	8.5	ND	NO
18	0700	12.5	8.0	9.0	1.084	145.0
19	0700	13.0	8.0	9.0	1.040	134.0
20	0635	14.0	8.5	10.0	1.093	147.0
21	0710	14.0	8.5	10.0	1.146	160.0
22	0645	12.0	8.5	9.5	1.091	146.0
23	0750	11.5	8.5	8.5	1.044	135.0
24	0640	11.0	7.5	8.5	0.994	123.0
25	0645	11.5	7.0	7.5	1.060	139.0
26	0615	15.0	9.0	10.5	1.154	162.0
27	0750	13.0	9.5	10.0	1.116	152.0
28	0700	12.0	8.0	8.5	1.054	137.0
29	0810	11.5	8.5	9.0	0.911	103.0
30	0630	12.5	8.5	10.0	0.880	96.8

JULY

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0815	13.5	8.5	10.5	0.978	119.0
2	0715	11.5	9.5	10.C	1.024	130.0
3	0825	11.5	8.5	9.5	0.973	117.0
4	0710	13.5	8.5	10.5	1.147	160.0
5	0640	11.5	8.0	8.5	1.438	242.0
6	0700	9.0	8.0	8.5	1.138	158.0
7	0615	11.0	8.0	9.C	0.973	117.0
8	0630	12.5	8.5	10.5	0.924	106.0
9	0815	12.0	9.0	10.0	1.004	125.0
10	0840	11.5	9.5	10.5	1.115	152.0
11	0715	12.5	9.0	10.0	1.089	146.0
12	0820	13.5	9.0	11.5	1.026	130.0
13	1235	15.0	11.0	11.5	1.063	139.0
14	0715	12.0	10.0	10.5	1.089	146.0
15	0905	11.0	10.0	10.0	NO	ND
16	0630	10.0	10.0	10.0 X	0.921	106.0
17	0840	11.5	9.5	10.C	0.841	89.0
18	0840	12.0	9.5	10.C	0.815	84.0
19	0840	14.0	10.5	11.5	0.817	84.4
20	0920	12.0	10.5	11.0	0.947	112.0
21	0920	13.5	11.5	11.5	1.036	133.0
22	0645	13.0	10.5	11.0	1.031	131.0
23	0755	13.5	10.0	10.5	1.073	142.0
24	0630	13.0	10.0	10.5	0.931	108.0
25	0655	11.0	10.0	10.5	0.941	110.0
26	0810	13.5	10.0	11.0	0.997	123.0
27	0655	12.0	10.0	10.0	0.959	114.0
28	0755	13.0	9.5	10.5	0.945	111.0
29	0645	13.0	10.0	11.0	0.874	95.5
30	0745	11.0	10.0	10.0	0.788	78.7
31	0720	12.5	10.5	11.0	0.766	74.5

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

August STREAM TEMPERATURE AND DISCHARGE, KITIMAT RIVER, 1980

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0810	12.0	10.0	10.0	0.873	95.3
2	0705	11.5	9.5	10.0	0.931	107.0
3	0905	12.5	8.5	9.0	0.865	93.8
4	0650	11.0	9.0	9.5	0.800	81.1
5	0750	14.0	10.0	10.5	0.765	74.7
6	0735	15.0	10.0	12.0	0.774	76.0
7	0815	13.5	10.5	11.0	0.769	75.0
8	0755	15.0	10.5	12.0	0.786	78.3
9	0820	14.5	11.5	11.0	0.809	82.9
10	0725	15.0	10.5	12.0	0.817	84.3
11	1240	15.5	11.5	13.0	0.870	94.8
12	0810	15.5	11.0	11.0	0.848	90.5
13	0840	15.5	12.0	13.0	0.814	83.9
14	0650	13.5	11.0	11.0	0.736	69.8
15	0840	13.0	10.0	10.0	0.695	63.6
16	0810	11.0	9.5	10.0	0.777	77.4
17	1015	13.0	9.0	9.0	1.191	173.0
18	0820	11.0	8.0	8.0	0.909	104.0
19	0855	13.5	8.0	10.5	0.775	76.7
					0.670	59.9

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

STREAM TEMPERATURES AND DISCHARGES HIRSCH CREEK, 1980

April

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1					0.653	5.29
2					0.658	5.50
3					0.676	6.16
4					0.705	7.26
5					0.723	8.01
6	1000	6.0	2.0	4.0	0.857	14.90
7	1930	5.0	2.0	4.5	0.811	12.30
8	0930	7.0	2.5	3.0	0.760	9.69
9	1700	7.5	3.0	5.5	0.745	8.98
10	1145	5.5	2.0	3.5	0.789	11.20
11	1100	4.5	2.0	3.5	0.792	11.30
12	1045	4.0	2.5	3.5	0.831	13.60
13					1.049	29.50
14	0945	3.5	2.0	2.5	0.996	25.00
15	0945	8.0	1.0	4.5	1.037	28.40
16	1055	5.0	1.5	4.0	0.952	21.50
17	1950	6.0	2.0	5.5	0.910	18.40
18	1100	7.5	4.0	4.5	0.908	18.60
19	1040	3.0	2.0	3.0	1.047	29.30
20	1635	5.0	2.5	5.5	0.924	19.50
21	1055	5.0	2.0	4.5	0.848	14.30
22	1100	6.5	3.0	4.5	0.849	14.40
23	1105	5.5	3.0	5.0	0.857	14.80
24	1125	5.0	3.5	4.5	0.859	15.00
25	1950	6.0	3.0	6.0	0.837	13.70
26	0925	4.0	3.5	5.0	0.878	16.30
27	2035	5.0	3.0	5.0	0.958	22.00
28	1045	5.0	3.0	4.0	0.974	23.10
29	1255	5.0	4.0	5.0	ND	ND
30	1045	6.0	4.5	5.0	0.924	19.5

May

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	1105	5.0	4.0	5.0	1.073	31.7
2	1920	7.5	6.0	7.5	1.159	40.2
3	1725	8.0	3.5	8.0	0.981	23.8
4	1125	4.5	4.0	4.5	0.935	20.2
5	0920	5.0	3.5	4.5	1.039	28.5
6	0940	8.0	4.0	4.5	1.213	45.8
7		5.0	3.5	4.5	1.142	38.0
8	0805	5.0	4.0	5.0	1.076	31.7
9	0825	4.5	4.0	4.0	1.057	30.1
10	1800	9.5	5.5	9.5	1.177	43.0
11	1045	5.0	4.5	5.0	1.359	67.8
12	2015	9.0	4.5	9.0	1.381	71.2
13	0820	7.5	3.5	5.0	1.318	61.1
14	0940	5.5	3.5	5.0	1.116	35.4
15	1240	7.0	5.5	7.0	1.061	30.4
16	1825	11.5	6.5	7.5	1.137	37.1
17	0915	6.0	5.0	6.0	1.135	36.9
18	1955	8.0	7.0	7.5	1.095	33.4
19	1030	6.5	6.5	6.5	1.037	28.4
20	1000	5.5	5.0	5.5	0.978	23.6
21	1900	9.5	6.0	9.0	0.924	19.4
22	1305	9.0	5.5	8.0	0.894	17.3
23	1555	9.0	5.0	9.0	0.868	15.6
24	0840	9.0	6.5	8.0	0.888	16.9
25	1900	11.0	7.0	10.5	0.986	24.1
26	1145	8.0	5.5	7.0	1.055	30.0
27	1015	7.0	6.5	7.0	1.166	40.4
28	2025	10.0	10.0	10.0	1.225	47.4
29	0920	6.5	5.5	6.0	1.197	44.2
30	0920	7.0	6.0	7.0	1.139	37.7
31	1045	7.0	5.5	7.0	1.255	52.0

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

STREAM TEMPERATURE AND DISCHARGE HIRSH CREEK, 1980

JUNE

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	1015	9.0	5.5	6.0	1.131	37.3
2	2100	10.0	5.0	9.0	0.973	23.2
3	0930	9.0	6.5	7.0	1.010	26.6
4	2130	11.0	7.0	11.0	1.215	46.5
5	0720	7.0	6.5	7.0	1.276	54.5
6	2205	10.0	7.5	10.0	1.219	46.9
7	1110	8.0	6.0	8.0	1.165	40.3
8	0945	11.0	6.5	7.5	1.174	41.4
9	0855	10.5	7.0	7.0	1.315	60.5
10	0845	8.0	4.5	6.5	1.132	37.0
11	0900	9.0	6.5	8.0	1.085	32.4
12	0940	14.5	6.5	8.5	1.104	34.1
13	0830	12.0	7.0	8.0	1.134	36.9
14	0925	10.0	7.5	8.5	1.123	36.0
15	0920	11.0	7.5	8.5	1.138	37.4
16	0855	11.5	7.0	8.0	1.081	32.2
17	0845	10.0	7.0	8.0	ND	ND
18	0940	9.0	7.5	8.0	0.998	25.2
19	0920	13.0	7.5	9.0	0.982	23.8
20	0805	10.0	8.0	8.5	1.013	26.4
21	0930	9.0	8.0	9.0	1.021	27.0
22	0915	10.0	8.5	9.0	0.990	24.5
23	0910	9.0	8.0	8.0	0.959	22.1
24	0840	12.5	8.0	9.0	0.950	21.4
25	0945	13.5	8.5	9.5	0.984	24.0
26	0925	14.5	8.5	9.5	1.008	25.9
27	0930	11.5	8.5	9.5	1.005	25.7
28	1125	11.5	7.5	9.0	0.983	24.0
29	1145	11.0	8.0	9.5	0.893	17.2
30	0810	11.5	8.5	9.5	0.871	15.8
31	ND	ND	ND	ND	ND	ND

JULY

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0930	13.5	8.5	10.5	0.930	19.9
2	0920	13.0	10.0	10.0	0.943	20.8
3	0930	11.5	9.0	9.5	0.924	19.4
4	0950	13.0	9.0	9.5	1.096	33.9
5	1030	9.5	8.5	8.5	1.248	51.0
6	1145	10.0	8.0	9.0	1.049	29.5
7	0915	9.5	8.0	9.0	0.945	21.0
8	0855	12.0	10.0	10.0	0.913	18.6
9	0915	11.0	9.5	10.0	0.998	25.2
10	1000	11.0	8.0	9.5	1.086	32.6
11	0925	12.5	9.0	9.5	1.035	28.3
12	0905	14.0	9.0	10.5	0.979	23.6
13	1110	15.0	10.0	11.0	1.004	25.6
14	1150	13.0	10.0	10.5	1.038	28.5
15	1110	11.0	9.0	10.0	ND	ND
16	0845	9.5	8.5	9.5	0.945	21.0
17	0930	11.5	9.0	9.5	0.884	16.6
18	1020	12.0	9.0	10.0	0.875	16.0
19	1010	14.5	10.5	11.5	0.872	15.8
20	1035	12.0	10.0	11.0	0.950	21.4
21	0835	13.0	11.0	11.0	0.983	23.9
22	0900	15.5	10.0	10.5	0.998	25.2
23	0840	13.0	9.5	10.0	1.005	25.8
24	0820	12.0	9.0	9.5	0.964	22.4
25	0935	10.0	9.5	10.0	1.017	26.7
26	0935	11.0	10.0	10.0	1.044	29.0
27	0905	10.5	9.5	10.0	1.027	27.6
28	0850	11.0	9.5	10.0	1.001	25.4
29	0900	11.0	8.5	9.0	0.934	20.2
30	0825	10.0	8.0	8.5	0.879	16.3
31	0920	10.5	8.5	10.5	0.861	15.1

Streamflow (discharge) measurements in m^3/sec

APPENDIX II
STREAM TEMPERATURE AND DISCHARGE HIRSCH CREEK, 1980

AUGUST

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0840	10.0	9.0	9.5	0.931	20.0
2	0930	10.0	7.5	8.0	0.987	24.2
3	0945	9.5	8.0	8.5	0.921	19.2
4	0830	12.5	9.5	10.0	0.890	17.0
5	0925	12.0	7.5	9.0	0.860	15.0
6	0900	13.0	8.5	9.5	0.852	14.5
7	0905	14.0	10.0	10.5	0.832	13.4
8	0930	13.5	9.0	10.5	0.829	13.2
9	0905	14.0	10.5	11.0	0.828	13.2
10	2025	15.5	10.5	15.5	0.828	13.1
11	1110	15.5	12.0	13.5	0.846	14.2
12	2030	14.0	10.5	14.0	0.824	13.0
13	0920	15.5	12.0	12.5	0.810	12.2
14	2030	14.0	11.0	11.0	0.782	10.8
15	0935	12.5	10.0	10.0	0.793	11.4
16	0930	10.5	9.0	10.5	0.886	17.1
17	1300	10.0	8.5	10.0	1.197	46.1
18	0920	11.0	8.5	10.0	0.925	19.6
19	1030	12.5	8.5	9.5	0.841	14.0
					0.787	11.1

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

STREAM TEMPERATURES AND DISCHARGES FOR CECIL CREEK, 1980

April

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1						
2						
3						
4						
5						
6	1400	4.0	3.0	3.5	1.54	3.93
7	0930	5.0	2.5	4.5	ND	ND
8	1930	5.0	1.0	5.0	ND	ND
9	1120	5.0	3.0	5.25	1.35	3.55
10	1045	6.5	4.5	5.0	1.34	2.52
11	1200	5.5	4.5	5.0	1.34	3.86
12						
13	1855	7.0	4.0	7.0	-	-
14	1125	7.5	5.5	5.75	1.57	-
15	1605	8.5	5.0	6.5	1.44	4.05
16	1030	6.5	4.5	5.5	1.77	4.61
17	1110	6.0	4.0	5.5	1.65	4.74
18	0915	7.0	5.5	5.5	1.46	3.45
19	1840	5.5	4.5	5.5	2.10	8.47
20	0835	8.5	4.5	5.0	1.72	6.48
21	1845	7.0	6.0	7.0	1.34	3.12
22	1240	7.0	6.0	6.0	1.19	3.58
23	1605	6.5	2.5	6.5	1.51	4.59
24	0940	7.0	5.5	6.0	1.48	3.75
25	1240	7.0	2.0	7.0	1.35	3.27
26	1015	6.5	2.5	6.5	1.24	2.83
27	2135	7.0	7.0	7.0	1.55	4.67
28	0835	6.0	5.5	5.5	1.78	6.61
29	2025	8.5	6.0	7.0	1.44	3.93
30	1135	6.5	6.0	6.0	1.41	3.90
31	-	-	-	-	-	-

May

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	1915	8.5	7.0	8.0	1.61	4.63
2	1115	9.0	6.0	6.0	1.65	4.61
3	1530	8.5	6.5	8.5	1.43	3.33
4	1250	9.0	6.5	7.5	1.30	3.24
5	1755	9.0	7.5	8.5	1.34	3.22
6	1130	9.5	8.0	8.0	1.46	3.84
7	0855	9.0	7.0	7.0	1.42	3.92
8	0845	9.0	6.5	7.0	1.39	3.39
9	0900	9.0	7.0	7.0	1.33	3.35
10	0815	8.5	7.0	7.0	1.33	3.40
11	0935	11.5	7.0	7.0	1.50	4.19
12	1015	12.5	6.5	7.0	1.48	4.52
13	0930	11.0	7.0	7.0	1.50	3.92
14	0905	8.5	6.0	7.0	1.30	3.46
15	1330	9.0	7.0	8.5	1.24	2.67
16	0825	10.0	6.0	8.5	1.28	3.13
17	1440	10.0	-	9.5	1.23	2.90
18	0845	12.0	6.5	7.5	1.24	2.87
19	1015	10.0	6.0	7.5	1.21	2.42
20	0830	8.5	7.0	7.0	1.28	2.47
21	1205	10.5	7.0	8.0	1.15	OFU
22	1030	10.0	7.0	8.0	1.06	2.10
23	0900	10.5	7.5	7.5	1.04	1.69
24	1535	11.0	7.0	11.0	1.06	2.00
25	1445	12.0	8.5	10.5	1.12	2.14
26	0845	13.5	7.5	8.0	1.15	2.68
27	0755	11.5	8.5	9.5	1.23	2.89
28	0945	11.0	9.0	9.0	1.24	2.98
29	1055	12.5	8.5	9.0	1.17	2.14
30	0845	12.0	9.0	9.0	1.13	2.60
31	1450	11.0	9.0	11.0	1.12	2.67

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

STREAM TEMPERATURES AND DISCHARGES FOR CECIL CREEK, 1980

June

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	1120	11.5	8.5	8.5	1.81	2.09
2	1145	9.0	7.5	9.0	0.97	1.80
3	1000	11.0	8.0	9.5	1.02	1.88
4	0655	13.0	9.0	9.0	1.17	2.21
5	2135	13.5	9.5	12.0	1.15	2.51
6	1035	11.5	8.0	9.5	1.12	2.29
7	0850	13.0	9.0	9.5	1.10	2.24
8	0955	14.0	9.5	10.0	1.08	2.16
9	0910	13.5	10.0	10.5	1.15	2.54
10	0915	12.0	9.0	9.0	1.12	2.08
11	0930	12.0	8.5	10.0	1.06	1.74
12	0930	11.0	9.5	10.0	1.02	1.91
13	0845	13.0	8.0	10.5	1.02	1.71
14	0855	12.5	10.5	11.0	1.01	1.35
15	0825	14.0	11.0		0.93	1.88
16	0825	14.0	11.0	11.0	0.95	1.82
17	0905	13.5	10.5	10.5	0.93	1.79
18	0920	14.0	10.0	10.5	0.91	1.37
19	0855	14.5	10.5	11.0	0.90	1.57
20	0820	15.0	11.0	11.0	0.91	1.29
21	0835	14.5	10.0	11.0	0.84	1.56
22	0850	15.0	11.5	11.5	0.88	1.52
23	0850	14.5	11.0	11.0	0.88	1.60
24	0845	14.5	8.5	11.5	0.86	1.19
25	1000	14.0	11.0	11.5	0.86	1.56
26	0915	15.0	12.0	12.0	0.84	1.49
27	0945	15.0	11.5	12.0	0.84	1.74
28	1015	14.0	11.0	11.0	0.82	ND
29	1040	14.0	10.5	11.0	0.80	1.15
30	2125	14.5	11.0	14.0	0.77	ND

July

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0945	14.0	12.5	13.0	0.79	1.25
2	0855	14.5	12.0	12.0	0.82	1.48
3	0920	13.5	11.0	11.0	0.80	1.73
4	0935	14.0	11.0	12.5	0.88	1.49
5	0945	14.0	10.0	10.0	1.21	2.61
6	0950	11.0	10.0	10.0	0.95	1.75
7	0935	12.0	10.0	11.0	0.88	1.57
8	0830	13.5	10.5	11.5	0.80	1.41
9	0905	13.5	11.0	11.5	0.82	1.15
10	0935	13.0	11.0	11.0	0.82	1.43
11	0930	14.0	11.0	12.0	0.79	1.33
12	0910	15.0	12.0	12.5	0.77	1.34
13	0900	16.0	13.0	13.0	0.77	1.17
14	1010	14.0	12.0	12.5	0.79	1.34
15	1005	13.5	11.0	11.5	0.77	1.27
16	0900	12.5	11.0	11.0	0.75	1.34
17	0925	12.5	11.0	10.5	0.73	1.04
18	0900	13.0	11.0	11.0	0.75	0.99
19	0935	15.0	11.0	12.5	0.85	1.01
20	0905	13.0	12.5	12.5	0.71	1.12
21	0920	16.0	12.0	13.5	0.71	1.17
22	0840	15.5	13.5	13.5	0.65	1.14
23	0955	15.0	12.5	13.0	0.71	1.19
24	0840	15.0	11.5	12.0	0.69	NO
25	0915	13.5	11.5	12.0	0.75	ND
26	1010	15.0	11.5	13.0	0.71	1.03
27	1010	14.5	12.0	12.5	0.71	1.14
28	0905	14.5	11.0	13.5	0.69	1.04
29	0800	14.5	12.0	12.0	0.69	1.09
30	0845	13.0	11.0	11.5	0.66	0.97
31	0920	13.0	11.0	12.0	0.69	0.94

Streamflow (discharge) measurements in m^3/sec

APPENDIX II

August

STREAM TEMPERATURES AND DISCHARGE CECIL CREEK, 1980

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge
1	0900	13.5	11.5	12.0	0.71	1.24
2	0905	13.0	11.5	12.0	0.71	0.98
3	0940	15.0	11.5	12.0	0.68	0.73
4	1025	14.0	11.0	12.0	0.68	0.59
5	0915	15.5	11.0	11.5	0.66	0.99
6	0930	16.0	11.0	12.75	0.66	1.03
7	0910	15.0	11.0	11.0	0.64	0.96
8	1200	15.0	10.5	13.0	0.66	0.74
9	0920	15.0	11.5	12.0	0.60	ND
10	2130	17.0	12.5	15.0	0.60	0.89
11	0920	16.0	13.0	13.5	0.62	ND
12	1430	16.5	12.5	15.0	0.60	0.66
13	0925	17.0	13.0	13.0	0.61	0.86
14	0835	16.0	11.0	11.0	0.60	0.61
15	1005	14.0	11.5	12.0	0.64	0.72
16	1000	13.0	10.5	11.0	0.64	0.72
17	1345	14.0	12.0	14.0	0.68	ND
18	0930	14.5	11.0	11.0	0.64	0.90
19	1035	15.0	11.0	12.0	0.64	0.94
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

Date	Temperature (°C)				Streamflow	
	time	max	min	prsnt	level	discharge

Streamflow (discharge) measurements in m^3/sec

APPENDIX III

WATER QUALITY DATA

WATER SAMPLES TAKEN DURING STORM FRESHETS

VLAUES EXCEEDING RECOMMENDED LEVELS ARE CIRCLED.

Stream: KITIMAT RIVER Location: HAISLA BRIDGE

Parameter	May 29	June 6	July 5	Aug 10	Aug 11	Aug 17
Temperature	7.0	9.0	8.25	14	14	9.0
Time	1055	0040	1245	1555	0000	1100
pH - lab	7.0	7.1	7.3	6.9	7.1	7.2
Total Alk ($CaCO_3$)	9.26	12.1	9.09	8.59	12.2	15.2
Sulfate (SO_4)	1.9	2.2	2.1	1.7	2.1	2.6	
	<0.50	1.11	0.72	0.61	0.50	0.77
Total PO_4	0.015	0.0123	0.0673	0.0202	0.0168	0.376
Nitrite	<0.0050	<0.0050	<0.0050	<0.0050	<0.00050	<0.00050
Nitrate	0.046	0.0208	0.0282	0.0325	0.0158	0.0303
Ammonia (total)	0.0122	0.010	0.0050	0.0052	0.0072	0.0110
Silica (Si)	0.95	1.10	1.22	0.80	1.25	2.91
Turbidity (FTU)	4.7	6.6	20	5.6	5.6	70
Conductivity (mhos/cm)	24.8	33.5	23.5	21.3	30.8	35.2
Diss. Conductivity (mhos/cm)	-	-	-	-		
Hardness ($CaCO_3$)	(11.1)	(13.9)	(14.8)	(10.2)	(13.2)	(16.7)
Dissolved As	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dissolved Ba	0.0096				0.01	0.0148
Dissolved Cd	<0.0010	<0.01	<0.01	<0.01	<0.01	<0.01
Dissolved Co	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Cr	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Cu	<0.0010	<0.01	<0.01	<0.01	<0.01	<0.01
Dissolved Hg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dissolved Mn	0.007	0.0163	0.526	0.0185	0.0068	0.0065
Dissolved Mo	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dissolved Ni	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Dissolved P	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Dissolved Pb	<0.0010	<0.08	<0.08	<0.08	<0.08	<0.08
Dissolved Sb	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Dissolved Se	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dissolved Sn	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dissolved Sr	0.0215	0.0226	0.0251	0.0182	0.02	0.0229
Dissolved Ti	<0.0085	<0.0241	<0.0734	<0.0241	<0.0085	<0.0132
Dissolved V	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Zn	0.0018	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Al	(0.127)	(0.397)	(1.6)	(0.654)	(<0.09)	(0.266)
Dissolved Fe	0.113	0.452	(1.74)	0.639	0.046	0.213
Dissolved Si	0.91	1.84	3.32	1.52	1.2	1.51
Dissolved Ca	3.86	4.64	4.2	3.23	4.68	5.94
Dissolved Mg	0.351	0.561	1.04	0.524	0.371	0.448
Dissolved Na	0.851	1.03	0.753	0.596	0.74	0.597
Dissolved K	0.334	0.525	0.566	0.326	0.410	0.470
Filterable Residues	17	25	18	16	20	27
Non-Filterable Residues	24	15	(97)	(38)	23	(357)

Samples were frozen prior to Analysis

Values are mg/L unless otherwise stated.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
7.2	6.5-8.5	< 5.0;<9.0	
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	<0.002[1]/<0.005[2]	0.080	[1]incubation/[2]rearing (un-ionized)
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	<0.050- <0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	< 0.010- <0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
<0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft water
		50	
70-400	<2,000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

Analysis after Shepherd (in prep).

APPENDIX III
WATER QUALITY DATA
WATER SAMPLES TAKEN DURING STORM FRESHETS
VALUES EXCEEDING RECOMMENDED LEVELS ARE CIRCLED

Stream: Kitimat River Location: HAISLA BRIDGE

Parameter	April 7	April 13	April 11	May 6	May 12	May 18
Temperature	6820	1130	1230	-	0840	1215
Time	3.5	4.0	3.5	3.5	5.5	-
pH - lab	7.0	7.1	6.9	7.1	7.0	6.9
Total Alk ($CaCO_3$)	12.5	13.3	14.4	8.87	9.76	11.3
Sulfate (So_4)	5.50	4.30	5.35	3.0	3.0	3.55
	1.27	0.94	1.22	0.95	0.59	0.59
Total PO_4	0.0242	0.0752	0.0128	0.318	0.111	0.0839
Nitrite	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050
Nitrate	0.112	0.115	0.137	0.132	0.127	0.154
Ammonia(total)	0.0071	0.0041	0.0068	0.0095	0.0050	0.0039
Silica (Si)	0.091	1.04	1.17	1.23	1.13	1.19
Turbidity (FTU)	10	22	3.4	45	34	23
Conductivity (mhos/cm)	40.5	34.2	44.3	27.9	24.3	29.7
Diff Conductivity (mhos/cm)	Nil	Nil	Nil	Nil	Nil	Nil
Hardness ($CaCO_3$)	(16.1)	(14.4)	(18.1)	(16.5)	(11.7)	(15.9)
Dissolved As	<0.15	< 0.15	< 0.15	<0.15	< 0.15	< 0.15
Dissolved Ba	0.0135	0.0078	0.0133	0.0374	0.015	0.0258
Dissolved Cd	<0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01
Dissolved Co	<0.015	< 0.015	< 0.015	<0.015	< 0.015	< 0.015
Dissolved Cr	<0.015	< 0.015	< 0.015	<0.015	< 0.015	< 0.015
Dissolved Cu	<0.01	< 0.01	< 0.01	<0.01	< 0.01	< 0.01
Dissolved Hg	<0.1	< 0.1	< 0.1	<0.1	< 0.1	< 0.1
Dissolved Mn	0.0186	0.0139	0.0156	0.0664	0.018	0.0443
Dissolved Mo	<0.15	< 0.15	< 0.15	<0.15	< 0.15	< 0.15
Dissolved Ni	<0.08	< 0.08	< 0.08	<0.08	< 0.08	< 0.08
Dissolved P	<0.3	< 0.3	< 0.3	<0.36	< 0.3	< 0.30
Dissolved Pb	<0.08	< 0.08	< 0.08	<0.08	< 0.08	< 0.08
Dissolved Sb	<0.08	< 0.08	< 0.08	<0.08	< 0.08	< 0.08
Dissolved Se	<0.15	< 0.15	< 0.15	<0.15	< 0.15	< 0.15
Dissolved Sn	<0.2	< 0.2	< 0.2	<0.2	< 0.2	< 0.2
Dissolved Sr	0.0267	0.0248	0.0298	0.0248	0.0214	0.0276
Dissolved Ti	0.0085	0.0104	0.0085	0.0248	0.0188	0.0263
Dissolved V	<0.05	< 0.05	<0.05	<0.05	< 0.05	< 0.05
Dissolved Zn	<0.02	< 0.02	<0.02	<0.02	< 0.02	< 0.02
Dissolved Al	(0.222)	(0.113)	(0.144)	(1.51)	(0.392)	(0.773)
Dissolved Fe	0.238	0.146	0.196	(1.03)	0.316	0.708
Dissolved Si	0.67	1.05	0.51	2.13	1.35	1.63
Dissolved Ca	5.54	4.9	6.28	5.68	4.0	5.39
Dissolved Mg	0.56	0.523	0.599	0.572	0.417	0.601
Dissolved Na	1.6	1.24	1.71	1.14	0.687	0.872
Dissolved K	0.473	0.445	0.514	0.439	0.348	0.374
Settlerable Residues	33	31	28	30	21	24
Non Fulterable Residues	(26)	(83)	17	(308)	(144)	85

[1] Samples were frozen prior to Analysis
Values are mg/L unless otherwise noted.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
	< 2.0-3.0;<18.0-25.0		
7.2	6.5-8.5	< 5.0;<9.0	
	6.0-8.0		
100 %			
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	< 0.002[1]/<0.005[2](un-ionized)	0.080	[1]incubation/[2]rearing
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	< 0.050-<0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	< 0.010-<0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
< 0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft water
		50	
70-400	<2,000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

APPENDIX III

WATER QUALITY DATA

RESULTS OF MONTHLY SAMPLING. VALUES EXCEEDING RECOMMENDED LEVELS ARE CIRCLED.

Stream: Kitimat River Location: Haisla Bridge

Parameter	April 8	April 28	May 26	June 24	July 20	Aug. 19
Temperature (^{o}C)	2.75	7.0	10.5	10.0	13.5	13.0
pH - field	6.5	7.0		7.0	7.0	7.5
Dissolved O_2 (ppm)	11.0	11.0	11.0	11.0	11.0	11.0
% saturation O_2	88	90	97.5	96.5	95.5	104
pH - lab	6.6	6.8	7.0	7.0	7.0	7.0
Total Alk. ($CaCO_3$)	7.28	10.9	10.0	10.6	10.8	13.5
Sulfate (SO_4)	5.3	4.55	2.9	2.8	2.0	2.8
	1.54	0.94	0.50	1.13	0.50	0.65
Total PO_4	0.0164	0.0178	0.0085	0.0065	0.0059	0.0087
Nitrite	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
Nitrate	0.118	(0.158)	0.0736	0.0235	0.0010	0.0390
Ammonia (total)	0.0081	0.0055	0.0050	0.0050	0.0160	0.011
Silica (Si)	2.24	1.92	1.44	0.50	1.27	1.49
Turbidity (FTU)	8.3	7.7	4.3	2.6	6.3	6.1
Conductivity (µmhos/cm)	42.3	34.1	29.3	27.7	28.7	34.8
Dil. Condo (µmhos/cm)	-	Nil	-	-	-	-
Hardness ($CaCO_3$)	(16.8)	(13.7)	(12.7)	(10.8)	(12.9)	(16.1)
Dissolved As	0.15	0.15	0.15	0.15	0.15	0.15
Dissolved Ba	0.0142	0.0119	0.0093	0.0111	0.0123	0.0153
Dissolved Cd	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Dissolved Co	0.015	0.015	0.015	0.015	0.015	0.015
Dissolved Cr	0.015	0.015	0.015	0.015	0.015	0.015
Dissolved Cu	0.0019	0.0010	0.0010	0.0010	0.0010	0.0039
Dissolved Hg	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
Dissolved Mn	0.0207	0.0163	0.0096	0.0085	0.0108	0.0298
Dissolved Mo	0.15	0.15	0.15	0.15	0.15	0.15
Dissolved Ni	0.08	0.08	0.08	0.08	0.08	0.08
Dissolved P	0.3	0.3	0.3	0.3	0.3	0.3
Dissolved Pb	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Dissolved Sb	0.08	0.08	0.08	0.08	0.08	0.08
Dissolved Se	0.15	0.15	0.15	0.15	0.15	0.15
Dissolved Sn	0.2	0.2	0.2	0.2	0.2	0.2
Dissolved Sr	0.289	0.0232	0.0223	0.0220	0.0231	0.026
Dissolved Ti	0.0096	0.011	0.0085	0.0087	0.015	0.0194
Dissolved V	0.05	0.05	0.05	0.05	0.05	0.05
Dissolved Zn	0.0033	0.0026	0.0010	0.0020	0.0046	0.02
Dissolved Al	(0.344)	(0.35)	(0.194)	(0.146)	(0.276)	(0.426)
Dissolved Fe	0.414	0.392	0.216	0.165	0.270	0.427
Dissolved Si	2.53	2.04	1.76	1.68	1.83	1.82
Dissolved Cu	5.59	4.54	4.42	3.70	4.48	5.48
Dissolved Mg	0.684	0.563	0.414	0.391	0.423	0.597
Dissolved Na	1.54	0.984	0.788	0.777	1.02	0.977
Dissolved K	0.572	0.429	0.355	0.356	0.418	0.534
Filterable Residues	44	35	26	23	22	24
NFR Filterable Residues	(8)	(11)	(9)	(5)	(9)	(11)

Recommended Values from Shepherd (in prep)

Values given are mg/L unless otherwise stated.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
7.2	6.5-8.5	< 5.0;<9.0	
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	<0.002[1]/<0.005[2]	0.080	[1]incubation/[2]rearing (un-ionized).
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	<0.050-<0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	<0.010-<0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
<0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft water
		50	
70-400	<2,000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

Analysis after Shepherd (in prep).

APPENDIX III
WATER QUALITY DATA
RESULTS OF ROUTINE MONTHLY SAMPLING
VALUES EXCEEDING RECOMMENDED LEVELS ARE CIRCLED

Stream: HIRSCH CREEK Location: CROWN ZELLERBACH BRIDGE

Parameter	Apr.8	Apr.28	May 26	June 24	July 20	Aug.19
Temperature (°C)	1.5	6.5	9.0	9.25	11.5	13.0
pH - field	7.5	7.5	7.0-7.5	7.5	7.5	7.5
Dissolved O_2	12.0	11.0	12.0	11.0	11.0	10.0
% saturation O_2	98	88.5	103	95	100	94.5
pH - lab	7.1	7.4	7.2	7.2	7.1	7.2
Total Alk. ($CaCO_3$)	15.9	14.9	14.0	13.5	12.6	14.9
Sulfate (SO_4)	4.25	5.45	2.25	2.3	1.6	2.3
Cl	0.96	0.53	< 0.50	< 0.50	< 0.50	<0.50
Total PO_4	0.0074	0.0140	0.0065	< 0.0050	< 0.0050	<0.0050
Nitrite	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050
Nitrate	0.0773	0.0867	0.0436	0.0238	< 0.010	0.0281
Ammonia (total)	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050
Silica (Si)	2.14	1.73	1.23	0.50	1.11	1.39
Turbidity (FTU)	1.8	6.6	1.4	< 1.0	1.7	1.4
Conductivity (µmhos/cm)	40.3	34.4	33.5	29.7	29.8	35.6
Diil. Condo (µmhos/cm)	-	nil	-	-	-	-
Hardness ($CaCO_3$)	(18.6)	(16.7)	(15.4)	(12.5)	(13.7)	(16.5)
Dissolved As	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	<0.15
Dissolved Ba	0.0117	0.0119	0.0083	0.0084	0.0078	0.0106
Dissolved Cd	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	<0 0010
Dissolved Co	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	<0.015
Dissolved Cr	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	<0.015
Dissolved Cu	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	<0.0024
Dissolved Hg	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	<0.00020
Dissolved Mn	0.0044	0.0087	< 0.003	< 0.003	< 0.003	0.0148
Dissolved Mo	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	<0.15
Dissolved Ni	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	<0.08
Dissolved P	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.3
Dissolved Pb	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	<0.0010
Dissolved Sb	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	<0.08
Dissolved Se	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	<0.15
Dissolved Sn	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	<0.2
Dissolved Sr	0.0269	0.0236	0.0225	0.0208	0.0215	0.0252
Dissolved Ti	< 0.0085	0.0141	< 0.0085	< 0.0085	< 0.0085	<0.0085
Dissolved V	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.05
Dissolved Zn	0.0010	0.0018	0.0019	0.0010	0.0010	0.0135
Dissolved Al	(0.159)	(0.296)	(0.09)	< 0.09	< 0.09	(0.205)
Dissolved Fe	0.141	0.29	0.042	0.032	0.051	0.106
Dissolved Si	2.25	2.06	1.45	1.20	1.21	1.51
Dissolved Cu	(5.92)	(5.30)	(5.16)	(4.14)	(4.63)	(5.46)
Dissolved Mg	0.931	0.852	0.616	0.523	0.526	0.699
Dissolved Na	0.911	0.741	0.65	0.56	0.742	0.710
Dissolved K	0.572	0.514	0.408	0.539	0.392	0.486
Filterable Residues	42	32	33	22	21	23
NFilterable Residues	< 5	8	< 5	< 5	< 5	<5

Recommended Values from Shepherd 1979
Values in mg/L unless otherwise stated.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
	< 2.0-3.0;<18.0-25.0		
7.2	6.5-8.5	< 5.0;<9.0	
	6.0-8.0		
100 %			
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	< 0.002[1]/<0.005[2]	0.080	[1]incubation/[2]rearing
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	< 0.050-<0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	< 0.010-<0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
< 0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft wate
		50	
70-400	<2,000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

APPENDIX III
WATER QUALITY DATA
WATER SAMPLES TAKEN DURING STORM FRESHETS
Values exceeding recommended levels are circled.

Stream: Hirsch Creek Location: CROWN ZELLERBACH BRIDGE

Parameter	May 31	June 6	June 9	July 5	Aug.13	Aug.17
Temperature	7.0	7.5	6.0	8.75	13.0	9.0
Time	2150	0015	1155	1245	1230	1045
pH - lab	7.7	7.1	7.3	7.6	7.1	7.3
Total Alk ($CaCO_3$)	11.1	10.1	9.60	10.1	11.4	14.4
Sulfate (So_4)	1.6	1.6	1.8	1.6	2.0	2.1
(	0.50	0.50	0.50	0.50	0.50	0.50
Total PO_4	0.0097	0.0129	0.0239	0.0106	0.0470	0.0050
Nitrite	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
Nitrate	0.010	0.010	0.010	0.010	0.0301	0.0132
Ammonia (total)	0.0050	0.0065	0.0050	0.0050	0.0054	0.0050
Silica (Si)	0.87	0.77	0.78	0.84	1.09	1.15
Turbidity (FTU)	2.7	2.3	4.8	2.1	8.9	1.4
Conductivity (mhos/cm)	25.5	24.0	22.5	24.0	32.9	26.6
Diff Conductivity(mhos/cm)	Nil	Nil	Nil	Nil	Nil	Nil
Hardness ($CaCO_3$)	(10.7)	(10.5)	(10.2)	(10.9)	(12.4)	(14.6)
Dissolved As	0.15	0.15	0.15	0.15	0.15	0.15
Dissolved Ba	Standard Precipitation Problem				0.0084	0.008
Dissolved Cd	0.01	0.01	0.01	0.01	0.01	0.01
Dissolved Co	0.015	0.015	0.015	0.015	0.015	0.015
Dissolved Cr	0.015	0.015	0.015	0.015	0.015	0.015
Dissolved Cu	0.01	0.01	0.01	0.01	0.01	0.01
Dissolved Hg	0.1	0.1	0.1	0.1	0.1	0.1
Dissolved Mn	0.0037	0.008	0.0104	0.0053	0.0033	0.003
Dissolved Mo	0.15	0.15	0.15	0.15	0.15	0.15
Dissolved Ni	0.08	0.08	0.08	0.08	0.08	0.08
Dissolved P	0.3	0.3	0.3	0.3	0.3	0.3
Dissolved Pb	0.08	0.08	0.08	0.08	0.08	0.08
Dissolved Sb	0.08	0.08	0.08	0.08	0.08	0.08
Dissolved Se	0.15	0.15	0.15	0.15	0.15	0.15
Dissolved Sn	0.2	0.2	0.2	0.2	0.2	0.2
Dissolved Sr	0.0167	0.0151	0.0155	0.0137	0.0185	0.0227
Dissolved Ti	0.0085	0.0092	0.0165	0.0085	0.0085	0.0085
Dissolved V	0.05	0.05	0.05	0.05	0.05	0.05
Dissolved Zn	0.02	0.02	0.02	0.02	0.02	0.02
Dissolved Al	(0.104)	(0.188)	(0.281)	(0.138)	(0.1)	0.09
Dissolved Fe	0.11	0.211	0.302	0.164	0.089	0.01
Dissolved Si	0.89	0.97	1.15	0.96	0.97	1.11
Dissolved Ca	3.5	3.4	3.23	3.52	4.15	4.88
Dissolved Mg	0.483	0.5	0.52	0.508	0.502	0.592
Dissolved Na	0.475	0.464	0.454	0.45	0.481	0.618
Dissolved K	0.296	0.317	0.302	0.314	0.231	0.231
Filterable Residues	18	16	17	18	21	20
Non Fulterable Residues	8	12	22	10	(42)	5

" Samples were frozen prior to Analysis
= second batch of the May 12 bottles, cracked in storage.
Values are given in mg/L unless otherwise stated.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
7.2	6.5-8.5	< 5.0;<9.0	
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	<0.002[1]/<0.005[2]	0.080	[1]incubation/[2]rearing (un-ionized)
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	<0.050- <0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	<0.010- <0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
<0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft water
		50	
70-400	<2.000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

Analysis after Shepherd (in prep).

APPENDIX III

WATER QUALITY DATA

WATER SAMPLES TAKEN DURING STORM FRESHETS

Values exceeding recommended levels are circled.

Stream: HIRSCH CREEK — Location: CROWN ZELLERBACH BRIDGE

Parameter	April 13	April 19	May 6	May 12	May 12	May 29
Temperature	5.0	2.5	2.0	8.0	8.0	6.5
Time	1240	0145	1100	1935	1935	1120
pH - lab	7.2	7.2	7.2	7.2	7.1	7.2
Total Alk ($CaCO_3$)	13.3	13.5	13.9	12.4	10.3	11.6
Sulfate (SO_4)	3.30	3.15	2.8	2.2	1.8	1.7
Cl	0.53	0.50	<0.50	<0.50	-	0.50
Total PO_4	0.0277	0.0482	0.0287	0.0213	-	<0.0050
Nitrite	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate	0.0905	0.0949	0.103	0.0886	0.0743	0.024
Ammonia	0.0061	0.0099	0.0702	0.0076	0.0064	<0.0050
Silica (Si)	0.96	1.12	1.40	1.20	-	1.03
Turbidity (FTU)	8.5	18	4.2	4.0	3.6	1.7
Conductivity (mhos/cm)	31.4	30.3	33.0	28.0	23.6	27.5
Diss Conductivity (mhos/cm)	Nil	Nil	Nil	Nil	Nil	-
Hardness ($CaCO_3$)	15.5	15.2	14.8	12.8	10.9	12.8
Dissolved As	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dissolved Ba	0.0112	0.0132	0.01	0.0087	0.0074	0.0069
Dissolved Cd	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0010
Dissolved Co	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Cr	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Cu	<0.01	<0.01	<0.01	<0.01	0.028	<0.0010
Dissolved Hg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dissolved Mn	0.0067	0.0097	0.0088	0.0046	0.0039	<0.003
Dissolved Mo	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dissolved Ni	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Dissolved P	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Dissolved Pb	<0.08	<0.08	<0.08	<0.08	<0.08	<0.0010
Dissolved Sb	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Dissolved Se	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Dissolved Sn	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dissolved Sr	0.022	0.0217	0.0217	0.0184	0.0161	0.0207
Dissolved Ti	<0.0085	0.012	<0.0085	<0.0085	<0.0085	<0.0085
Dissolved V	<0.05	0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Zn	<0.02	0.02	<0.02	<0.02	<0.02	0.0015
Dissolved Al	0.171	0.271	0.108	0.108	0.1	<0.09
Dissolved Fe	0.148	0.209	0.121	0.088	0.077	0.026
Dissolved Si	0.62	0.97	0.91	0.94	0.83	0.93
Dissolved Ca	5.1	4.96	4.87	4.29	3.67	4.32
Dissolved Mg	0.68	0.681	0.65	0.517	0.433	0.489
Dissolved Na	0.785	0.763	0.774	0.543	0.459	0.705
Dissolved K	0.482	0.520	0.448	0.354	0.275	0.340
Filterable Residues	30	30	25	23	30	19
N. Filterable Residues	33	67	20	15	15	5

1 Samples were frozen prior to Analysis

The second batch of the May 12 bottles, cracked in storage.

Values are mg/L unless otherwise stated.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
7.2	6.5-8.5	< 5.0;<9.0	
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	<0.002[1]/<0.005[2]	0.080	[1]incubation/[2]rearing (un-ionized).
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	<0.050- <0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	<0.010- <0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
<0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft water
		50	
70-400	<2.000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

Analysis after Shepherd (in prep)

APPENDIX III
WATER QUALITY DATA
WATER SAMPLES TAKEN DURING STORM FRESHETS
Values exceeding recommended levels are circled

Stream: CECIL CREEK Location: Near Fyke net

Parameter	April 7	April 17
Temperature	3.5	5.5
Time	0930	1140
pH - lab	6.9	7.1
Total Alk ($CaCO_3$)	12.5	13.8
Sulfate (So_4)	3.35	3.30
Cl -	1.08	0.81
Total PO_4	0.0892	0.0320
Nitrite	<0.0050	<0.0050
Nitrate	0.114	0.101
Ammonia (total)	0.0113	0.0130
Silica (Si)	1.16	1.26
Turbidity (FTU)	3.6	4.8
Conductivity (mhos/cm)	31.2	34.2
Lab Conductivity (mhos/cm)	-	-
Hardness ($CaCO_3$)	(15.4)	(16.1)
Dissolved As	<0.15	<0.15
Dissolved Ba	0.0183	0.0134
Dissolved Cd	<0.01	<0.01
Dissolved Co	<0.015	<0.015
Dissolved Cr	<0.015	<0.015
Dissolved Cu	<0.01	<0.01
Dissolved Hg	<0.1	<0.1
Dissolved Mn	0.0348	0.0229
Dissolved Mo	<0.15	<0.15
Dissolved Ni	<0.08	<0.08
Dissolved P	<0.3	<0.3
Dissolved Pb	<0.08	<0.08
Dissolved Sb	<0.08	<0.08
Dissolved Se	<0.15	<0.15
Dissolved Sn	<0.2	<0.2
Dissolved Sr	0.0248	0.0268
Dissolved Ti	0.0138	0.0085
Dissolved V	<0.05	<0.05
Dissolved Zn	<0.02	<0.02
Dissolved Al	(0.444)	(0.231)
Dissolved Fe	0.452	0.289
Dissolved Si	0.95	0.66
Dissolved Ca	5.11	5.43
Dissolved Mg	0.652	0.629
Dissolved Na	1.18	1.19
Dissolved K	0.599	0.532
Filterable Residues	36	37
Vol. Filterable Residues	(122)	(30)

Both samples were frozen prior to analysis.
Values shown are mg/L unless otherwise stated.

ANALYSIS

Optimal Values	Recommended Values	Toxic Values	Comments
7.2	6.5-8.5	< 5.0;<9.0	
	< 17.0	400	
	< 0.050		
not detectable	< 0.0120	0.2000	
	< 0.120		
	<0.002[1]/<0.005[2]	0.080	[1]incubation/[2]rearing (un-ionized)
	< 10-60		
	1-60		
	150-2000		
	20-400		
	< 0.50	1.00	
	< 1.00		
	< 0.0004*		*in soft water
	< 0.010		
	< 0.006*		*in soft water
not detectable	< 0.00005		
	<0.050-<0.100	<15	
	< 0.01*		*96 hr LC50
	< 0.0001*		*salt water life
	<0.010-<0.030		
	< 0.001*		*96 hr LC50
	< 0.005*		*in soft water
	< 0.10	5.00	
<0.300	< 1.000*		*for fresh water life
	<10-60		
<52	4-150	300	
	<10	100	
		20[1]/500[2]	AsNaOH[1]/AsNa+soft water
		50	
70-400	<2.000		
not detectable	<[1]3.0/<[2]25.0		[1]incubation/[2]rearing

Analysis after Shepherd (in prep).

APPENDIX IV

WATER TEMPERATURES AND SALINITIES IN KITIMAT ARM, 1980

Station A: MINETTE BAY

Date	Tide			Sample						
	type	level (m)	time (pst)	time (pst)	0M T°C	0M S°/oo	2M T°C	2M S°/oo	5M T°C	5M S°/oo	
Apr. 11	LW	1.1	1623	1610	8.0	17.0	8.0	22	8.0	24.25	*
Apr. 13	HW	4.7	1140	1215	11.1	22.5	9.8	24.5	8.9	22.8	*
Apr. 20	LW	1.1	1118	1220	7.8	6.3	8.5	10.3	9.6	15.0	*
Apr. 20	HW	3.9	1750	1820	8.8	4.2	8.0	4.6	10.0	15.0	*
Apr. 27	LW	1.5	1738	1830							
Apr. 27	HW	4.1	1145	1230	8.8	1.5	9.2	4.0	9.5	4.5	*
May 7	LW	1.3	1228	1300	9.0	8.7	8.5	17.1	8.0	32.4	
May 7	HW	3.8	1910	2025	8.0	5.8	8.0	8.1	7.75	27.9	
May 21	LW	1.5	1233	1400	9.0	3.0	9.0	3.1	9.0	8.8	
June 9	LW	1.6	1603	1555	12.5	3.8	12.0	4.6	12.0	8.2	
June 9	HW	3.9	1025	1105	12.0	4.1	12.0	4.5	12.0	7.1	
June 18	LW	1.2	1110	1130	14.0	2.1	14.0	2.2	14.0	2.5	
June 18	HW	4.0	1745	1740	15.5	4.4	15.5	4.3	15.5	26.6	
July 2	LW	0.6	0953	1100	15.0	4.3	15.0	4.7	14.5	5.2	
July 2	HW	4.3	1630	1630	19.0	3.7	14.0	3.9	14.25	5.0	
July 8	LW	1.9	1548	1630	13.0	2.8	13.5	2.7	11.5	3.7	
July 8	HW	3.7	1015	1040	13.0	2.4	12.5	2.4	13.0	2.9	
July 16	LW	0.9	0948	1025	12.5	2.2	13.0	2.3	13.0	2.6	
July 16	HW	4.1	1605	1710	13.0	2.2	13.0	2.3	13.0	2.4	
July 24	LW	2.1	1623	1650	14.5	1.7	13.75	2.4	13.75	3.4	
July 30	LW	0.3	0905	0915	14.0	3.3	14.0	3.6	14.0	4.4	
Aug. 20	LW	2.4	1343	1420	15.5	4.9	14.0	7.6	14.0	13.7	
Aug. 20	HW	3.3	0830	0840	14.0	4.9	14.0	5.9	14.0	10.3	

* Measured with YSI Meter

WATER TEMPERATURES AND SALINITIES IN KITIMAT ARM, 1980

Station B: MK BAY

Date	Tide			Sample						
	type	level (m)	time (pst)	time (pst)	0M T°C	0M S°/oo	2M T°C	2M S°/oo	5M T°C	5M S°/oo
Apr. 11	LW	1.1	1623	1640	8.7	16.0	8.9	17.25	8.5	24.5 *
Apr. 13	HW	4.7	1140	1205	10.1	24.0	8.4	25.8	9.4	26.1 *
Apr. 20	LW	1.1	1118	1140	6.5	2.2	6.8	2.7	9.2	9.8 *
Apr. 20	HW	3.9	1750	1740	7.8	4.6	8.0	8.2	10.5	22.2 *
Apr. 27	LW	1.5	1738	--	N/A meter malfunction					*
Apr. 27	HW	4.1	1145	1200	10.1	7.5	10.5	14.0	11.0	13.0 *
May 7	LW	1.3	1228	1240	7.5	9.0	9.5	25.2	9.0	28.8
May 7	HW	3.8	1910	2010	8.25	6.9	8.5	16.2	8.0	34.2
May 21	LW	1.5	233	1300	9.5	5.4	9.0	3.3	11.0	19.8
June 9	LW	1.6	1603	1615	12.0	3.6	12.5	5.4	14.0	16.0
June 9	HW	3.9	1025	1050	13.0	5.1	15.0	10.6	14.5	14.4
June 18	LW	1.2	1110	1115	14.0	2.6	14.5	2.9	15.0	19.8
June 18	HW	4.0	1745	---------- too rough ----------						
July 2	LW	0.6	0953	1020	15.5	6.5	15.5	9.1	14.0	16.0
July 2	HW	4.3	1630	1645	15.0	5.5	15.5	6.4	14.75	9.1
July 8	LW	1.9	1548	1610	13.5	3.0	14.0	3.2	14.0	5.1
July 8	HW	3.7	1015	1030	13.5	3.6	14.0	4.0	14.0	5.0
July 16	LW	0.9	0948	1040	13.0	2.9	13.5	3.0	14.0	5.8
July 16	HW	4.1	1605	1650	13.0	2.6	13.5	3.0	14.0	3.8
July 24	LW	2.1	1623	1640	14.5	3.0	15.0	5.9	14.0	19.8
July 30	LW	0.3	0905	0940	14.0	4.6	14.0	4.8	14.5	15.2
Aug. 20	LW	2.4	1343	1405	15.25	13.7	15.0	17.9	14.0	22.8
Aug. 20	HW	3.3	0830	0900	13.25	6.9	15.0	17.5	15.0	19.0

* Measured with YSI Meter

WATER TEMPERATURES AND SALINITIES IN KITIMAT ARM, 1980

Station C: CENTRAL CHANNEL

Date	Tide			Sample						
	type	level (m)	time (pst)	time (pst)	0M T°C	0M S°/oo	2M T°C	2M S°/oo	5M T°C	5M S°/oo
Apr. 11	LW	1.1	1623	1650	7.0	9.0	8.0	18.0	8.25	24.5 *
Apr. 13	HW	4.7	1140	1150	10.2	20.1	9.8	22.8	9.8	23.2 *
Apr. 20	LW	1.1	1118	1130	6.9	3.5	7.1	4.4	10.1	9.2 *
Apr. 20	HW	3.9	1750	1730	8.0	6.0	8.3	8.6	10.8	23.1 *
Apr. 27	LW	1.5	1738	1800	9.0	3.8	9.0	7.2	9.5	22.5 *
Apr. 27	HW	4.1	1145	1150	10.0	5.5	10.5	12.0	10.8	21.0 *
May 7	LW	1.3	1228	1230	8.0	3.6	8.5	21.6	9.0	28.8
May 7	HW	3.8	1910	2005	8.0	9.9	8.5	25.2	8.5	31.5
May 21	LW	1.5	1233	1245	8.5	1.7	8.0	3.8	11.0	20.7
June 9	LW	1.6	1603	1630	12.0	3.5	12.0	3.7	14.5	18.0
June 9	HW	3.9	1025	1040	14.5	7.5	14.5	9.1	15.0	13.7
June 18	LW	1.2	1110	1105	14.0	2.4	14.0	2.6	14.5	16.0
June 18	HW	4.0	1745							
July 2	LW	0.6	0953	1015	13.5	2.4	15.0	6.4	14.5	16.0
July 2	HW	4.3	1630	1650	15.5	7.1	15.5	7.2	15.0	8.4
July 8	LW	1.9	1548	1535	14.5	4.9	14.5	4.9	15.0	5.5
July 8	HW	3.7	1015	1020	13.5	4.1	14.0	4.3	14.0	7.1
July 16	LW	0.9	0948	1100	12.5	2.8	13.5	2.7	14.0	5.9
July 16	HW	4.1	1605	1645	14.0	4.2	14.0	4.3	14.5	5.6
July 24	LW	2.1	1623	1635	14.5	3.3	14.75	2.9	15.0	17.5
July 30	LW	0.3	0905	0950	13.5	3.3	13.5	3.6	14.0	16.7
Aug. 20	LW	2.4	1343	1355	15.0	12.9	15.5	16.7	14.5	21.7
Aug. 20	HW	3.3	0830	0910	13.0	5.0	15.0	16.7	15.0	19.8

* Measured with YSI Meter

WATER TEMPERATURES AND SALINITIES IN KITIMAT ARM, 1980

Station D: ADJACENT TO RIVTOW DOCK
(MOON BAY)

Date	Tide			Sample						
	type	level (m)	time (pst)	time (pst)	0M T°C	0M S °/oo	2M T°C	2M S°/oo	5M T°C	5M S °/oo	
Apr. 11	LW	1.1	1623	1700	8.0	16.0	8.0	18.9	8.2	24.5	*
Apr. 13	HW	4.7	1140	1135	9.0	19.0	9.25	24.0	9.0	25.2	*
Apr. 20	LW	1.1	1118	1100	7.0	3.2	6.5	7.1	10.0	18.8	*
Apr. 20	HW	3.9	1750	1715	8.0	5.8	9.1	16.2	10.5	20.0	*
Apr. 27	LW	1.5	1738	1745	7.6	2.8	8.5	5.5	9.5	16.8	*
Apr. 27	HW	4.1	1145	1135	8.5	4.0	9.5	8.8	10.1	12.5	*
May 7	LW	1.3	1228	1215	9.5	3.7	8.5	18.9	9.0	28.8	
May 7	HW	3.8	1910	1950	8.5	10.8	8.5	27.0	8.5	32.4	
May 21	LW	1.5	1233	1230	9.5	3.2	9.5	3.2	11.0	16.2	
June 9	LW	1.6	1603	1640	12.0	3.2	12.5	3.6	15.0	12.2	
June 9	HW	3.9	1025	1025	13.5	5.6	15.0	9.1	15.5	14.4	
June 18	LW	1.2	1110	1055	15.0	3.6	15.0	3.6	14.5	10.6	
June 18	HW	4.0	1745	1815	16.5	5.9	16.0	6.9	16.0	31.9	
July 2	LW	0.6	0953	1005	14.0	2.8	14.0	3.1	15.0	16.0	
July 2	HW	4.3	1630	1657	15.5	6.4	15.5	10.6	14.5	13.7	
July 8	LW	1.9	1548	1545	14.5	3.9	14.5	4.0	13.5	4.7	
July 8	HW	3.7	1015	1015	13.5	4.6	14.0	5.3	13.5	6.3	
July 16	LW	0.9	0948	1110	13.5	3.4	13.5	3.4	13.5	5.2	
July 16	HW	4.1	1605	1630	15.0	5.2	15.0	5.4	14.5	6.2	
July 24	LW	2.1	1623	1630	14.5	2.4	14.75	3.3	13.75	20.5	
July 30	LW	0.3	0905	1000	14.0	10.6	14.0	11.4	13.0	22.0	
Aug. 20	LW	2.4	1343	1345	14.75	8.4	15.25	16.0	15.0	19.4	
Aug. 20	HW	3.3	0830	0925	13.25	5.1	15.0	16.7	14.75	18.2	

* Measured with YSI Meter

APPENDIX V
KITIMAT RIVER INCLINED PLANE TRAP
CATCH RECORD

Location: KITIMAT RIVER

Gear Type: 2x3 INCLINE PLANE TRAP

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout	Rainbow Trout (*=smolt)	Cutthroat Trout (*=smolt)	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
April															
8	164	1821	104	1	103	36	0	0	0	0	0	0	2	2	2
9	87	846	16	0	9	29	0	0	0	0	2	0	3	9	4
10	38	545	45	2	14	20	0	0	1	0	0	0	3	0	0
11	93	1046	98	4	9	37	0	1	1	0	1	0	3	2	0
11day	30	65	5	0	2	1	0	0	0	0	0	0	0	0	0
12	82	861	27	2	5	25	0	0	42	0	0	0	1	4	0
14	30	924	70	6	31	53	0	0	266	0	6	0	3	12	0
15	33	143	17	0	1	2	0	0	22	0	0	0	0	0	0
15day	0	8	0	0	0	7	0	0	0	0	0	0	0	0	0
16	12	407	7	0	3	46	0	0	73	0	1	0	6	3	0
17	11	492	39	0	5	51	0	1	76	0	1	0	4	3	0
18	3	181	12	0	1	28	0	0	40	0	2	0	3	3	0
21	5	83	11	3	3	35	0	0	4	0	2	0	2	1	0
22	6	97	17	2	2	30	0	0	11	0	1	0	1	0	0
23	26	213	19	13	8	63	0	0	11	1	1	0	2	0	0
24	8	63	10	7	1	29	0	0	8	1	1	0	3	1	0
25	6	25	4	5	2	52	0	0	3	0	0	0	4	0	0
25day	5	2	2	0	0	0	0	0	1	0	0	0	0	0	0
27	3	39	18	5	1	61	0	0	11	1	0	0	9	1	0
29	1	12	6	5	0	60	0	0	1	0	0	0	5	0	0
30	1	6	7	1	0	17	0	0	1	0	0	0	11	0	1
May															
1	8	13	0	3	0	32	0	0	0	1	0	0	8	0	0
4	0	4	4	3	0	23	0	0	11	0	1	0	43	1	0
5	0	6	1	5	8	1	0	0	6	1	0	0	6	1	0
6	1	10	4	0	1	1	0	0	5	0	0	0	1	1	0
8	0	2	2	3	2	15	0	0	19	0	0	0	2	1	0
10	0	13	15	4	4	25	0	0	8+1*	0	1	0	2	2	0
17	0	1	4	0	1	13	0	0	0	1	1	0	3	0	0
18	1	3	10	1	4	13	0	0	8	1	0	0	1	2	0
19	0	1	1	0	0	3	0	0	1	1	1	0	0	2	0
21	2	0	0	1	0	1	0	0	3	0	0	0	0	1	0
23	0	0	2	0	1	4	0	0	0	1	0	0	0	2	0
25	0	0	3	0	0	3	0	1	2	0	1	0	0	1	0
27	0	1	2	0	2	5	0	0	2	1	0	0	1	2	0
29	0	1	5	1	14	9	0	0	8	1	0	0	1	1	0
31	0	0	5	2	10	5	0	0	1	0	0	0	1	0	0
June															
2	0	0	0	0	18	1	0	0	3	2	0	0	0	0	0
4	0	1	2	0	33	0	0	0	1+ 1*	1	0	0	1	1	0
6	0	0	2	0	87	2	0	0	2	1	0	0	1	1	0
7	0	0	0	0	39	4	0	0	0	4	1	0	1	0	0
8	0	0	2	0	62	4	0	0	1	0	0	0	1	0	0
9	0	0	2	0	59	1	0	0	0	2	0	0	0	0	0
10	0	0	7	0	177	0	0	0	3	3	2	0	1	4	0

Location: KITIMAT RIVER (continued)

Gear Type: 2X3 INCLINE PLANE TRAP

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D Trout	Rainbow Trout	Cutthroat Trout (*=smolt)	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
June															
11	0	0	3	0	48	3	0	0	1	1	0	0	0	1	0
12	0	0	3	0	64	4	0	1	3	0	0	0	0	0	0
13	0	0	2	0	66	9	0	0	1	2	0	0	0	1	0
14	0	0	4	0	80	4	0	1	4	5	0	0	0	1	0
15	0	0	2	0	66	5	0	0	0	0	0	0	0	0	0
16	0	0	1	0	67	3	0	0	0	2	0	0	0	2	0
17	0	0	0	0	37	3	0	0	0	1	0	0	0	3	0
18	0	0	2	0	22	3	0	0	5	0	0	0	0	0	0
19	0	0	3	0	8	1	0	0	2	0	0	0	0	0	0
20	0	0	0	0	14	2	0	0	4	0	0	0	0	4	0
20day	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0
21	0	0	0	0	28	5	0	0	3	0	1	0	0	1	0
22	0	0	0	0	25	5	0	0	0	0	0	0	0	0	0
24	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0
25	0	0	0	0	12	5	0	0	4+ 1*	1	0	0	0	13	0
26	0	0	2	0	6	0	0	1	2	3	0	0	0	0	0
28	0	0	2	0	25	0	0	1	0	0	0	0	0	0	0
30	0	0	1	0	0	0	0	1	0	0	0	0	0	15	0
30day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July															
2	0	0	0	13	0	0	0	0	0	0	0	0	0	1	0
4	0	1#	1	0	11	0	0	1	0	2	0	0	0	0	0
5	0	0	4	0	405	0	0	0	2	0	0	0	0	3	0
6	0	1#	2	0	134	2	0	0	0	0	1	0	0	1	0
6day	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0
7	0	0	4	0	24	0	0	0	0	0	0	0	0	0	0
8	0	0	1	0	9	0	0	0	0	0	0	0	0	1	0
9	0	0	2	0	4	2	0	0	0	1	0	0	1	0	0
10	0	0	3	0	13	1	0	0	0	0	0	0	0	0	0
11	0	0	1	0	31	5	0	1	0	0	1	0	10	0	0
12	0	1#	1	0	11	4	0	1	0	0	0	0	1	1	0
14	0	1#	0	0	8	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	6	1	0	0	0	0	0	0	1	0	0
18	0	0	0	0	1	1	0	0	4	0	0	0	0	0	0
18	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0
20	0	0	0	0	1	0	5	0	0	0	0	0	0	0	0
22	0	2#	0	0	9	0	4	0	0	0	0	0	2	1	0
24	0	0	0	0	5	0	3	0	0	0	0	0	0	0	0
24day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
27	0	0	0	0	4	1	5	0	0	0	0	0	0	0	0
29	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
31	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
31day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

= possible sockeye.

Location: KITIMAT RIVER (continued)

Gear Type: 2X3 INCLINE PLANE TRAP

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D Trout	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
August															
2	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0
4	0	0	0	0	2	0	8	0	0	0	1	0	0	1	0
8	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
10	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0
12	0	0	2	0	1	0	5	0	0	0	0	0	1	1	0
14	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
16	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	2	0	2	0	0	0	0	0	7	5	0

APPENDIX V
KITIMAT INCLINED PLANE TRAP
TRAP EFFICIENCY

Location : KITIMAT RIVER

Gear Type : 2x3 IPT
Species & Stage : Chum

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
8	1074	846	20	545	1	1046	3	2437	24	104834	69335	159156	43.0	Mean= 53.2 X
14	818	143	12	0	0	0	0	143	12	9072	5361	16380	63.4	
17	858	181	2	-	-	-	-	181	2					
23	172	63	0	25	0	2	0	90	0					
30	49	13	0	-	-	-	-	13	0					

Location : KITIMAT RIVER (cont'd.)

Gear Type 2x3 IPT
Species & Stage : Pink

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
8	156	87	3	38	0	93	0	87	3					
14	23	33	4	12	0	11	0	33	4	163	73	408	4.94x	
17	19	3	0	-	-	-	-	3	0					
23	13	8	0	6	0	5	0	19	0					

Location : KITIMAT RIVER (cont'd.)

Gear Type : 2x3 IPT
Species & Stage : Chinook Presmolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April 14	6	0	0	0	0	0	0	0	0					

Location : KITIMAT RIVER (cont'd.)

Gear Type : 2x3 IPT
Species & Stage : Chinook Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
8	103	16	0	45	0	98	1	159	1					
14	63	17	0	7	0	39	0	63	0					
17	44	12	0	0	0	0	0	12	0					
23	31	10	0	4	0	2	0	16	0					
30	24	0	0	-	-	-	-	0	0					
July														
7	4	1	0	2	0	3	0	6	0					

Location : KITIMAT RIVER (cont'd.)

Gear Type : 2x3 IPT
Species & Stage : Coho Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
8	127	9	1	14	0	9	0	9	1					
14	31	1	0	3	0	5	0	9	0					
17	7	1	0	-	-	-	-	1	0					
30	1	0	0	-	-	-	-	0	0					
June														
12	300	66	2	80	0	66	0	66	2					
July														
7	505	10	4	4	1	13	0	14	5	1,265	539	1,991	83.9x	

Location : KITIMAT RIVER (cont'd.)

Gear Type 2x3 IPT
Species & Stage : Coho Presmolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
14	50	2	0	46	2	-	-	48	2					
17	23	28	1	-	-	-	-	28	1					
23	12	29	1	52	0	-	-	29	1					
30	91	32	2	-	-	-	-	32	2					

APPENDIX V
KITIMAT RIVER INCLINED PLANE TRAP
FRY SAMPLING

Location: KITIMAT RIVER

Gear Type: 2x3 IPT
Species & Stage: Pink Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
9		40	34.4 ±2.4	29.0-39.0	0.24 ±0.03	0.13-0.29	1.810	
12		50	35.0 ±1.4	29.5-37.5	0.23 ±0.03	0.14-0.29	1.751	
18		3	34.2 ±0.8	33.5-35.0	0.25 ±0.04	0.22-0.29	1.842	
22		12	34.6 ±1.4	32.0-36.5	0.22 ±0.03	0.17-0.25	1.887	
27		2	35.8 ±1.8	34.5-37.0	0.22 ±0.06	0.18-0.26	1.686	
May								
18-21		3	33.5 ±0.9	32.5-34.0	0.21 ±0.02	0.20-0.23	1.774	

Location : KITIMAT RIVER (cont'd.)

Gear Type : 2x3 IPT
Species & Stage: Cutthroat Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
14	228	22	0	73	0	76	0	171	0					
17	144	40	1	-	-	-	-	40	1					
23	17	8	0	3	0	1	0	12	0					
30	1	0	0	-	-	-	-	0	0					
June														
12	2	1	0	4	0	-	-	5	0					
July														
7	2	0	0	0	0	-	-	0	0					

Gear Type: 2x3 Incline Plane Trap
Species & Stage: CHUM FRY

Location: KITIMAT RIVER (continued)

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
8		50	40.5 ±2.2	36.0-47.5	0.42 ± 0.08	0.25-0.66	1.849	
12		50	39.8 ±2.1	36.0-45.0	0.38 ± 0.07	0.29-0.65	1.820	
18		50	39.9 ±1.7	36.5-43.0	0.37 ± 0.06	0.25-0.49	1.799	
22		48	41.0 ±2.4	36.0-48.5	0.39 ± 0.07	0.29-0.63	1.782	
27		32	40.3 ±2.30	35.5-48.0	0.38 ± 0.09	0.21-0.74	1.797	
May								
4		4	40.9 ±3.5	36.5-45	0.48 ± 0.13	0.35-0.66	1.914	
8		2	39.3 ±2.8	37.5-41	0.41 ± 0.08	0.35-0.46	1.890	
17-18		2	42.5 ±4.9	39.0-46.0	0.51 ± 0.20	0.37-0.65	1.880	

Location:
KITIMAT RIVER (continued)

Gear Type: 2x3 IPT
Species & Stage: CHINOOK FRY

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
9	0+	16	39.5 ±4.4	29.0-44.5	0.43± 0.13	0.19-0.50	1.91	
12	0+	19	40.4 ±1.6	36.5-43	0.47± 0.07	0.34-0.54	1.92	
18	0+	12	40.6 ±2.0	35.5-41.5	0.49± 0.10	0.21-0.62	1.94	
22	0+	33	41.6 ±1.7	36.5-44.5	0.49± 0.07	0.30-0.65	1.89	
27	0+	18	41.2 ±1.4	39.0-44.0	0.48± 0.08	0.33-0.69	1.90	
May								
4	0+	4	40.9 ±1.4	39.5-42.0	0.50± 0.08	0.43-0.61	1.94	
8	0+	5	39.2 ±1.8	37.0-41.5	0.44± 0.07	0.35-0.54	1.94	
17	0+	4	40.9 ±2.0	38.5-43.0	0.50± 0.07	0.41-0.56	1.94	
18	0+	7	41.4 ±1.6	39.5-44.0	0.53± 0.07	0.45-0.65	1.95	
25	0+	3	40.2 ±1.0	39.0 41.0	0.45± 0.10	0.35-0.54	1.90	
29	0+	4	40.6 ±2.5	38.0-44.0	0.58± 0.12	0.47-0.72	2.05	
June								
6-10	0+	7	47.1 ±5.34	39.0-53.0	0.98± 0.47	0.42-1.57	2.11	
13-14	0+	5	5.08 ±9.37	41.5-62.0	1.36± 0.82	0.64-2.29	2.18	
16-18	0+	3	60.0 11.53	47.0-69.0	2.17± 1.30	0.72-3.26	2.16	
28	0+	2	58.3 ±3.2	56.0-60.5	1.96± 0.29	1.75-2.16	2.15	
July								
4-7	0+	10	51.9 ±5.8	43.0-59.0	1.33± 0.39	0.73-1.94	2.12	
8-12	0+	8	55.9 ±6.5	47.5-66.5	1.73± 0.47	1.05-2.32	2.15	
18	0+	1	62.0	-	2.60	-	2.21	
August								
2	0+	1	62.0	-	2.50	-	2.19	
12	0+	2	81.5 ±0.7	81.0-82.0	6.27 ± 0.25	6.09-6.45	2.26	Stage 2

Location:
KITIMAT RIVER (continued)

Gear Type: 2x3 IPT
Species & Stage: CHINOOK SMOLTS

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
8-12	1+	2	83.0 ± 17.0	71.0-95.0	6.46 ± 3.37	4.07-8.84	2.24	
18-21	1+	3	80.8 ± 10.8	68.5-88.5	5.26 ± 1.47	3.67-6.58	2.15	
26	1+	5	86.0 ± 7.4	78.0-94.5	6.30 ± 1.97	4.26-8.77	2.14	
27	1+	5	84.3 ± 10.5	76.5-102.0	6.02 ± 2.35	4.15-9.90	1.19	
May								
5	1+	5	72.9 ± 6.6	62.5-8.05	4.68 ± 1.08	3.47-6.27	2.29	
8	1+	3	83.8 ± 3.5	80.0-87.0	6.27 ± 0.30	5.95-6.54	2.20	Stage 2
10	1+	4	75.6 ± 5.9	68.0-81.0	4.21 ± 1.08	2.92-5.21	2.14	
18-21	1+	2	82.8 ± 0.4	82.5-83.0	5.86 ± 0.63	5.41-6.30	2.18	
29-31	1+	3	76.0 ± 10.0	64.5-82.5	4.55 ± 1.61	2.70-5.66	2.18	

Location: KITIMAT RIVER (continued)

Gear Type: 2x3INCLINE PLANE TRAP
Species & Stage: COHO FRY

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
9-12		7	37.3 ±5.6	28.5-43.5	0.37 ± 0.16	0.18-0.56	1.92	
18		1	34.5	-	0.25	-	1.83	
22		5	40.7 ±2.9	36.0-43.5	0.43 ± 0.07	0.33-0.50	1.85	
27		1	35.0	-	0.31	-	1.93	
May								
8		1	37.0	-	0.43	-	2.04	Stage 3
17-18		5	34.5 ±1.5	32.0-36.0	0.29 ± 0.02	0.28-0.32	1.92	
29		14	34.9 ±1.0	32.5-36.5	0.32 ± 0.04	0.25-0.43	1.96	
June								
2		18	34.6 ±1.7	32.0-37.0	0.33 ± 0.06	0.24-0.45	1.99	
6		50	34.5 ±1.3	31.5-37.0	0.33 ± 0.05	0.22-0.45	2.00	
10		50	34.4 ±1.4	31.5-37.0	0.32 ± 0.05	0.23-0.45	1.99	
14		50	35.0 ±1.6	32.5-38.5	0.35 ± 0.05	0.19-0.45	2.01	
18		21	34.6 ±1.2	32.0-37.0	0.32 ± 0.03	0.26-0.40	1.98	
22		25	34.5 ±1.0	32.5-36.5	0.27 ± 0.03	0.22-0.34	1.87	
26		3	35.3 ±0.6	35.0-36.0	0.32 ± 0.00	0.32-0.32	1.94	
28		25	34.8 ±1.3	32.0-37.0	0.33 ± 0.05	0.25-0.42	1.99	
July								
2		8	35.7 ±1.3	33.5-38.0	0.34 ± 0.06	0.25-0.47	1.96	
6		42	36.3 ±1.6	32.5-38.5	0.36 ± 0.06	0.23-0.50	1.96	
9		4	34.2 ±1.3	33.0-36.0	0.30 ± 0.05	0.26-0.35	1.96	
11		22	35.1 ±2.2	30.5-40.5	0.34 ± 0.09	0.21-0.62	1.99	
14		7	34.4 ±1.9	31.5-36.5	0.31 ± 0.07	0.21-0.40	1.97	
18-20		2	34.3 ±1.77	33.0-35.5	0.29 ± 0.08	0.23-0.34	1.93	
24		5	41.9 ±6.22	39.0-53.0	0.71 ± 0.41	0.42-1.43	2.13	
27		4	38.3 ±2.4	35.0-40.5	0.56 ± 0.14	0.36-0.68	2.15	
29-31		2	38.5 ±0.7	38.0-39.0	0.47 ± 0.06	0.43-0.51	2.02	
August		2	37.2 ±1.1	36.5-38.0	0.45 ± 0.08	0.39-0.51	2.06	
4		3	40.0 ±2.0	38.0-42.0	0.60 ± 0.17	0.42-0.76	2.10	
6		2	50.3 ±5.3	46.5-54.0	1.25 ± 0.36	0.99-1.50	2.14	
12		1	56.0	-	-	-		
14		1	38.5	-	0.55	-	2.13	
18		2	41.3 ±0.4	41.0-41.5	0.65 ± 0.10	0.58-0.72	2.10	

Location: KITIMAT RIVER (continued)

Gear Type: 2x3 INCLINE PLANE TRAP
Species & Stage: COHO SMOLT

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
8	1+	28	79.6 ± 9.43	61.0- 99.0	5.15± 1.76	2.97- 9.55	2.16	
	2+	8	98.1 ±16.81	80.5-123.5	10.24± 5.59	4.83-19.18	2.21	
12	1+	20	81.0 ± 9.53	68.5- 97.0	5.29± 1.79	2.97- 8.80	2.15	
	2+	6	89.6 ± 7.53	82.0-102.0	6.67± 2.08	4.30-10.09	2.10	
18	1+	23	80.5 ±11.45	60.5-106.0	5.11± 1.44	2.26- 7.78	2.14	
	2+	4	94.8 ±13.15	85.0-114.0	8.79± 3.35	6.31-13.67	2.18	
22	1+	28	84.4 ±11.18	65.0-110.0	5.79± 2.12	2.64-10.53	2.13	
	2+	6	86.8 ± 7.59	78.0- 98.0	6.37± 1.94	4.51- 9.56	2.14	
27	1+	18	84.19±12.45	68.0-112.0	5.88± 2.37	2.97-10.2	2.14	
	2+	2	83.75± 7.42	78.5- 89.0	7.18± 0.51	6.82- 7.54	2.26	
May								
5	1+	4	83.13±12.59	66.0- 94.0	5.69± 2.02	3.04- 7.56	2.15	
	2+	4	11.0 ±18.0	87.0-130.0	11.92± 5.13	5.31-12.90	2.07	
17	1+	13	70.0 ±10.5	50.0- 90.5	3.49± 1.50	1.22- 6.64	2.17	
18	1+	14	71.2 ±11.4	48.0- 88.0	3.66± 1.66	1.02- 6.55	2.16	
21	1+	1	86.0 ±	-	7.6	-	2.29	
23	1+	4	78.5 ± 6.3	71.0- 84.0	5.15± 1.33	3.94- 6.52	2.20	
25	1+	3	79.0 ±11.6	68.5- 91.5	5.22± 2.01	3.50- 7.43	2.20	
29	1+	7	69.7 ± 7.0	59.0- 78.5	3.45± 1.01	2.13- 4.70	2.17	
June								
2	1+	1	80.5 ±	-	4.87	-	2.11	
6	1+	2	62.3 ± 2.5	60.5- 64.0	2.50± 0.39	2.22- 2.77	2.18	
14	1+	3	82.3 ± 3.78	78.0- 85.0	5.55± 1.71	3.54- 6.70	2.15	
18	1+	3	68.8 ± 7.1	64.5- 77.0	3.30± 1.16	2.62- 4.64	2.16	
22	1+	1	68.0	-	3.33	-	2.20	
July								
6	1+	2	73.3 ±11.7	65.0- 81.5	4.58± 2.79	2.60- 6.55	2.26	
9-10	1+	3	70.7 ± 5.9	64.0- 75.0	3.77± 1.15	2.50- 4.74	2.20	
11	1+	4	68.6 ± 7.54	61.0- 78.5	3.32± 0.92	2.41- 4.55	2.17	
12	1+	3	75.8 ± 7.0	69.0- 83.0	4.43± 1.05	3.43- 5.54	2.17	
27	1+	1	92.5	-	6.56	-	2.02	
August								
10	1+	1	70.5	-	3.43	-	2.14	
13	1+	1	56.0	-		-		

Location: KITIMAT RIVER (continued)

Gear Type: 2x3 IPT
Species & Stage: RAINBOW TROUT

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
June 14		-	59.5	-	2.03	-	-	
26.28		2	107.3 ±3.9	104.5-110.0	12.01 ± 1.87	10.68-13.33	-	
July 11		1	109.5	-	13.05	-	-	

Location: KITIMAT RIVER (continued)

Gear Type: 2x3 IPT
Species & Stage: DOLLY VARDEN

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
May								
17-18		2	88.8 ± 3.9	86.0- 91.5	6.54 ± 0.32	6.31- 6.76	-	
June								
2		2	70.5 ±18.4	57.5- 83.5	3.48 ± 2.44	1.75- 5.20	-	
6		2	62.3 ± 2.5	60.5- 64	2.50 ± 0.39	2.22- 2.77	-	
14		5	97.6 ±10.9	89.0- 11.0	9.19 ± 3.14	6.83-14.32	-	
26		3	103.8 ±12.8	92.0-117.5	10.56 ± 3.52	7.12-14.16	-	

Location: KITIMAT RIVER (cont'd.)

Gear Type: 2x3 IPT
Species & Stage: CUTTHROAT

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
18		1	31.0	-	-	-	-	
22		12	32.5 ± 1.4	30.5- 35.5	0.20 ± 0.03	0.17- 0.27	-	
27		11	32.5 ± 1.4	30.5- 35.0	0.19 ± 0.04	0.13- 0.27	-	
May								
4		11	32.2 ± 1.06	30.5- 34.0	0.21 ± 0.03	0.19- 0.29	-	
8		18	32.8 ± 2.67	28.0- 38.5	0.23 ± 0.07	0.14- 0.40	-	
18		7	32.6 ± 0.7	32.0- 34.0	0.19 ± 0.03	0.16- 0.24	-	
21		3	32.5 ± 3.3	29.5- 36.0	0.24 ± 0.12	0.14- 0.38	-	
25		2	31.5 ± 0.7	31.0- 32.0	0.16 ± 0.04	0.13- 0.19	-	
29		2	35.3 ± 3.2	33.0- 37.5	0.29 ± 0.11	0.21- 0.37	-	
June								
2		2	37.0 ± 2.1	35.5- 38.5	0.40 ± 0.11	0.32- 0.48	-	
10		1	46.5	-	0.86	-	-	
14		4	38.0 ± 8.2	30.0- 49.0	0.52 ± 0.41	0.16- 1.09	-	
18		5	45.1 ± 4.1	40.5- 49.5	0.66 ± 0.18	0.49- 0.91	-	
26		2	42.8 ± 1.1	42.0- 43.5	0.62 ± 0.04	0.59- 0.65	-	
July								
6		1	41.0	-	0.52	-	-	

Location: KITIMAT RIVER (continued)

Gear Type: 2X3 IPT
Species & Stage: TROUT FRY

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
July								
18		5	31.9 ± 2.1	30.5 - 35.5	0.24 ± 0.06	0.20 - 0.34	-	
20		5	31.6 ± 0.4	31.0 - 32.0	0.20 ± 0.02	0.19 - 0.23	-	
24		3	31.5 ± 0.5	31.0 - 32.0	0.24 ± 0.03	0.22 - 0.27	-	
27		6	30.8 ± 0.9	30.0 - 31.5	0.25 ± 0.05	0.15 - 0.24	-	
August								
2		2	31.0 ± 1.4	30.0 - 32.0	0.22 ± 0.03	0.20 - 0.24	-	
4		8	31.2 ± 1.0	0.29 - 32.0	0.22 ± 0.03	0.17 - 0.23	-	
6		4	31.8 ± 0.3	31.5 - 32.0	0.25 ± 0.01	0.24 - 0.25	-	
12		5	32.0 ± 1.46	31.0 - 34.5	0.26 ± 0.08	0.21 - 0.36	-	3 Fry for weights
18		2	32.5 ± 1.4	31.5 - 33.5	0.22 ± 0.01	0.21 - 0.22	-	

APPENDIX VI
HIRSCH CREEK FYKE NET
CATCH RECORD

Location: HIRSCH CREEK

Gear Type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.O. Trout Fry	Rainbow Trout (*=smolt)	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
April															
6	7	195	45	0	10	0	0	0	0	0	1	0	0	0	0
8	0	58	37	0	11	0	0	0	0	0	6	0	0	0	0
10	0	114	51	0	34	0	0	0	0	0	0	0	0	0	0
10day	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0
11	3	97	54	0	8	0	0	0	0	0	1	0	0	0	0
11day	0	6	1	0	0	0	0	10 *	0	0	0	0	0	0	0
12	.2	105	28	0	9	0	0	1	0	0	2	0	0	0	0
15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0
16	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0
18	8	64	22	0	30	4	0	0	0	0	0	0	0	13	0
19	0	1	11	1	0	0	0	0	0	0	0	0	0	0	0
21	204	279	23	0	5	0	0	0	0	0	5	0	0	0	0
22	118	346	8	0	14	0	0	0	0	0	7	0	0	0	0
23	406	352	17	0	7	0	0	0	0	0	0	0	0	0	0
23day	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0
24	174	275	8	0	2	0	0	0	4	0	0	0	0	0	0
26	145	105	8	0	5	1	0	0	2	0	2	0	0	0	0
28	190	101	14	0	2	2	0	0	1	0	3	0	0	0	0
29	62	9	12	0	0	2	0	0	0	0	0	0	0	0	0
30	8	2		0	0	0	0	0	0	0	1	0	0	0	0
May															
1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
4	11	11	5	0	3	0	0	0	0	0	2	0	0	0	0
5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
6	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	4	0	0	0	0	0	0	0	3	0	0	0	0
17	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	4	0	2	0	0	0	0	0	1	0	0	0	0
24	0	1	0	0	6	0	0	0	0	0	1	0	0	0	0
26	0	0	0	0	25	2	0	0	0	0	0	0	0	0	0
29	0	0	2	0	4	1	0	0	0	0	0	0	0	0	0
30	0	0	8	0	80	1	0	0	0	0	2	0	0	2	0
31	0	0	0	0	122	0	0	0	0	0	3	0	0	0	0
June															
1	0	0	5	0	242	2	0	0	0	0	0	0	0	2	0
2	0	0	1	0	61	2	0	0	0	0	4	0	0	0	0
3	0	0	1	0	52	0	0	0	0	0	0	0	0	0	0
3day	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0

APPENDIX VI
HIRSCH CREEK FYKE NET
CATCH RECORD

Location: HIRSCH CREEK (continued)

Gear Type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout Fry	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
June															
4	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	42	1	0	0	0	0	0	0	0	0	0
7	0	0	0	0	62	0	0	0	0	0	0	0	0	0	0
8	0	0	1	0	76	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	123	0	0	0	0	0	0	0	0	2	0
10	0	0	2	0	201	0	0	0	1	0	0	0	0	0	0
11	0	0	1	0	157	0	0	0	2	0	0	0	0	1	0
12	0	0	2	0	187	1	0	0	0	0	3	0	0	0	0
12day	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0
13	0	0	4	0	144	1	0	0	0	0	1	0	0	0	0
14	0	0	3	0	189	0	0	0	0	0	0	0	0	0	0
15	0	0	2	0	201	0	0	0	1	0	0	0	0	0	0
16	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	134	0	0	0	1	0	0	0	0	0	0
18	0	0	1	0	86	0	0	1	1	0	0	0	0	0	0
18day	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	83	0	0	0	0	0	0	0	0	0	0
19day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	73	0	0	0	0	0	0	0	0	0	0
21	0	0	1	0	207	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	172	1	0	0	0	0	0	0	0	0	0
23	0	0	0	0	145	1	3	0	0	0	0	0	0	0	0
24	0	0	0	0	84	0	2	0	0	0	0	0	0	0	0
25	0	0	1	0	164	0	3	0	0	0	0	0	0	1	0
25day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	1	0	201	2	4	0	0	0	0	0	0	1	0
27	0	0	1	0	125	0	2	0	0	0	0	0	0	0	0
28	0	0	4	0	232	1	5	0	0	0	0	0	0	0	0
29	0	0	0	0	33	0	0	1	0	0	0	0	0	0	0
30	0	0	3	0	14	0	0	0	0	0	0	0	0	0	0
July															
1	0	0	0	0	36	0	1	0	0	0	0	0	0	1	0
1day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	5	0	78	0	2	0	0	0	0	0	0	0	0
2day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	2	0	58	0	1	0	0	0	0	0	0	0	0
4	0	0	4	0	96	0	2	0	0	0	0	0	0	0	0
5	0	0	3	0	139	0	3	0	0	0	0	0	0	0	0
6	0	0	10	0	202	0	9	0	0	0	1	0	0	0	0
7	0	0	4	0	44	0	1	0	0	0	1	0	0	1	0
8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
9	0	0	1	0	20	0	0	0	0	0	0	0	0	0	0
10	0	0	2	0	54	0	1	0	0	0	0	0	0	0	0
10day	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0
11	0	0	1	0	52	2	1	0	0	0	0	0	0	0	0

APPENDIX VI
HIRSCH CREEK FYKE NET
CATCH RECORD

Location: HIRSCH CREEK

Gear type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout Fry	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
July															
11day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0
12day	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0
15	0	0	0	0	7	1	1	0	0	0	0	0	0	0	0
16	0	0	1	0	7	0	0	0	0	0	0	0	0	0	0
18day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
20	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0
21	0	0	2	0	19	0	9	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0
23	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
23day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
25	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
26	0	0	0	0	3	1	11	0	0	0	0	0	0	0	0
27	0	0	1	0	1	0	8	0	0	0	1	0	0	0	0
28	0	0	0	0	1	0	15	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	1	0	7	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
August															
1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
2	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0
3	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6day	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
9	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
11	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
13	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0

APPENDIX VI
HIRSCH CREEK FYKE NET
TRAP EFFICIENCY

Location : HIRCH CREEK

Gear Type (s): FYKE NET
Species & stage : Pink Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
18	4	8	0	0	0	-	-	8	0					
21	170	118	7	406	0	179	0	118	7	2544	4139	939	21.6x	
29	133	8	0	4	0			12	0					

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Chum

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
10	109	97	0	105	0	-	-	203	0					
18	51	64	0	1	0	-	-	65	0					
21	265	363	17	352	1	275	0	715	18	10,024	5,689	14,389	14.0 X	
29	101	2	0	2	0	-	-	4	0					

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & stage : CHINOOK FRY

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
10	50	54	0	28	0	-	-	82	0					
18	36	11	0	23	0	-	-	34	0					
21	23	8	0	17	0	8	0	33	0					
29	26	2	0	0	0	-	-	2	0					
May														
31	6	5	0	1	o	1	0	7	0					
June														
10	2	1	0	2	0	4	0	7	0					
17	1	1	0	0	0	0	0	1	0					
July														
5	7	10	0	4	0	0	0	14	0					

Location : HIRSH CREEK (cont'd.)

Gear Type : FYKE NET
Species & stage : Chinook smolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
June 17	1	0	0	0	0	0	0	0	0					

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Coho Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April														
10	34	8	0	9	0	-	-	17	0					
18	15	30	0	0	0	-	-	30	0					
21	5	14	0	7	0	2	0	23	0					
29	2	0	0	0	0	-	-	0	0					
May														
31	196	242	5	61	1	52	0	303	6	8,555	2,695	14,415	28.2 X	
June														
10	383	157	3	187	0	144	0	157	3					
17	330	86	1	84	1	73	0	170	2					(mean 35.2 X)
25	400	201	6	125	0	227	0	201	6	11,572	3,693	19,451	57.6 X	
July														
5	355	207	13	44	4	4	0	251	17	4,984	2,824	7,144	19.9 X	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Coho smolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April 18	3	0	0	0	0	0	0	0	0					
May 31	2	2	0	2	0	0	0	4	0					

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Cutthroat Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
April 29	1	0	0	0	0	-	-							
June 10	1	2	0	0	0	0	0	2	0					
June 17	2	1	0	0	0	0	0	1	0					

Appendix VI
HIRSCH CREEK FYKE NET
FRY SAMPLING RECORD

Location : HIRSCH CREEK

Gear Type : FYKE NET
Species & Stage : Pink Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
11		3	35.5±0.9	35.0-36.5	0.22± 0.02	0.20-0.24	1.701	
23		50	35.7±1.1	33.5-37.5	0.25± 0.04	0.17-0.33	1.765	
28		50	35.1±1.6	32.0-39.0	0.23± 0.05	0.11-0.33	1.746	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Chum Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
8		50	40.2 ±2.1	36.0-44.5				
11		50	40.2 ±2.4	35.0-44.5	0.37±0.06	0.25-0.50	1.786	
15		1	42.0		0.45		1.825	
23		50	39.7 ±1.8	36.5-44.0	0.37±0.06	0.23-0.51	1.808	
28		50	40.1 ±2.2	35.5-46.0	0.38±0.07	0.24-0.54	1.806	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Coho Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
8		11	38.3 ±3.7	28.0-42.5				
11		8	35.4 ±3.0	32.0-41.0	0.29±0.05	0.22-0.39	1.86	
23		3	35.5 ±3.6	32.5-39.5	0.32±0.10	0.26-0.43	1.90	
28		2	36.5 ±0.2	36.0-37.0	0.32±0.01	0.31-0.32	1.86	
May								
20		2	34.3 ±1.1	33.5-35.0	0.29±0.01	0.28-0.29	1.92	
22		2	35.5 ±0.8	35.0-35.0	0.29±0.0	0.29-0.29	1.84	
26		24	34.9 ±1.6	31.0-38.0	0.31±0.04	0.20-0.37	1.93	
30		50	34.3 ±1.7	30.5-38.5	0.31±0.06	0.19-0.46	1.97	
June								
3		52	35.0 ±1.5	29.5-39.0	0.31±0.05	0.16-0.45	1.92	
7		50	34.6 ±2.0	31.0-39.5	0.33±0.06	0.20-0.45	1.98	
11		50	35.0 ±1.3	31.5-39.0	0.32±0.04	0.24-0.48	1.95	
15		50	34.5 ±1.3	31.5-37.0	0.32±0.03	0.25-0.42	1.99	
19		50	34.9 ±0.99	33.0-37.0	0.32±0.03	0.27-0.43	1.97	
23		49	34.9 ±1.3	32.0-38.0	0.36±0.03	0.29-0.45	2.04	
27		50	35.1 ±1.1	33.0-37.5	0.35±0.04	0.25-0.43	2.00	
July								
1		35	35.5 ±1.4	33.0-39.0	0.33±0.05	0.25-0.48	1.97	
6		48	35.6 ±1.6	32.0-40.0	0.37±0.06	0.28-0.53	2.01	
7		5	36.6 ±2.9	34.0-40.0	0.45±0.11	0.33-0.61	2.08	
10		49	35.7 ±1.9	32.0-44.0	0.36±0.07	0.23-0.55	1.99	
14 + 15	07	11	36.5 ±2.9	33.0-42.0	0.40±0.13	0.25-0.67	2.04	
19 + 20		3	38.8 ±1.8	37.0-40.5				
26 + 28		4	39.8 ±6.63	35.0-49.5	0.67±0.42	0.40-1.31	2.13	
August								
1 + 2		2	42.8 ±1.06	42.0-43.5	0.69±0.08	0.65 0.75	2.06	
13		1	35.5		0.36		2.00	
18		2	38.0 ±2.1	36.5-39.5	0.45±0.16	0.33-0.56	1.99	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Coho smolts

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April 28	1+	2	73.8 ±0.35	73.5-74.0	4.24±0.37	3.97-4.50	2.21	
May 26	1+	2	61.8 ±3.9	59.0-64.5	2.58±0.49	2.23-2.92	2.22	
30 + 31	1+	2	54.8 ±1.1	54.0-55.5	1.72±0.06	1.68-1.76	2.19	
July 6	1+	2	59.8 ±12.4	51.0-68.5	2.4±1.44	1.38-3.42	2.24	
15	1+	1	66.0		3.03		2.19	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Chinook Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
8 + 9	0+	61	41.7 ±3.1	36.5-49.5				
11	0+	50	39.4 ±2.0	36.0-42.5	0.40±0.05	0.31-0.53	1.88	
15	0+	15	41.3 ±2.9	38.0-49.5	0.57±0.15	0.41-1.08	1.99	
19	0+	9	41.1 ±0.8	39.5-42.5	0.50±0.04	0.45-0.56	1.93	
23	0+	19	39.9 ±2.1	35.5-43.0	0.45±0.08	0.29-0.58	1.92	
28	0+	18	42.2 ±1.5	38.5-44.5	0.50±0.05	0.40-0.58	1.88	
May								
9	0+	6	40.7 ±1.6	38.0-42.5	0.59±0.01	0.58-0.59	2.02	weights are from 2 fish only
16	0+	2	49.5 ±0.7	49.0-50.0	1.11±0.02	1.09-1.12	2.08	
22	0+	3	41.5 ±0.5	41.0-42.0	0.48±0.03	0.45-0.50	1.97	
29 + 30	0+	7	41.6 ±2.5	36.5-44.5	0.58±0.08	0.44-0.66	1.97	
June								
3	0+	1	41.0		0.49		1.92	
15	0+	2	50.5 ±9.2	44.0-57.0	1.23±0.76	0.69-1.76	2.06	
27	0+	1	58.5		2.55		1.97	
July								
2 - 6	0+	22	49.6 ±5.9	39.0-63.0	1.17±0.49	0.49-2.58	2.09	
7,9 - 11	0+	8	54.3 ±4.4	50.0-63.0	1.58±0.45	1.10-2.33	2.10	
16	0+	1	55.5		1.75		2.17	
21	0+	1	49.5		1.16		2.12	
30	0+	1	52.0		1.47		2.19	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Spacies & Stage : Chinook smolts

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April 19	1+	1	68.0		2.82		2.08	

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Trout Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
June								
23		1	29.5		0.23			
July								
1		1	32.0		0.22			
6		2	32.0 ±0	32.0-32.0	0.24±0	0.24-0.24		
10		1	32.0		0.21			
19 + 20		2	33.0 ±0	33.0-33.0				
24 + 26		13	31.2 ±1.0	29.5-33.0	0.26±0.03	0.20-0.30		
28		15	31.1 ±0.6	30.5-32.0	0.22±0.02	0.19-0.24		weight from only 6 fish
30/7+2/8		9	31.3 ±0.9	30.0-33.0	0.23±0.02	0.21-0.26		
August								
6		1	31.5		0.22			
11 + 13		5	31.4 ±0.7	31.0-32.5	0.23±0.02	0.21-0.24		3 mortalities
18		2	32.5 ±0.7	32.0-33.0	0.26±0.04	0.23-0.29		

Location : HIRSCH CREEK

Gear Type : FYKE NET
Species & Stage : Rainbow Trout

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April 24		1	53.5		1.36			

Location : HIRSCH CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Cutthroat Fry

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April 28		1	30.0		0.10			
June 15		1	29.0		0.14			

APPENDIX VII
CECIL CREEK FYKE NET
CATCH RECORD

Location: CECIL CREEK

Gear Type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout Fry	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
April															
7	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0
9	1	1	0	0	10	15	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	12	0	0	0	0	0	1	0	11	0
10day	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0
16	0	0	0	0	1	43	0	0	0	0	2	0	0	2	0
17	0	0	0	0	0	18	0	0	0	0	0	0	0	1	0
18	0	0	0	0	3	27	0	0	0	0	2	0	0	18	0
20	0	0	0	0	5	1	0	0	0	0	0	0	0	28	0
22	0	0	0	0	14	4	0	0	0	0	0	0	0	67	0
24	0	0	0	0	8	10	0	0	0	0	0	0	0	42	0
26	0	0	0	0	5	3	0	0	0	0	0	0	0	29	0
28	0	0	0	0	2	40	0	0	0	0	0	0	0	22	0
30	0	0	0	0	5	8	0	0	0	0	0	0	0	0	0
May															
2	0	0	0	0	35	3	0	0	0	0	2	0	0	1o3	0
4	0	0	0	0	28	3	0	0	0	0	0	0	0	50	0
6	0	0	0	0	48	4	0	0	0	0	0	0	0	83	0
6	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
7	0	0	15	0	59	11	0	0	0	0	0	0	0	59	0
8	0	0	5	0	70	11	0	0	0	0	1	0	0	43	0
9	0	0	5	0	116	12	0	0	0	0	0	0	0	37	0
9	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	55	1	0	0	0	0	0	0	0	22	0
10day	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11	0	0	1	0	43	1	0	0	0	0	0	0	0	5	0
12	0	0	19	0	71	10	0	2	2	0	0	0	0	6	0
12day	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
13	0	0	0	0	179	7	0	0	0	0	0	0	0	43	0
14	0	0	9	0	140	4	0	0	0	0	0	0	0	24	0
14day	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
15	0	0	0	0	28	0	0	0	0	0	0	0	0	6	0
15day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	16	0	0	0	0	0	1	0	0	16	0
16day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	52	0	0	0	0	0	0	0	0	11	0
18	0	0	0	0	34	0	0	0	0	0	0	0	0	18	0
19	0	0	0	0	6	0	0	0	0	0	0	0	0	8	0
20	0	0	0	0	242	7	0	0	0	0	0	0	0	16	0
20day	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
21	0	0	0	0	245	2	0	0	0	0	1	0	0	12	0
22	0	0	0	0	18	0	0	0	0	0	0	0	0	4	0
22day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	43	0	0	0	0	0	0	0	0	7	0

Location: CECIL CREEK (continued)

Gear Type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout Fry	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	...r smolt	fry	...resmolt									
May															
24	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	49	1	0	0	0	0	0	0	0	15	0
27	0	0	0	0	61	0	0	0	0	0	0	0	0	10	0
28	0	0	0	0	126	0	0	0	0	0	1	0	0	16	0
28day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	15	0	0	0	0	0	0	0	0	5	0
29day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	60	0	0	0	0	0	1	0	0	1	0
30day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	25	0	0	0	0	0	0	0	0	2	0
June															
1	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	850	1	0	0	0	0	0	0	0	19	0
2day	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	227	0	0	0	0	0	0	0	0	2	0
3day	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4	0	0	0	0	42	0	0	0	0	0	0	0	0	1	0
6	0	0	0	0	2754	0	0	0	0	0	3	0	0	24	0
6day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	242	0	0	0	0	0	0	0	0	8	0
7day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	16	0	0	0	0	0	0	0	0	5	0
9	0	0	0	0	8	0	0	0	0	0	0	0	0	2	0
9day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	39	0	0	0	0	0	0	0	0	2	0
10	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0
11day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	169	0	0	0	0	0	0	0	0	5	0
14	0	0	0	0	14	0	0	0	0	0	0	0	0	1	0
14day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0
15day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0
16day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
17day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
20	0	0	0	0	38	0	0	0	0	0	0	0	0	12	0
20day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0
21day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Location: Cecil Creek (continued)

Gear Type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout Fry	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	[illegible] smolt	fry	[illegible] smolt									
June															
23	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0
24	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0
25	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	6	2	1	3	0	0	2	0	0	5	0
26day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	5	0	1	1	0	0	1	0	0	11	0
28	0	0	0	0	6	0	4	0	0	0	0	0	0	4	0
29	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
July															
1	0	0	0	0	5	0	16	0	0	0	1	0	1	5	0
1day	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2	0	0	0	0	2	0	0	0	0	0	1	0	0	1	0
2day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
4	0	0	0	0	9	0	0	0	0	0	0	0	0	2	0
5	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
6	0	0	0	0	648	0	228	0	0	0	0	0	0	21	0
7	0	0	0	0	58	0	20	0	0	0	0	0	0	8	0
7day	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
8day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0
9day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	1	0	12	0	0	0	0	0	0	11	0
10day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	4	0	4	0	0	0	1	0	0	3	0
12day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
13day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	14	0	338	0	0	0	1	0	0	30	0
14day	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
15	0	0	0	0	11	0	256	0	0	0	0	0	0	22	0
15day	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	3	0	32	0	0	0	0	0	0	6	0
16day	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	11	0	0	0	0	0	0	1	0
17day	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0
18	0	0	0	0	3	0	194	0	0	0	0	0	0	13	0
18day	0	0	0	0	0	0	4	0	0						

Location: CECIL CREEK (Continued)

Gear Type: FYKE NET

Date (d/m)	Pink	Chum	Chinook		Coho		U.I.D. Trout Fry	Rainbow Trout	Cutthroat Trout	Dolly Varden	Coast Range Sculpin	Prickly Sculpin	Stickle-back	Lamprey	Eulachon
			fry	smolt	fry	smolt									
July															
19	0	0	0	0	0	0	24	0	0	0	3	0	0	8	0
21	0	0	0	0	14	0	168	0	0	0	0	0	0	21	0
21day	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
22	0	0	0	0	1	0	23	0	0	0	0	0	0	13	0
22day	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
23	0	0	0	0	0	0	7	0	0	0	0	0	0	3	0
23day	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
24	0	0	0	0	1	0	5	0	0	0	0	0	0	4	0
24day	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
25	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0
25day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
27	0	0	0	0	1	0	35	0	0	0	0	0	0	7	0
27day	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
28	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0
28day	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
29	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0
29day	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
30day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August															
1	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0
1day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	9	0	0	0	0	0	0	9	0
3	0	0	0	0	1	0	2	0	0	0	0	0	0	21	0
3day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	0	0	0	0	0	0	10	0
4day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0
6	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0
6day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	2	0	0	0	0	0	0	10	8
7day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	2	0	0	0	0	0	0	0	0	19	0
8day	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
9	0	0	0	0	0	0	2	0	0	0	0	0	0	20	0
11	0	0	0	0	5	0	4	0	0	0	1	0	0	41	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0
12day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
16	0	0	0	0	11	1	0	0	0	0	1	0	0	8	0
18	0	0	0	0	8	0	3	0	0	0	1	0	0	19	0
19	0	0	0	0	2	1	0	0	0	0	0	0	0	6	0

APPENDIX VII
CECIL CREEK FYKE NET
TRAP EFFICIENCY

Location : CECIL CREEK

Gear Type : FYKE NET
Species & Stage : Coho Fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
May														
8-10	123	116	5	4	0	57	2	177	7	2,759	997	4,521	15.6X	
13-15	240	172	32	28	0	16	0	172	32	1,263	881	1,645	7.3X	
21-23	237	245	12	18	1	43	0	263	13	4,488	2,278	6,698	17.1X	
29-31	181	15	7	60	1	25	0	75	8	1,537	643	2,431	20.5X	
June														
3-5	836	272	40	42	0	-	-	272	40	5,573	4,019	7,127	20.5X	
7-9	998	242	36	16	0	8	0	242	36	6,461	4,570	8,352	26.7X	
14-16	164	14	0	2	0	1	0	-	-	-	-	-	-	
July														
9-11 coho & trout	106	0	0	0	0	-	-	-	-	-	-	-	-	
23-25	10	0	0	1	1	-	-	-	-	-	-	-	-	

Location : CECIL CREEK (cont'd.)

Gear Type : FYKE NET
Species & Stage : Coho smolt

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
May														
8-10	23	12	3	1	0	1	0							
13-15	14	4	1	0	0	0	0							
21-23	7	2	0	0	0	0	0							
Apr. 17-19	463	18	2	27	1	-	-							

Gear Type(s): FYKE NET
Species & Stages: Chinook Fry
Trout Fry

Location: CECIL CREEK (continued)

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
May														
8-10	20	5	2	0	0	0	0							
13-15	15	9	4	0	0	0	0							
Chinook														
Trout Fry														
July														
23-26	187	5	1	5	0	1	0							

APPENDIX VII
CECIL CREEK FYKE NET
FRY SAMPLING

Location: CECIL CREEK

Gear Type: FYKE NET
Species & Stage: COHO FRY

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
9	0+	10	34.4 ±0.65	33.0 - 35.0	0.32± 0.02	0.30 - 0.36	1.99	
18	0+	2	36.0 ±2.12	34.5 - 37.0	0.39± 0.01	0.38 - 0.39	2.02	
20	0+	5	36.2 ±1.52	34.0 - 38.0	0.46± 0.06	0.39 - 0.54	2.12	
22	0+	15	35.5 ±1.57	32.0 - 38.0	0.33± 0.05	0.19 - 0.38	1.93	
26	0+	5	34.9 ±2.04	32.0 - 36.5	0.3 ± 0.08	0.23 - 0.42	1.91	
30	0+	3	36.8 ±0.29	36.5 - 37.0	0.37± 0.01	0.36 - 0.38	1.94	
May 4	0+	28	35.5 ±0.84	34.5 - 37.5	0.35± 0.03	0.29 - 0.42	1.98	
8	0+	51	34.9 ±1.52	30.5 - 38.5	0.33± 0.05	0.19 - 0.41	1.96	
12	0+	50	35.9 ±2.13	31.0 - 42.5	0.34± 0.07	0.18 - 0.59	1.97	
17	0+	20	34.5 ±1.94	29.5 - 37.0	0.28± 0.05	0.16 - 0.33	1.90	
20	0+	50	34.7 ±1.44	32.0 - 37.0	0.31± 0.04	0.22 - 0.42	1.93	
27	0+	50	34.6 ±1.19	31.0 - 37.0	0.32± 0.03	0.24 - 0.41	1.98	
31	0+	22	35.1 ±1.47	31.5 - 36.5	0.34± 0.04	0.28 - 0.41	1.99	
June								
4	0+	42	35.5 ±1.43	32.0 - 39.0	0.34± 0.04	0.20 - 0.41	1.97	
9	0+	7	36.8 ±1.99	35.5 - 41.0	0.36± 0.07	0.29 - 0.52	1.93	
13	0+	50	35.4 ±1.46	32.0 - 39.0	0.33± 0.05	0.24 - 0.49	1.95	
17	0+	1	35.5	-	0.43	-	2.13	
21	0+	4	35.6 ±1.38	34.0 - 37.0	0.40± 0.04	0.35 - 0.45	2.07	
26	0+	6	35.9 ±0.86	35.0 - 37.0	0.34± 0.03	0.30 - 0.38	1.94	
July								
1	0+	5	37.4 ±3.11	33.5 - 42.0	0.46± 0.16	0.30 - 0.73	2.06	
6	0+	37	36.2 ±1.28	33.5 - 39.0	0.35± 0.05	0.30 - 0.47	1.95	
10	0+	1	36.0	-	0.41	-	2.06	
15	0+	2	35.5 ±0.71	35.0 - 36.0	0.35± 0.04	0.32 - 0.37	1.99	
21	0+	6	38.7 ±3.19	35.0 - 42.5	0.48± 0.14	0.30 - 0.67	2.02	
27	0+	1	39.0	-	0.59	-	2.15	
August								
3	0+	1	37.0 ±	-	0.48	-	2.12	
6	0+	2	40.25±3.18	38.0 - 42.5	0.62± 0.19	0.48 - 0.75	2.12	
13	0+	5	43.1 ±2.75	39.0 - 46.0	0.74± 0.14	0.56 - 0.92	2.10	
16	0+	11	42.4 ±2.58	39.0 - 48.0	0.74± 0.16	0.54 - 1.15	2.13	
18-19	0+	10	42.0 ±4.07	37.5 - 51.0	0.70± 0.25	0.44 - 1.31	2.11	

Location: CECIL CREEK (continued)

Gear Type: FYKE NET
Species & Stage: COHC SMOLT

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
April								
10	1+	11	70.0± 6.23	61.0 - 82.5	3.47± 0.98	2.70 - 5.40	2.16	
10	2+	1	89.5±	-	6.30±	-	2.06	
14	1+	27	72.3±14.24	61.0 - 84.0	3.84± 1.35	2.16 - 5.95	2.14	
14	2+	6	92.1± 3.93	86.5 - 96.5	7.29± 0.75	6.38 - 8.27	2.10	
17	1+	12	79.7± 8.14	68.5 - 95.0	4.86± 1.38	3.22 - 7.79	2.13	
17	2+	4	97.8±16.26	82.5 -113.5	8.36± 3.23	5.23 -11.93	2.08	
18	1+	1	49.5±	-	1.21	-	2.15	
20	1+	1	90.0	-	7.09	-	2.13	
22	1+	4	57.5± 4.77	51.5 - 63.5	1.86± 0.51	1.23 - 2.53	2.14	
26	1+	3	65.8± 11.1	58.0 - 78.5	3.09± 1.50	2.05 - 4.81	2.21	
30	1+	8	62.1± 11.2	53.0 - 84.0	2.23± 1.12	1.16 - 4.32	2.10	
May								
4	1+	2	81.0±13.44	71.5 - 90.5	5.35± 2.25	3.76 - 6.94	2.16	
8	1+	23	62.4±10.26	47.0 - 87.5	2.47± 1.45	1.05 - 6.78	2.17	
12	1+	10	63.3± 7.58	52.0 - 76.0	2.42± 1.15	1.35 - 3.00	2.12	
20	1+	7	62.4± 6.40	55.5 - 70.0	2.52± 0.82	1.65 - 3.60	2.18	
June 26	1+	2	72.0± 4.24	69.0 - 75.0	3.79± 0.80	3.16 - 4.32	2.17	
Aug. 16		1	62.0	-	2.49	-	2.19	

Gear Type: FYKE NET
Species & Stage: RAINBOW CUTTHROAT AND UNIDENTIFIED TROUT FRY

Location: CECIL CREEK

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
May								
12		2	80.2 ± 0.35	80 - 80.5	5.15± 0.15	5.05 - 5.26		Rainbow
12		2	84. ± 41.0	55 - 11.3	7.19± 8.2	1.39 -12.99		Cutthroat
June								
26		1	28.5	-	0.15	-		Trout Fry
July								
1		16	30.6 ± 0.87	29.0 - 31.0	0.21± 0.02	0.18 - 0.25		
6		13	33.5 ± 1.42	30.0 - 35.0	0.25± 0.03	0.19 - 0.29		
10		12	30.3 ± 0.96	29.5 - 33.0	0.22± 0.02	0.19 - 0.27		
15		48	30.6 ± 0.94	28.5 - 32.0	0.22± 0.03	0.18 - 0.29		
17		11	30.5 ± 1.45	28.0 - 32.0	0.22± 0.03	0.18 - 0.27		
19		24	30.7 ± 1.09	29.0 - 32.5	0.19± 0.03	0.14 - 0.23		
23		7	31.5 ± 1.0	30.0 - 33.0	0.23± 0.01	0.21 - 0.24		
25		5	31.0 ± 0.71	30.0 - 32.0	0.26± 0.03	0.22 - 0.29		
27		35	31.2 ± 0.76	30.0 - 33.0	0.27± 0.02	0.22 - 0.31		
August								
29-1		6	31.3 ± 0.75	30.5 - 32.5	0.21± 0.03	0.17 - 0.26		
2-5		15	31.2 ± 0.84	29.5 - 32.0	0.24± 0.03	0.20 - 0.29		
6-11		6	32.2 ± 2.12	30.0 - 35.5	0.27± 0.09	0.18 - 0.40		
19		1	30.0	-	0.19			

Location: CECIL CREEK (continued)

Gear Type: FYKE NET
Species & Stage: CHINOOK FRY

Date (d/m)	Scale Age	Sample Size	Fork Length (mm)		Weight (g.)		Developmental Index (k_D)	Comments
			Mean ($\bar{x} \pm SD$)	Range	Mean ($\bar{x} \pm SD$)	Range		
May								
8	0+	20	41.6± 0.63	40.5 - 42.5	0.53± 0.02	0.50 - 0.57	1.95	
12	0+	17	41.6± 0.56	41.0 - 42.5	0.51± 0.02	0.48 - 0.55	1.92	

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: AVELING CREEK

Station locations are shown in figure 1.0-3.

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum				Chinook				Coho				Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
					Σ	Subsample			Σ	Subsample			Σ	Subsample						
						n	F.L. (mm) ($\bar{x}$ ± SD)	Range		n	F.L. (mm) ($\bar{x}$ ± SD)	Range		n	F.L. (mm) ($\bar{x}$ ± SD)	Range				
1	Main stem, coarse gravel water fast and green	June 5	6.5	2.5 x 10^3 sq. ft. EF	0	0	--	--	1 fry	1	39.5	--	2 SM	2	67.8 ± 13.8	58.0-77.5	0	0	5 + 3 fry	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: BIG WEDEENE RIVER

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	side channel, coarse gravel, water slow, shallow and clear, some overhead vegetation	April 17-18	6.0	10 BS 10 MT	23	23	41.0 ± 2.2	36.0-46.5	2 fry	2	41.3 ± 1.1	40.5-42.0	1 fry	1	40.5	--	0	0	0	5 AS
		June 25-26	10.5 11.75	6.0 x 10^3 sq. ft. EP 13 BS 10 MT	0	0	--	--	5 SM 37 fry	5 37	74.9 ± 5.7 45.0 ± 3.1	70.0-82.5 40.5-53.0	3 SM 112 fry 3 SM	3 95 3	78.8 ± 14.7 36.0 ± 2.0 68.3 ± 1.3	63.0-92.0 31.5-43.0 67.0-69.5	0	1	11	0
		July 24-25	10.5	6 BS 10 MT	0	0	--	--	1 fry	1	58.0	--	42 fry 12 SM	42 12	41.0 ± 4.2 66.5 ± 8.2	34.5-51.0 57.0-87.5	1	0	1	2 AS
2	side channel and main stem, coarse gravel, water slow and clear, some overhead vegetation	April 18-19	4.0	4 DP 10 MT 9 BS	0	0	--	--	3 SM	3	72.8 ± 3.6	70.5-77	10 fry 6 SM	10 6	41.1 ± 3.2 68.6 ± 17.0	36.5-44.5 50.5-90.5	0	0	12	0
		June 12-13	8.0-9.0	15 BS 10 M2 1 DP	0	0	--	--	43 fry	43	42.1 ± 2.7	37.0-49.0	8 fry 21 SM	8 20	36.3 ± 1.5 59.4 ± 7.4	33.5-38.0 47.0-79.5	1	2	16	1 AS
		July 24-25	11.0	10 MT 7 BS	0	0	--	--	9 fry	9	46.0 ± 4.2	40.0-53.0	91 fry 21 SM	53 21	40.2 ± 5.0 67.8 ± 7.0	33.0-56.0 59.0-85.5	0	0	11	0
3	side channel, coarse gravel, water velocity moderate and clear, some overhead vegetation	July 1-2	7.5-9.0	10 MT 8 BS 2 DP	0	0	--	--	62 fry	62	44.4 ± 4.5	39.0-66.0	163 fry 44 SM	53 44	36.3 ± 3.3 68.4 ± 8.3	32.0-50.5 54.0-87.5	0	0	16	0
		July 25-26	11.0	10 MT 13 BS	0	0	--	--	7 fry	7	47.4 ± 4.2	41.0-53.5	111 fry 42 SM	76.0 42	40.7 ± 4.5 69.3 ± 8.0	33.5-52 54.0-89.0	0	0	17	0
4	side channel and main stem, coarse gravel water fast and green, little overhead vegetation	June 5	6.5	5.0 x 10^2 sq. ft. EF	0	0	--	--	0	0	--	--	3 fry	3	37.5 ± 2.6	34.5-39.5	0	0	15	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: CECIL CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	April 4 & 10	4.5	15 BS	0	0	--	--	0	0	--	--	2 SM	2	55.0 ± 5.7	51.0-59.0	0	2	0	0
		April 22-23		10 MT	0	0	--	--	0	0	--	--	0	0	--	--	0	1	1	1 A cottid
		May 14-15	9.0	20 MT 50 MT 5 BS, 3 DP	0	0	--	--	0	0	--	--	34 SM	33	62.8 ± 8.9	49.5-103.5	0	2	35	0
		May 19-24	6.0-9.0	3 DP	0	0	--	--	1 fry	1	45.5	--	52 fry	51	36.5 ± 2.4	31.0-46.5	7	4	42	5 stbk 5 AS
													47 SM	45	63.3 ± 8.7	51.0-84.0				
		June 6-7	12.0-12.5	10 MT 2.00 x 10^2 ft² ES	0	0	--	--	0	0	--	--	47 fry	47	37.8 ± 3.0	33.5-46.5	0	2	8	3 stbk
													21 SM	21	68.3 ± 6.8	50.0-86.0				
		June 21-22	11.0-11.75	4.00 x 10^2 ft²	0	0	--	--	0	0	--	--	155 fry	73	39.9 ± 4.6	33.0-52.0	0	2	3	5 stbk 4 AS
													12 SM	3	72.0 ± 1.7	70.0-73.0				
		July 14-18	12.5-13.5	80 MT 1.35 x 10^2 ft² ES	0	0	--	--	6 fry	6	70.5 ± 13.3	58.5-91.0	629 fry	77	48.7 ± 7.0	35.5-62	47 (37)	4 + 1 adult y	40	1 stbk 167 AS 207 lamp
													243 SM	105	80.1 ± 8.7	63.0-100				
		August 2-3	12.0-13	10 MT 3.5 x 10^3 sq. ft. ES	0	0	--	--	2 fry	2	68.3 ± 0.4	68.0-68.5	193 fry	122	53.6 ± 8.1	38.5-70.5	11 (76)	6	7 (1)	90 AS 43 lamp
													46 SM	46	86.3 ± 8.8	72.5-105.5				
		August 13-14	15.0	10 MT 2.00 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	136 fry	105	52.9 ± 10.3	35.5-74.5	7 (42)	1	10	1 stbk 33 AS 56 lamp
													34 SM	33	83.7 ± 5.6	78.5-92.0				
2	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	April 25-26	5.5	10 MT 4 BS	0	0	--	--	0	0	--	--	6 SM	5	67.7 ± 11.6	49.0-29.0	0	0	9	0
		May 16-18	7.5-8.0	20 MT	0	0	--	--	0	0	--	--	22 SM	18	65.4 ± 6.9	54.0-83.0	0	0	18	0

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KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: CECIL CREEK (cont.)

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
2		May 31	10.0	2.25 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	120 fry	50	35.5 ± 1.8	31.0-39.0	6	0	0	2 lamp
													42 SM	42	56.9 ± 9.6	41.0-73.5				
		June 6-7	10.5	10 MT 3.00 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	83 fry	55	36.8 ± 4.3	32.0-53.0	1	6	15	0
													17 SM	17	68.6 ± 5.9	60.0-79.0				
		June 20-22	9.5-12.0	20 MT 4.00 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	208 fry	137	39.6 ± 6.3	31.0-58.0	3	16	13	0
													33 SM	33	72.6 ± 6.8	61.0-85.5				
		July 16-19	10.0-10.5	10 MT 4.00 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	186 fry	63	43.0 ± 5.7	35.5-56.0	3 (1)	2	12	1 AS 76 lamp
													74 SM	74	76.1 ± 9.8	58.0-97				
		August 2-3	10.0	10 MT 1.75 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	138 fry	76	47.4 ± 6.4	36.0-61.0	1 (8)	4	21	31 lamp
													47 SM	46	81.0 ± 8.9	63.5-99.0				
		August 12-17	9.0-10.0	60 MT 3.50 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	570	147	52.1 ± 6.5	38.0-64.0	7 (27)	10	151	2 AS 42 lamp
													290 SM	150	80.9 ± 8.4	65.0-103.0				
3	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	June 6-7	13.0	100 sq.ft. ES	0	0	--	--	0	0	--	--	49 fry	26	43.8 ± 3.9	35.5-48.5	0 (31)	0	2	0
													6 SM	6	86.0 ± 9.5	74.0-100				
		July 20-21	16.5	700 sq. ft. ES 5 MT	0	0	--	--	0	0	--	--	94 fry	52	47.5 ± 5.0	38.0-54	0 (26)	10	7	0
													46 SM	46	88.1 ± 7.4	69.0-110.5				
		August 2-3	14.0-16.5	5 MT 200 sq. ft. ES	0	0	--	--	0	0	--	--	111 fry	72	51.8 ± 5.5	41.0-67.0	0 (55)	9	9	0
													63 SM	59	88.2 ± 6.5	72.0-112.0				
		August 13	Not minnow trapped or electrofished, as it was almost totally dry.																	

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: CECIL CREEK (cont.)

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
4	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	July 3-4	8.5	5 MT 1 DP	0	0	--	--	0	0	--	--	1 fry 3 SM	1 3	50 92.0 ± 4.9	-- 88.0 92.5	--	0	0	0
		July 19-21	9.0	5 MT 900 sq.ft. ES	0	0	--	--	0	0	--	--	86 fry 25 SM	51 25	41.6 ± 5.3 78.7 ± 9.9	31.5-56.0 62.0-104.0	0	10	14 (2)	0
		August 2-3	9.0	5 MT 1260 sq.ft. ES	0	0	--	--	0	0	--	--	76 fry 19 SM	56 19	44.1 ± 6.8 84.0 ± 8.8	35.0-60.0 65.5-102.5	0 (2)	3	17	0
		August 13-14	9.0	5 MT 480 sq.ft. ES	0	0	--	--	0	0	--	--	112 fry 42 SM	54 42	45.2 ± 7.2 84.0 ± 6.7	35.5-64.0 69.0-97.0	0	1	54	0
5	mouth of lake	May 5	17.0	5 MT	0	0	--	--	0	0	--	--	0	0	--	--	0	0	0	3 stbk

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KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: CHIST CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	braided main stem and side channel, coarse gravel, water velocity moderate and clear, little overhead vegetation	June 8	10.0	8.00 x 10^3 ES	0	0	--	--	42 fry	42	47.5 ± 3.7	39.5-76.0	48 fry	48	38.1 ± 3.4	31.5-45.5	1 (7[1])	0	10	0
													63 SM	45	59.8 ± 6.9	48.0-76.0				
		August 3-4, 6	10.0-11.0	10 MT 3.2 x 10^3 sq. ft. ES	0	0	--	--	40 fry	40	64.0 ± 6.5	52.0-77.0	453 fry	79	46.7 ± 6.4	35.0-58.5	15 (19)	0	52	0
													133 SM	116	75.9 ± 8.6	60.0-104				
2	side channel, some main channel, good gravel (1-311) water velocity variable, 1-5 fps, water clear, some overhead vegetation	June 7	10.0	1.50 x 10^3 sq. ft. ES	0	0	--	--	43 fry	43	45.4 ± 3.4	40.0-52.5	4 fry	4	41.4 ± 5.8	37.0-49.5	0	0	4	0
													2 SM	2	62.8 ± 2.5	61.0-64.5				
		August 3-4	9.0	10 MT 3.60 x 10^3 sq. ft. ES	0	0	--	--	64 fry	64	58.5 ± 6.6	46.5-73.0	154 fry	66	42.6 ± 5.7	33.0-59.0	0 (7)	0	27	0
													49 SM	49	82.9 ± 5.9	71.0-97.0				
3	side channel, coarse gravel, water swift and clear, lots of overhead vegetation	June 5	6.0	1.5 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	0	0	--	--	0	0	4	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: DAVIS CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum				Chinook				Coho				Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
					Σ	Subsample			Σ	Subsample			Σ	Subsample						
						n	F.L. (mm) ($\bar{x} \pm$ SD)	Range		n	F.L. (mm) ($\bar{x} \pm$ SD)	Range		n	F.L. (mm) ($\bar{x} \pm$ SD)	Range				
1	main stem, coarse gravel, water swift and clear, little overhead vegetation	June 5	6.5	750 sq.ft. ES	0	0	--	--	0	0	--	--	0	0	--	--	0	0	0	0

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KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: DECEPTION CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	May 1-2	7.0-8.0	10 MT 3 BS	0	0	--	--	0	0	--	--	36 SM	36	65.8 ± 9.6	51.0-102.0	4	1	3	2 AS
		June 26-28	14.5-19.5	10 MT 4 BS	0	0	--	--	0	0	--	--	155 fry	69	42.4 ± 7.1	32.0-59.0	4	2	8	7 AS
													12 SM	12	73.4 ± 7.5	66.0-91.5				
		August 4-5	12.0-14.0	10 MT 10 BS	0	0	--	--	0	0	--	--	168 fry	64	45.2 ± 7.9	35.0-62.0	7 (13)	2	0	2 AS
													38 SM	35	80.0 ± 5.7	70.0-93.0				
2	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	May 2-3	7.0	10 MT 1 BS	0	0	--	--	0	0	--	--	0	0	--	--	12	0	0	0

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JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: DUCK CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	main stem, sand to coarse gravel, slow moving and clear, lots of overhead vegetation	May 8-11	8.5-13	28 MT	0	0	--	--	0	0	--	--	62 SM	62	71.4 ± 8.6	56.0-109.5	0	1	46	3 AS 116 stbk
		June 9-10	15.0	10 MT 4.00 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	52 fry	52	37.4 ± 2.1	33.0-42.0	2	10	16	23 stbk
													24 SM	24	76.8 ± 5.8	66.0-89.0				
		August 11-12, 15	12.0-16.0	10 MT 3.0 x 10^3 sq. ft. ES	0	0	--	--	0	0	--	--	76 fry	56	46.7 ± 5.0	36.0-60.0	1	0	37	11 lamp 269 stbk
													26 SM	26	79.6 ± 9.2	64.0-98.5				
2	main stem, coarse gravel, water slow and clear, lots of overhead vegetation	May 9-12	8.5-12.5	15 MT	0	0	--	--	0	0	--	--	15 SM	14	64.1 ± 8.5	53.0-81.0	0	3	24	28 stbk
		June 11-12	13.0	5 MT	0	0	--	--	0	0	--	--	2 SM	2	78.0 ± 1.4	77.0-79.0	0	1	6	2 stbk
		August 11-12	13.0-13.5	5 MT	0	0	--	--	0	0	--	--	2 fry	2	52.0 ± 8.5	46.0-58.0	0	2	3	43 stbk
3	main stem left, coarse gravel, water is slow and clear, lots of overhead vegetation	May 9-12	7.5-10.5	6 MT	0	0	--	--	0	0	--	--	4 SM	4	58.9 ± 9.5	52.0-72.5	0	4	2	0
		June 12-13	12.0-12.5	5 MT	0	0	--	--	0	0	--	--	2 SM	2	81.8 ± 5.3	78.0-85.5	0	1	1	0
		August 11-12		5 MT	0	0	--	--	0	0	--	--	8 fry	8	54.3 ± 2.8	51.0-58.0	0	2	16	1 lamp
													2 SM	2	78.8 ± 4.6	75.5-82.0				
4	main stem, right, fine gravel, water slow and clear, lots of overhead vegetation	May 11-12	10.5	5 MT	0	0	--	--	0	0	--	--	1 SM	1	68.5	--	0	0	4	0
		June 12-13	12.0	5 MT	0	0	--	--	0	0	--	--	2 SM	2	63.5 ± 0.7	63.0-64.0	0	0	2	0
		August 11-12	13.0	5 MT	0	0	--	--	0	0	--	--	8 fry	8	49.9 ± 3.8	46.0-56.5	0	2	0	0
													5 SM	5	79.8 ± 7.9	72.0-91.0				
5	main stem, water slow and clear, lots of overhead vegetation, fine gravel	May 12-13	9.0-11.5	5 MT	0	0	--	--	0	0	--	--	1 fry	1	39.0	--	0	2	4	6
		June 12-13	12.5-13.5	5 MT	0	0	--	--	0	0	--	--	5 SM	5	79.8 ± 7.9	72.0-91.0	0	1	2	0
		August 11-12	13.0-14.0	5 MT 160 sq. ft. ES	0	0	--	--	0	0	--	--	107 fry	57	45.6 ± 5.6	37.0-61.5	0 (20)	17	5	4 lamp
													22 SM	21	85.8 ± 8.9	67.0-104				

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KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: GOOSE CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum				Chinook				Coho				Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
					Σ	Subsample			Σ	Subsample			Σ	Subsample						
						n	F.L. (mm) ($\bar{x}$ ± SD)	Range		n	F.L. (mm) ($\bar{x}$ ± SD)	Range		n	F.L. (mm) ($\bar{x}$ ± SD)	Range				
1	main stem, fine gravel, water clear and swift little overhead vegetation	May 9-12	6.0-11.0	15 MT	0	0	--	--	0	0	--	--	28 SM	28	69.0 ± 12.7	49.0-99.0	0	0	3	3 stbk 7 AS
		June 11-12	9.5-11.5	5 MT	0	0	--	--	0	0	--	--	3 SM	3	70.8 ± 7.1	66.5-79.0	0	0	3	1 stbk 2 AS
		August 11-12	16.0-16.5	5 MT	0	0	--	--	0	0	--	--	1 fry	1	44.0	--	0	0	4	3 stbk
													2 SM	2	82.3 ± 1.1	81.5-83.0				

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JUVENILE SALMONID REARING SURVEY 1980
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(n)=fry (n^1)=unidentified trout fry

Stream: HIRSCH CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x} \pm SD$)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1 & 2	main stem, moderate velocity, coarse gravel	April 9	--	7 BS	18	0	--	--	23 fry	0	--	--	30 fry 19 SM	0 0	--	--	0	0	0	0
1	side channel and pool, sand and fine gravel water slow and clear, lots of overhead vegetation	April 20-21	--	1 MT 1 BS	0	0	--	--	1 fry	1	51.5	--	1 fry 20 SM	1 20	36.5 69.8 ± 10.4	-- 54.5-91.5	(9[1])	0	0	5 AS
2	main stem, coarse gravel, water velocity moderate, water clear, little overhead vegetation	April 20-21	4-7	9 MT 1 DP 9 BS	5	5	39.2 2.0	38.0-42.0	71 fry	48	40.6 ± 2.0	36.5-46.5	8 SM	8	50.1 ± 5.5	45.5-53.0	0 (1[1])	0	0	1 AS
									4 SM	4	57.0 ± 5.8	51.5-62.0								
1 & 2		April 20-21	4-7	10 MT 1 DP 10 BS	5	5	39.2 2.0	38.0-42.0	71 fry	48	40.6 ± 2.0	36.5-46.5	1 fry	1	36.5 ±	--	0 (10[1])	0	0	6 AS
									4 SM	4	57.0 ± 5.8	51.5 62.0	28 SM	28	64.2 ± 12.9	45.5-91.5				
1		May 2	6.0	2 BS	0	0	--	--	0	0	--	--	65 SM	65	61.9 ± 9.3	40.0-87.0	0 (5[1])	0	0	0
		May 16	7.0	1 BS 1 DP	0	0	--	--	25	25	43.0 ± 2.1	39.5-47.0	0	0	--	--	0	0	0	0
		May 21-27	7.0-8.75	4 MT 2 DP 2 BS	0	0	--	--	326 fry	32	45.7 ± 4.5	40-58.5	55 fry	24	40.6 ± 3.8	35-45.5	4 (4[1])	2	0	2 AS
									1 SM	1	73.0	--	81 SM	63	56.5 ± 6.9	46.5-73				
2		May 21-27	7.0-10.75	76 MT 11 BS 21 DP	0	0	--	--	167 fry	40	44.2 ± 4.1	36.0-55.0	12 fry	12	37.0 ± 2.6	34.0-43.5	19 (6[1])	5	15	22 AS
									2 SM	2	69.3 ± 4.6	66.0-72.5	118 SM	114	62.6 ± 6.6	48.0-84.0				
1 & 2		May 21-27	7.0-10.75	80 MT 13 BS 23 DP	0	0	--	--	493 fry	72	44.9 ± 4.3	36.0-58.5	67 fry	36	39.4 ± 3.8	34.0-45.5	23 (10[1])	7	15	24 AS
									3 SM	3	70.5 ± 3.9	66.0-73.0	199 SM	177	60.4 ± 7.3	46.5-84.0				
1		June 10-11	10.0	1 MT 1 BS	0	0	--	--	50 fry	50	48.2 ± 3.4	41.5-56.0	65 fry	57	39.5 ± 3.9	34.5-49.5	0	0	0	0
													3 SM	3	60.7 ± 5.6	54.5-65.5				

APPENDIX VIII
KITIMAT WATERSHED
JUVENNILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HIRSCH CREEK

(n)=fry (n^1)=unidentified trout fry

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x} \pm SD$)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
2		June 10-11	8.0-9.0	9 MT 1 BS	0	0	--	--	9 fry	8	43.9 ± 3.1	37.0-47.0	22 fry	22	35.6 ± 1.6	32.5-39.0	1 (1^1)	4	1	2 AS
													16 SM	16	69.1 ± 5.9	57.5-80.5				
1 & 2		June 10-11	8.0-10.0	10 MT 2 BS	0	0	--	--	59 fry	58	47.6 ± 3.7	37.0-56.0	87 fry	79	38.4 ± 3.8	32.5-49.5	1 (1^1)	4	1	2 AS
													19 SM	19	67.8 ± 6.5	54.5-80.5				
1		June 22-23	9.0	1 MT 1 BS	0	0	--	--	33 fry	33	49.6 ± 4.9	41.5-61.0	280 fry	84	40.1 ± 4.8	33.0-51.0	0	0	0	1 AS
													9 SM	9	70.6 ± 7.5	60.0-84.0				
2		June 22-23	11.0-12.0	9 MT 1 BS	0	0	--	--	6 fry	6	45.5 ± 4.4	40.0-52	81 fry	0	--	--	0	0	1	5 AS
													14 SM	14	71.2 ± 5.9	60.0-82.0				
1 & 2		June 22-23	9.0-12.0	10 MT 2 BS	0	0	--	--	39 fry	39	48.9 ± 5.0	40.0-61	361 fry	84	40.1 ± 4.8	33.0-51.0	0	0	1	6 AS
													23 SM	23	70.9 ± 6.5	60.0-84.0				
1		July 7-12	12.0-14.5	1 BS 4 MT	0	0	--	--	1 fry	1	55.5	--	138 fry	54	38.4 ± 4.2	30.0-48.0	0	0	3	2 AS
													25 SM	25	75.4 ± 11.6	54.5-110				
2		July 7-12	11.0-13.5	7 BS 76 MT 1.14 x 10^4 sq. ft. ES	0	0	--	--	60 fry	40	53.2 ± 6.0	42.0-64.0	829 fry	4	42.6 ± 7.2	36.0-50	26	2	25	16 lamp 66 AS
													293 fry	173	75.2 ± 8.5	53.0-110				
1 & 2		July 7-12	11.0-14.5	8 BS 80 MT 1.14 x 10^4 sq. ft. ES	0	0	--	--	61 fry	41	53.3 ± 5.9	42.0-64.0	967 fry	58	38.7 ± 4.5	30.0-50.0	26	2	28	16 lamp 68 AS
													318 SM	198	75.3 ± 8.6	53.0-110				
1		July 22-23	10.0	2 BS	0	0	--	--	6 fry	6	60.9 ± 8.2	49.0-71.5	219 fry	51	38.8 ± 3.3	34.0-52.0	0	0	0	0
													19 SM	19	75.3 ± 13.8	59.0-108.0				
2		July 22-23	13.0-13.5	10 MT 4 BS	0	0	--	--	4 fry	4	51.9 ± 3.3	48.0-56.0	73 fry	53	38.8 ± 4.0	32.5-53.5	0	0	0	4 AS
													21 SM	20	75.1 ± 7.0	62.0-86.0				

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HIRSCH CREEK (cont.)

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1 & 2		July 22-23	10.0-13.5	10 MT 6 BS	0	0	--	--	10 fry	10	57.3 ± 7.9	48.0-71.5	292 fry 40 SM	104 39	38.7 ± 3.4 75.2 ± 10.2	32.5-53.5 59.0-108.0	0	0	0	4 AS
1		August 7-8	7.0	2 BS 1 MT	0	0	--	--	24 fry	24	59.2 ± 9.2	43.0-75.0	333 fry 36 SM	46 36	45.4 ± 4.1 82.3 ± 10.7	38.5-56.0 63.0-109.5	0 (1)	0	3	2 AS
2		August 7-8	10.5-11.0	9 MT 9 BS	0	0	--	--	9 fry	9	57.9 ± 6.6	47.5-65.5	309 fry 42 SM	62 41	45.7 ± 4.9 79.0 ± 6.8	37.0-59.0 64.0-95	4 (8)	2	1	13 AS
1 & 2		August 7-8	7.0-11.0	10 MT 11 BS	0	0	--	--	33 fry	33	58.8 ± 8.5	43.0-75.0	642 fry 78 SM	108 77	45.6 ± 4.6 80.6 ± 8.9	37.0-59.0 63.0-109.5	4 (9)	2	3	15 AS
1		August 18-19	--	1 MT 1 BS	0	0	--	--	1 fry	1	63.0	--	181 fry 3 SM	34 3	50.5 ± 8.2 90.0 ± 19.1	39.0-68.5 78.0-112.0	0	0	1	0
2		August 18-19	9.0	9 MT 10 BS	0	0	--	--	1 fry	1	65.5 ±	--	234 fry 41 SM	72 41	46.9 ± 5.9 83.4 ± 6.1	38.0-65.5 71.0-99.0	1 (13)	0	0	16 AS
1 & 2		August 18-19	9.0	10 MT 11 BS	0	0	--	--	2 fry	2	64.3 ± 1.8	63.0-65.5	415 fry 44 SM	106 44	48.0 ± 6.9 83.8 ± 7.4	38.0-68.5 71.0-112.0	1 (13)	0	0	16 AS
3	main stem and side channel, water clear with a moderate velocity, little overhead vegetation	April 7	3.0-5.0	9 BS	0	0	--	--	6 fry	0	--	--	0	0	--	--	0	0	0	1 AS
		May 24	9.0-14.5	7 BS 1 DP	2 fry	2	40.0 5.7	36.0-44.0	54 fry	52	43.7 ± 3.4	37.0-57.0	14 fry 21 SM	14 21	38.5 ± 3.0 59.9 ± 4.1	33.5-43.0 54.5-67.0	0	0	0	0
		June 10	10.0-14.0	6 BS	0	0	--	--	21 fry	20	43.7 ± 4.6	39.0-55.5	30 fry	30	35.4 ± 2.2	31.0-39.5	0	0	0	1 AS
		June 23	13.5-14.0	2.8 x 10^3 sq. ft. ES					26 fry	26	46.8 ± 4.6	39.5-59.0	158 fry 22 SM	55 22	36.0 ± 2.6 64.6 ± 8.8	33.0-38.5 51.0-78.0	5	2	1	0
		July 9	10.5	2.1 x 10^3 sq. ft. ES 1 BS	0	0	--	--	8 fry	8	53.9 ± 6.1	46.0-63.5	163 fry 19 SM	50 19	36.5 ± 2.2 70.5 ± 8.4	32.0-43.0 50.5-83.5	1	0	0	23 AS

APPENDIX VIII
KITIMAT WATERSHED
JUVENNILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HIRSCH CREEK

(n)=fry (n^1)=unidentified trout fry

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x} \pm SD$)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
2		June 10-11	8.0-9.0	9 MT 1 BS	0	0	--	--	9 fry	8	43.9 ± 3.1	37.0-47.0	22 fry	22	35.6 ± 1.6	32.5-39.0	1 (1^1)	4	1	2 AS
													16 SM	16	69.1 ± 5.9	57.5-80.5				
1 & 2		June 10-11	8.0-10.0	10 MT 2 BS	0	0	--	--	59 fry	58	47.6 ± 3.7	37.0-56.0	87 fry	79	38.4 ± 3.8	32.5-49.5	1 (1^1)	4	1	2 AS
													19 SM	19	67.8 ± 6.5	54.5-80.5				
1		June 22-23	9.0	1 MT 1 BS	0	0	--	--	33 fry	33	49.6 ± 4.9	41.5-61.0	280 fry	84	40.1 ± 4.8	33.0-51.0	0	0	0	1 AS
													9 SM	9	70.6 ± 7.5	60.0-84.0				
2		June 22-23	11.0-12.0	9 MT 1 BS	0	0	--	--	6 fry	6	45.5 ± 4.4	40.0-52	81 fry	0	--	--	0	0	1	5 AS
													14 SM	14	71.2 ± 5.9	60.0-82.0				
1 & 2		June 22-23	9.0-12.0	10 MT 2 BS	0	0	--	--	39 fry	39	48.9 ± 5.0	40.0-61	361 fry	84	40.1 ± 4.8	33.0-51.0	0	0	1	6 AS
													23 SM	23	70.9 ± 6.5	60.0-84.0				
1		July 7-12	12.0-14.5	1 BS 4 MT	0	0	--	--	1 fry	1	55.5	--	138 fry	54	38.4 ± 4.2	30.0-48.0	0	0	3	2 AS
													25 SM	25	75.4 ± 11.6	54.5-110				
2		July 7-12	11.0-13.5	7 BS 76 MT 1.14 x 10^4 sq. ft. ES	0	0	--	--	60 fry	40	53.2 ± 6.0	42.0-64.0	829 fry	4	42.6 ± 7.2	36.0-50	26	2	25	16 lamp 66 AS
													293 fry	173	75.2 ± 8.5	53.0-110				
1 & 2		July 7-12	11.0-14.5	8 BS 80 MT 1.14 x 10^4 sq. ft. ES	0	0	--	--	61 fry	41	53.3 ± 5.9	42.0-64.0	967 fry	58	38.7 ± 4.5	30.0-50.0	26	2	28	16 lamp 68 AS
													318 SM	198	75.3 ± 8.6	53.0-110				
1		July 22-23	10.0	2 BS	0	0	--	--	6 fry	6	60.9 ± 8.2	49.0-71.5	219 fry	51	38.8 ± 3.3	34.0-52.0	0	0	0	0
													19 SM	19	75.3 ± 13.8	59.0-108.0				
2		July 22-23	13.0-13.5	10 MT 4 BS	0	0	--	--	4 fry	4	51.9 ± 3.3	48.0-56.0	73 fry	53	38.8 ± 4.0	32.5-53.5	0	0	0	4 AS
													21 SM	20	75.1 ± 7.0	62.0-86.0				

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HIRSCH CREEK (cont'd)

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
3		July 23	--	3.50 x 10^3 sq. ft. ES	0	0	--	--	11 fry	11	57.5 ± 6.7	46.0-66.0	118 fry	50	38.6 ± 4.0	34.0-45.0	0(10)	0	0	1 lamp 17 AS
													16 SM	16	78.0 ± 5.1	69.0-86.5				
		July 8	--	2.4 x 10^3 sq. ft. ES	0	0	--	--	9 fry	9	62.9 ± 5.6	53.0-71.0	172 fry	50	44.0 ± 4.6	36.0-54.5	0(30)			2 lamp 25 AS
													23 SM	22	74.3 ± 7.1	59.0-85.5				
		August 18	13.0	2.4 x 10^3 sq. ft. ES	0	0	--	--	2 fry	2	68.8 ± 0.5	68.5-69.0	125 fry	50	46.8 ± 7.7	36.0-64.0	0(2)	0	0	2 lamp 19 AS
													22 SM	22	79.3 ± 6.4	66.5-89.0				
4	Main stem, fine cobble. Water clear & slow, little overhead vegetation	May 24-25	9.75-10.0	10 MT	0	0	--	--	0	0	--	--	0	0	--	--	(3[1])	0	0	4 AS
		June 10-11	9.0	5 MT 562 sq.ft. ES	0	0	--	--	0	0	--	--	0	0	--	--	2	0	1	1 AS 3 lamp
		June 23-24	11.5-14.0	5MT	0	0	--	--	0	0	--	--	58 fry	50	37.2 ± 3.1	32.0-46.0	7	0	2	36 AS
													5 SM	5	50.7 ± 1.4	49.5-53.0				
		July 7-9	10.5-11.5	10 MT 1.25 x 103 sq ft ES	0	0	--	--	3 fry	3	61.2± 10.6	49.0-68.0	141 fry	56	41.5± 3.6	32.0-52.0	6	2	0	41 As
		July 22-23	10.5-11.5	10 MT 4.0x10^2 sq. ft ES	0	0	--	--	2 fry	2	79.0± 5.7	75.0-83.0	94 fry	75	46.2 ± 4.8	36.5-58.5	2	1	0	3 lamp 25 AS
													3 SM	3	68.0 ± 3.6	64.0-71.0				
		August 7-8	13.0-14.0	7 MT 750 sq.ft. ES	0	0	--	--	2 fry	2	68.8± 0.4	68.5-69.0	72 fry	57	50.0 ± 5.1	39.5-61.0				
													2 SM	2	65.3 ± 0.4	65.0-65.5				
		August 19	12.0	760 sq.ft. ES	0	0	--	--	0	0	--	--	41 fry	41	50.8 ± 6.1	41.0-63.5	1(28)	0	2	7 lamp 15 AS
													2 SM	2	71.8 ± 0.4	71.5-72.0				

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HIRSCH CREEK (cont'd)

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x} \pm SD$)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
5	Main stem, fine rubble, water slow & clear, some overhead vegetation	April 21-22	3.5	10 MT	0	0	--	--	0	0	--	--	0	0	--	--	0	0	16	0
6	Side channel, fine cobble, water slow & clear, some overhead vegetation	July 10-11	9.5-11.5	10 MT 525 sq.ft. ES	0	0	--	--	0	0	--	--	0	0	--	--	0	0	25	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HOULT CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Mainstream, fine cobble water fast & clear, quite a bit of vegetation	June 4	8.0	1.2 x 10^3 sq. ft. ES	0	0	--	--	47 fry	47	42.4 ± 3.4	35.5-51.0	16 fry	16	35.8 ± 2.6	32.0-42.5	0(1[1])	0	11	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: HUMPHREYS CREEK

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum F.L. (mm) ($\bar{x}$ ± SD)	Chum Range	Chinook Σ	Chinook Subsample n	Chinook F.L. (mm) ($\bar{x}$ ± SD)	Chinook Range	Coho Σ	Coho Subsample n	Coho F.L. (mm) ($\bar{x}$ ± SD)	Coho Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Main stem, coarse gravel, water slow & clear, little overhead vegetation	April 27-29	5.6-6.5	5MT 4BS	7 fry	7	42.0± 3.6	36.0-47.0	6 fry	6	41.2 ± 1.3	39.5-42.0	5 fry	5	39.9 ± 1.1	38.0-41.0	0(4[1])	0	4	0
													1SM	1	63.0	--				
		May 5	7.0-8.5	8BS	17 fry	17	45.9± 4.9	38.0-53.0	25 fry	20	42.8 ± 2.4	39.5-48.0	47 fry	16	41.6 ± 1.9	38.5-46.0	0	0	27	0
													1SM	1	61.0	--				
		June 19-20	8.75-12.5	10MT 9BS	0	0	--	--	0	0	--	--	6 fry	6	37.3 ± 3.1	35.0-43.5	6	0	6	0
													20SM	20	73.7 ± 7.3	58.5-87.0				
		August 7-8	14.0-15.0	7MT 7BS	0	0	--	--	0	0	--	--	98 fry	62	43.6 ± 5.9	33.5-63.0	0(11)	0	2	1 AS
													49 SM	49	76.5 ± 4.9	65.5-89.0				
2	Main stem, fine rubble, water fast & clear, little overhead vegetation.	April 27-28	4.0-5.5	5MT	0	0	--	--	0	0	--	--	3 SM	3	50.2 ± 3.3	48.0-54.0	0(4[1])	0	0	0
		June 19-20	8.0-9.0		0	0	--	--	0	0	--	--	5 SM	5	67.5 ± 6.0	59.0-75.5	1	0	0	0
		August 7-8	14.0-15.5	10MT 10MT,2BS 110 sq.ft. ES	0	0	--	--	0	0	--	--	141 fry	70	44.1 ± 5.9	35.0-60.5	6(5)	7	16	1AS
													93SM	93	78.3 ± 11.5	62.0-99.5				
3	Braided main stem, fine rubble, water fast & clear, some overhead vegetation	April 27-28	5.0	5MT	0	0	--	--	0	0	--	--	0	0	--	--	0(1[1])	1	0	0
		June 19-20	7.75-9.0	5MT	0	0	--	--	0	0	--	--	2 fry	2	68.8 ± 3.2	66.5-71.0	0	0	1	0
		August 7-8	14.0-16.0	5MT 5BS	0	0	--	--	0	0	--	--	40 fry	39	45.4 ± 4.5	35.0-54.0	0(7)	1	0	0
													17SM	17	76.1 ± 13.5	58.5-98				
4	Main stem, coarse rubble, water fast & clear, some overhead vegetation	April 27-28	4.0	5MT	0	0	--	--	0	0	--	--	0	0	--	--	0	0	1	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: Hunter Creek

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Braided main stem, fine gravel, water slow & clear, some overhead vegetation	June 4	7.0	150 sq ft ES	0	0	--	--	17 fry	17	46.3 - 4.0	37.5 52	9 fry 13 SM	9 .3	36.5 1.2 45.3 6.0	34.0-38.0 40.0-59.0	0	0	0	0
2	Braided main stream, fine rubble, water slow & clear, some overhead vegetation	June 4	6.5	300 sq ft ES	0	0	--	--	1 fry	1	45.0	0	0	0	--	--	0	0	22(1)	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream : Kitimat River

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Braided main stem, coarse gravel & fine rubble, water velocity moderate	May 29-30	8.5-9.5	10MT 6 BS 3 DP	0	--	--	--	37	37	41.2± 2.53	37.5-49.	3 SM	3	57.7± 7.0	51.0-65.	7	0	2	5Trt 2A.C. 1Stbk
													7 FRY	7	35.4± 2.16	31.0-37.0				
		June 30 to July 7	12.0-16.5	10MT 12BS	0	--	--	--	13	13	44.0± 3.29	40.5-53.	3 SM	3	65.3± 4.04	61.0-69.0	6	0	13	5A.C.
													144 FRY	50	36.3± 2.23	32.0-41.5				
		July 28-29	10.0-12.0	10MT 14BS	0	--	--	--	3	3	61.0± 4.36	56.-64.	27 SM	27	77.9± 6.62	66.-90.0	1	1	26	10Trt Fry 1A.C.
													98FRY	50	39.3± 2.89	34.0-44.5				
2	Braided main stem, coarse gravel & fine rubble, water velocity moderate	May 28-29	9.0-11.0	10MT 10BS 1DP	0	--	--	--	125	80	44.7± 2.68	39.5-55.5	21FRY	21	37.5± 2.35	33.5-43.	2	1	14	18Trt 2A.C. 1Lamp
		June 29-30	11.0-17.0		0	--	--	--	21	21	49.7± 3.22	44.-55.0	33 SM	33	71.9± 6.16	58.-85.	0	?	19	13Trt 2A.C.
													168 FRY	50	38.6± 4.06	32.-49.				
		July 29-30	?		0	--	--	--	4	4	57.4± 3.61	52.-59.5	64 SM	64	75.9± 7.37	61.-99.	--	--	15	18Trt Fry
													97FRY	61	42.9± 5.94	33.5-61				
3	Braided main stem, fine rubble & some coarse gravel, water velocity moderate	May 28-29	9.0	10MT	0	--	--	--	--	0	--	--	8 SM	8	59.6± 8.1	46.5-7.4	--	--	1	1A.C.
		June 6 to July 1	13.0-15.	10MT 2BS	0	--	--	--	1	1	52.0	--	4 SM	4	68.5± 12.9	57.0-87.	--	--	1	--
													177 FRY	45	37.5± 2.4	34.0-47.5				
		July 30-31	11.0	10MT 4.9×10^3 sq. ft EF.	0	--	--	--	46	46	62.0± 5.86	51.-77.	119 SM	115	77.3± 6.22	63.-92	6	8	46	4Trt Fry 19A.C. 1Lamp 1Frog
													220 FRY	58	45.9± 6.61	37.-60.				

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream : Kitimat River

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
4	Braided main stem & isolated pools coarse gravel water swift	June 4	7.0-9.5	$2x10^3$sq.ft E,F, 5BC 1DP	0	--	--	--	46	46	43.6± 6.46	39.5-52.	25 SM	25	57.6± 4.74	51.-68.	--	1	2	--
													10FRY	10	42.7± 3.63	37.0-48.				
5	Braided main stem, fine rubble, water velocity fast	June 4	10.0	$6.7x10^3$sq. ft. E,F,	0	--	--	--	55	55	42.6± 1.52	39.0-47.	1 SM	1	65.5	--	--	--	3	--
													1FRY	1	36.5					
6	Braided main stem, fine rubble, water velocity moderate	June 4	7.5-9.0	$4.5x10^3$sq. ft. E,F.	0	--	--	--	2	2	38.3± 0.35	38.-38.5	8 SM	8	57.8± 8.42	48.-72.	--	--	11	--

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: Little Wedeene River

(n)=fry (n^1)=unidentified trout fry

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x} \pm SD$)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Braided main stem, fine gravel, water velocity moderate, clear, some overhead vegetation	April 16-17	3.5-5.5	8 BS, 10 MT,	0	0	--	--	1SM	1	77.0	--	5SM	4	61.3 ± 4.5	58.5-68.0	1(3^1)	0	0	2AS
		May 27-28	8.0-9.5	5 DP, 10 MT, 8 BS	0	0	--	--	1 fry	7	43.4 ± 4.6	39.5-52.5	104 fry	77	36.7 ± 2.9	32.0-48.0	3	0	3	0
		July 24-25	--	10 MT 6 BS	0	0	--	--	7 fry	7	55.4 ± 5.4	46.0-60.5	102 fry	27	44.6 ± 6.1	37.0-59.5	2	0	4	1AS
2	Main stem & side channel, fine to coarse gravel, water clear with varying velocity, lots to little overhead vegetation.	May 26-27	7.0-8.0	7 MT	0	0	--	--	0	0	--	--	0	0	--	--	0	0	16	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: Lone Wolf Creek

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum				Chinook				Coho				Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
					Σ	Subsample			Σ	Subsample			Σ	Subsample						
						n	F.L. (mm) ($\bar{x}$ ± SD)	Range		n	F.L. (mm) ($\bar{x}$ ± SD)	Range		n	F.L. (mm) ($\bar{x}$ ± SD)	Range				
42	Main stem, coarse gravel water slow & clear, lots of overhead vegetation	May 7-8	8.0-14.75	10MT, 98S, 2DP	0	0	--	--	0	0	--	--	33 fry 41SM	33 41	36.9± 3.1 70.4± 8.9	31.0-46.0 48.0-89.0	0	1	13	0
		July 26-27	9.5-12.0	98S, 10MT	0	0	--	--	0	0	--	--	45 fry 24SM	45 24	39.7± 5.0 76.3± 6.6	34.0-53.0 67.5-91.5	0	0	10	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: McKay Creek

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Braided main channel, fine rubble, water fast & clear	June 5	7.0	2000 sq. ft. ES	0	0	--	--	15 fry	15	44.6± 2.6	40.0-49.5	5SM	5	65.1± 0.7	64.5-66.0	6	0	4	0
2	Main stem fine rubble, some sand, water fast & clear	June 5	5.5	875 ft.ES	0	0	--	--	0	0	--	--	0	0	--	--	0	0	7	0

APPENDIX VIII
KITIMAT WATERSHED
JUVENILE SALMONID REARING SURVEY 1980
CATCH RECORD

Stream: Nalbeelah Creek

(n)=fry (n^1)=unidentified trout fry

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
1	Main stem coarse gravel, some clay, water velocity moderate, some overhead vegetation.	May 6-7	6.5-8.0	7BS, 10MT	2 fry	2	41.5± 0.7	41.0-42.0	1 fry	1	43.0	-	11SM	10	64.3 ± 13.4	43.0-92.5	4(1^1)	0	2	4AS
		June 17-18	12.5-14.0	8BS,10MT	0	0	--	--	0	0	--	--	72 fry	64	35.2 ± 2.0	32.0-42.5	0	1	2	6AS
													10SM	8	66.6 ± 9.8	45.0-75.5				
		August 9-10	15.0-18.0	8MT, 6BS	0	0	--	--	0	0	--	--	75 fry	55	45.8 ± 6.2	34.0-59.5	3(57)	0	3	1 stbk 6 AS
													17 SM	17	79.2 ± 5.9	65.5-88.0				
2	Side channel coarse gravel, some clay, water slow & clear, lots of overhead vegetation	May 7-8	5.0-7.0	9BS,10MT	0	0	--	--	0	0	--	--	72 SM	72	56.4 ± 6.7	41.0-71.5	0(1^1)	0	4	0
		May 16-17	10.0-13.0	9BS,10MT	0	0	--	--	0	0	--	--	17 fry	17	39.2 ± 2.2	36.0-44.0	2	1	13	0
		August 9-10	17.0-20.0	7BS,10MT	0	0	--	--	1 fry	1	71.0	--	63 fry	60	45.8 ± 5.9	36.5-62.0	3(19)	1	15	2AS
													24 SM	24	83.2 ± 5.9	73.0-93.5				
3	Main stem, above clay slide, large pool, fine & coarse rubble, silt on bottom, water clear, little overhead vegetation	June 22	12.5	1800 sq.ft ES	0	0	--	--	0	0	--	--	7 fry	7	37.4 ± 1.8	35.0-40.5	1	0	0	0
													1 SM	1	68.0	--				

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location:Cecil Creek 1

Species & Stage: Coho fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
16/7	195	207	16	279	10	-	-	486	26					Minnow traps Electrofisher
		11	2	10	0	-	-	23	2					
		218	18	289	10			509	28	3230	2262	4779	6.34x	

APPENDIX VIII

KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Cecil Creek 1

Species & Stage: Coho smolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
21/5	25	7	0	5	0	-	-	12	0					Minnow traps only
16/7	92	62 21 83	11 5 16	48 15 63	5 2 7	- -	- -	110 36 147	16 7 24	497	339	758	3.38x	Minnow traps Electrofisher

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Species and Stage: Trout fry

Location Cecil Creek 1

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
16/7	5	0	0	0	0	-	-	0	0					Minnow traps
		28	0	30	0	-	-	58	-					Electrofisher

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Species & Stage: Dolly Varden

Location: Cecil Creek 1

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
21/5	13	4	1	18	3	--	--	22	4	54	24	134	2.45x	Minnow traps only
16/7	17	5 10 15	0 3 3	6 4 10	2 2 4	-- --	-- --	11 14 25	2 5 7	49	26	104	1.96x	Minnow traps Electrofisher

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Cecil Creek 1

Species and Stage: Cutthroat

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
21/5	2	2	0	0	0	-	-	2	0					Minnow traps only
16/7	2	0	0	1	0	-	-	1	0					Minnow traps
		2	0	0	0	-	-	2	0					Electrofisher
		2	0	1	0			3	0					

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Cecil Creek 1

Species & Stage: Rainbow trout

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
16/7	14	1	0	0	0	-	-	0	0					Minnow traps
		23	1	4	0	-	-	27	1					Electrofisher

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Cecil Creek 2

Species & Stage: Coho fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
14/8	164	26	7	32	6	-	-	58	13					Minnow traps
		216	15	84	6	-	-	300	21					Electroshock
		242	22	116	12			358	34	1605	1158	2292	4.48x	

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Cecil Creek 2

Species & Stage: Coho . ·smolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
16/5	32	13	0	5	0	-	-	18	0					Minnow traps
14/8	75	28	6	28	3	-	-	56	9					Minnow traps
		66	11	31	6	-	-	97	17					Electroshock
		94	17	59	9			154	27	374	260	557	2.43x	

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Species & Stage: Trout fry

Location Cecil Creek 2

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
14/8	15	0	0	0	0	-	-	0	0					Minnow traps
		35	0	24	0	-	-	59	0					Electroshock

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Locaction: Cecil Creek 2

Species & Stage: Dolly Varden

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
16/5	34	13	2	5	0	-	-	13	2					Minnow traps
14/8	70	40	6	40	7	-	-	80	13					Minnow traps
		19	3	7	0	-	-	26	3					Electro-shocking
		59	9	47	7			106	16	412	259	686	3.89x	

APPENDIX VIII

KITIMAT WATER SHED JUVENILE REARING SURVEY

POPULATION ESTIMATES

Location: Cecil Creek 2 Species & Stage: Cutthroat

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
16/5	2	0	0	0	0	-	-	2	0					Minnow traps only
14/8	6	1	0	1	1	-	-	2	1					Minnow traps
		5	1	5	1	-	-	10	2					Electro-shocking
		6	1	6	2			12	3					

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Cecil Creek 2

Species & Stage: Rainbow trout

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
14/8	2	1	0	3	0	--	--	4	0					Minnow traps
		3	0	8	1	--	--	11	1					Electro-shocking

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Duck Creek 1

Species & Stage: Dolly Varden

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
9/5	11	25	1	8	0	-	-	33	1					Minnow traps

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Duck Creek 1 Species & Stage: Coho smolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
9/5	36	13	0	12	0	-	-	25	0					Minnow traps

APPENDIX VIII

KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Species & Stage: Coho smolts

Location: Goose Creek 1

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
10/5	9	14	0	5	1	--	--	19	1					Minnow traps

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Hirsch Creek

Species & Stage: Coho fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
9/7	113	1	0	3	0	0	0	4	0					Minnow traps
		-	-	197	1	249	1	446	2					Electrofisher
		1	0	200	1	249	1	500	2					

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Hirsch Creek

Species & Stage: Dolly Varden

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
24/5	8	3	0	6	0	5	1	14	1					Minnow traps only
9/7	7	7	0	6	0	6	0	19	0					Minnow traps
		-	-	0	0	0	0	0	0					Electrofisher
		7	0	6	0	6	0	19	0					

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Hirsch Creek

Species & Stage: Rainbow trout

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
24/5	11	3	0	5	0	4	0	12	0					Minnow traps only
9/7	7	3	0	0	0	2	0	5	0					Minnow traps Electrofisher
		-	-	8	1	7	0	15	1					
		3	0	8	1	9	0	20	1					

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Hirsch Creek

Species & Stage: Chinook fry

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
9/7	16	5 - 5	0 - 0	0 9 9	0 0 0	3 15 18	0 1 1	8 24 32	0 1 1					

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Hirsch Creek

Species & Stage: Coho Smolts

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
24/5	78	8	0	26	0	28	1	62	1					Minnow traps only
9/17	99	37	2	33	1	43	0	113	3					Minnow traps Electrofisher
		-	-	36	2	42	5	78	7					
		37	2	69	3	85	5	191	11	1529	886	2867	8.01x	

APPENDIX VIII
KITIMAT WATER SHED JUVENILE REARING SURVEY
POPULATION ESTIMATES

Location: Hirsch Creek

Species & Stage: Cutthroat trout

Date(s) (d/m)	Total Marks Released (M)	Recaptures						Total Recaptures		Total Est. Pop'n. over Recapture Period(N)			Recapture Efficiency Factor	Comments
		Day 1		Day 2		Day 3								
		Total	Marks	Total	Marks	Total	Marks	Total (C)	Marks (R)	"Best" Est.	Lowest Est.	Highest Est.		
24/5	2	1	0	1	0	0	0	2	0					Minnow traps only

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Table 1
OUTER ESTUARY BEACH SEINE SAMPLES

Location	Habitat Type Substrate	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Site #2	Estuary Mud Flats	24/4	7°C	4 BS	4	4	41.1 ± 2.65	38-44.5												2 Fl
Site #3	Estuary, River Mouth, Mud-Gravel	24/4	6.5°C	3 BS									1	1	78.0					2 Fl 1 SS
Site #4	Below River Mouth, Gravel	24/4	7.0°C 6.5°C	7 BS 2 DP	40	28	41.0 ± 2.0	38-45.5	1	1	41.5							1 fry (32.0)		7 Fl 6 SS 1 Pk 3 SS
Site #5	Minette Bay Outler, Gravel	25/4	9.0°C	2 BS	10	9	43.7 ± 3.5	38-49.5	1	1	41.0									4 Fl 1 SS 1 Sc
Site #7	Minette Bay Mud Flats	25/4	9.5°C	2 BS	13	13	42.1 ± 2.9	38-48	1	1	42.0									1 Fl 11 SS 1 EP
Site #8	Minette Bay MudFlats	30/4	8.0°C	2 BS	6	6	43.8 ± 3.48	39-49												4 Sc 3 Pk
Site #2	Estuary, Mudflats	1/5	7.0°C	2 BS																5 SS
Site #2b	Estuary, T.C., Mud	1/5	7.0°C	2 BS 1 DP	14	14	43.5 ± 4.48	34-51	2	2	40.8 ± 1.76	39.5-42						1 fry (26.0)		

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Location	Habitat Type Substrate	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x} \pm SD$)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x} \pm SD$)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Site #1	Eurocan Dock, Gravel, Riprap	18/5	12.5°C	2 BS	1	1	68.5		2	2	105.8± 6.7	101, 110.5							1	25 Fl 4 St 1 sp
Site #2	Estuary, Mudflats	18/5	13.5°C	2 BS																22 Fl 2 SS
Site #3	Estuary, River Channel, Mud-Gravel	18/5	12.0°C	2 BS																2 Fl
Site #4	Below River Mouth, Gravel	19/5	13.5°C	3 BS									1	1	66.0			1 ad (128)		1 Fl 1 SS
Site #5	Minette Bay Outlet, Gravel	19/5	14.0°C	3 BS															4	5 Sc
Site #7	Minette Bay Mud Flats	19/5	14.0°C	1 BS																7 Fl 7 SS 10 sp
Site #8	Minette Bay Mue Flats	19/5	13.0°C	1 BS																15 SS 3 St 22 sp

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Location	Habitat Type Substrate	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Site #2	Estuary, Mud Flats	6/6	14°C	1 BS																10 Fl 11 SS
Site #3	Estuary, Mud-Gravel Substrate	6/6	14°C	1 BS														1 fry (41.5		2 Fl 1 SS
Site #4	Below River Mouth, Gravel	6/6	11°C	3 BS	1	1	46.0						5	5	84.6± 4.32	80.5-91.0			3	7 SS
													(All Coho Smolts silvering)							
Site #5	Minette Bay Outlet, Gravel	6/6	13.5°C	3 BS	4	4	69± 4.0	65.5-74.0	8	8	87.1 ± 8.3	77-104.5	19 sm	19	87.7± 7.2	73-97			4	1 SS 11 St
									1Cl	1	86.0		2 fry	2	59.8± 3.2	57.5, 62				
Site #6	Minette Bay, Mud	1/6	11°C	2 BS	4	4	45.5±6.0	40.5-54										1 fry		8 Fl 3 SS 1 St
Site #7	Minette Bay Mud Flats	7/6	17°C	3 BS	1	1	52 (smolting)						2 smolting	2	79 ± 2.82	77,81				267 Fl 259 SS 31 St 16 sp
Site #7	Minette Bay, Mud Flats	1/6	11.0°C	2 BS	11	10	68.5±5.8	59.5-76	1	1	81.0		5 smolts	5	86.5± 3.74	84-93				24 Fl 25 SS 6 St
Site #2	Estuary, Mud Flats	20/6	15.0°C	3 BS														1 fry (30.5)		6 Fl 5 SS 1 St
Site #3	Estuary, Mud-Gravel	20/6	17.0°C	1 BS	2	2	53.3±1.1	52.5, 54.0												6 Fl 16 St
Site #4	Below River Mouth, Gravel	20/6	17.5-18.5°C	2 BS	1	1	45.5		1	1	60.5							1 fry (55.5)	15	5 SS 4 St 3 Fl
Site #5	Minette Bay Outltet, Gravel	20/6	17.0°C	2 BS					8	8	86.1 ± 9.2	72-97	2	2	79.5± 17.6	67-92		1 ad (150 mm)	11	2 SS
									2Cl	2	95.3 ± 1.1	96, 94.5						1 fry (60 mm)		7 St
Site #6	Minette Bay Mud Flats	15/6	14.5°C	1 BS	17	17	50.0±4.0	47-56.5	4	4	52.1 ± 3.7	49-57.5	2	2	95.8± 8.1	90, 101.5		23 fry	1	30 Fl 29 SS 32 St 4 Sp
									1	1	81									

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Table 1
OUTER ESTUARY BEACH SEINE SAMPLES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum F.l. (mm) ($\bar{x}$ ± SD)	Chum Range	Chinook Σ	Chinook Subsample n	Chinook F.l. (mm) ($\bar{x}$ ± SD)	Chinook Range	Coho Σ	Coho Subsample n	Coho F.l. (mm) ($\bar{x}$ ± SD)	Coho Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Site #8	Minette Bay, Mud Flats	18/6	20°C	2 BS	1	1	52.0						1	1	90.5			1 fry (40.0)		214 SS 122 Fl 75 St 232 sp
Site #1	Estuary, Mud Flats	5/7	11.5°	3 BS	2	2	62 ±1.41	61,63	3	3	76±3.77	72-79.5	3 (fry)	3	35.8 ± 0.57	35.5-36.5			11	50 Fl 20 SS 3 St 2 sp
Site #2	Estuary, Mud-Gravel	5/7	11.5°C	2 BS	3	3	54.5 ± 3.04	52.5-58.0					1 (fry)	1	36.0			1 fry (48.0)		8 Fl 42 SS
Site #3	Estuary, Mud-Gravel	5/7	10°C	2 BS																3 SS
Site #4	Below River Mouth, Gravel	6/7	11-12°C	3 BS					11	11	75.4±6.7	65.5-86	3(fry)	3	35.5 ± 2.17	33-37	1 (122 mm)		9	1 Fl 9 SS 127 St
Site #5	Minette Bay Outlet, Gravel	3/6	16°C	5 BS	7 (includes smolts)	7	56.8±7.3	48.5-69.0	19	19	79.6± 12.5	64-111	1	1	73				16	13 Sc 4 SS 2 H
Site #6	Minette Bay, Mud Flats	3/7	16°C	3 BS					4 Cl	4	104.8 ± 5.68	99-111								
									4	4	88.3 ± 14.2	77.5-109 (includes 1 smolt)	1	1	85			1 ad 170)		83 Fl 168 SS 519 St 39 sp
Site #7	Minette Bay Mud Flats	3/7	16°C	2 BS					1	1	73.0									33 Fl 149 SS 316 St 502 Sp

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Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Site #8	Minette Bay Mud Flats	6/7	13.5°C	3 BS																57 Fl 99 SS 18 St 1 A.s
Site #1	Eurocan Dock, Gravel, Riprap	20/7	15.5-16.0°C	3 BS					1	1	97								6	22 Fl 6 SS 13 St 12 Sp 2 Sl
Site #2	Estuary, Mud Flats	20/7	16.0°C	2 BS																11 Fl 69 SS 6 St 3 sp
Site #3	Estuary, Mud-Gravel	20/7	6.0	1 BS																6 Fl 19 SS 1 St 3 Sp
Site #4	Below River Mouth, Gravel	21/7	14.0	3 BS					8	7	96.3 ± 22.3	62.0-127	1	1	57.2				9	1 Fl 4 SS 10 St
Site #5	Minette Bay Outlet & River Mouth	27/7	14.5°	6 BS	2	2	62±2.8	60,64	36	36	86.5 ± 8.99	62.5-103						1 ad (225 mm)	6	1 Fl 12 SS 1 St
Site #6	Nubette Bay Mudflats	27/7	14.5°C	2 BS					1	1	88.5								1	26 Fl 7 SS 9 St

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Location	Habitat Type Substrate	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Site #7	Minette Bay Mudflats	27/7	14.5°C	2 BS	2	2	54.5±2.1	53,56	1	1	93									24 Fl 33 SS 46 St
Site #8	Minette Bay Mudflats	27/7	14.5°C	2 BS																6 Fl 62 SS 7 St
Site #1	Eurocan Dock, Gravel, Riprap	5/8	14°C	2 BS					3	2	89±0.7	88.5, 89.5							4	17 Fl 4 SS 6 St 1 Ps
Site #2	Estuary Mudflats	5/8	18°C	2 BS																34 Fl 28 SS 2 St 1 sp
Site #3	Estuary, River Channel, Mud-Gravel	5/8	13-17.5	3 BS															5	4 Fl 6 SS
Site #4	Below River Mouth, Gravel	5/8, 6/8	13.5, 14°C	3 BS					8	8	88.8±3.4	78-102	2	2	59.8 ± 8.1	54.0, 65.5			9	1 Fl 1 St
Site #5	Minette Bay Outlet & River Mouth, Gravel	6/8	14.0-14.5°C	3 BS					6 (all smolting)	6	109.4 ± 5.54	103.5-116.5							10	1 Sc
Site #6	Minette Bay Mudflats	6/8	16°C	2 BS																156 Fl 26 SS 32 St
Site #7	Minette Bay Mudflats	6/8	16-17°C	2 BS																104 Fl 14 SS 1 St
Site #8	Minette Bay Mudflats	6/8	16.0°C	1 BS																21 Fl 49 SS 31 St

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TABLE 2
EUROCAN DOCK SET NET AND BEACH SEINES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Eurocan Channel	Tidal Channel	14/4-15/4	-	Set Net	61	52	40.6±2.5	37-51	1	1	40.0									16 SS
	Main Tide Channel	15/4	-	2 BS	11				Pink 3	3										1 St
	Mudflats	15/4		3 BS	4															1 Fl 5 SS
Eurocan Channel	Tidal Channel	3/5-4/5	11°C	Set Net	63	63	41.7±2.5	37-47					2 fry	2	43± 2.82	41,45		2 fry		1 Fl 50 SS
													1 smolt	1	79.5					9 St
	Mudflats	4/5	11° C	4 BS	1	1	39.0													4 SS 1 St
Eurocan Channel	Tidal Channel	16/5-17/5	11°C	Set Net	7	7	49.3± 3.14	44-54	2 smolts	2	77.8 ± 3.18	75.5, 80	5	5	77.9 ± 2.89	75-82.5		1 fry		53 SS 72 st 3 H
	Main Tide Channel	17/5	11.5°C 10.5°C	4 BS	32	32	48.2± 3.97	39-57.5	9 fry	9	43.7 ± 4.0	39-49	1	1	35.5			4 fry		24 SS 2 St
	Mudflats	17/5	10.0°-16.0°C	4 BS	3	3	43.2± 3.33	41-47	3 fry	3	44±3.46	42-48								1 Fl 6 SS 2 St
Eurocan Channel	Tidal Channel	1/6-2/6	12°C	Set Net									2	2	83.3 ± 8.1	77.5, 89			1	22 SS 169 St
	Main Tide Channel	2/6	11-12° C	3 BS	51	51	57.2± 7.65	42-72.5	5	5	51.9 ± 2.63	48.5-54	4	4	43.8 ± 6.4	38-53		14 fry		1 Fl 9 SS
									3	3	63.2 ± 4.2	60.5-68	4	4	65.8 ± 7.5	61-77				297 St
	Mudflats	2/6	11-18°C	4 BS																7 Fl 16 SS 51 St

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Eurocan Channel	Tidal Channel	15/6-16/6	14.0°C	Set Net	2	2	51.5±6.4	56, 47.	1	1	76.0		2 smolts	2	92.5 ± 9.2	86, 99		2 fry	3	1 Fl. 13 SS 252 St 1 H
	Main Tide Channel	16/6	13-14.5° C	3 BS					1 fry 2 smolt	1 2	66.0 89.3± 12.3	80.5, 98	7 smolts	7	95.8 ± 5.8	92-102		2 fry	21	9 Fl. 5 SS 2 St
	Mudflats	16/6	13.5-14°C	4 BS					2 fry	2	60.5± 7.78	55,66	3 fry	3	62.8 ± 5.8	57.5 69.0				18 Fl 24 SS
Eurocan Channel	Tidal Channel	28/6-29/6	.3/25°C	Set Net	3	3	58.5±2.6	55.5-60	1	1	82.0		1 fry 1 smolt	1 1	49.5 105.0					185.5 335 St 1 SP
	Main Tide Channel	29/6	14.5-15°C	5 BS	39	39	55.6±5.9	47-71.5	5	5	64.1 ± 9.2	53-74	2	2	46±0.71	46.5, 45.5		1 fry		2 Fl 19 SS 1 Sc 153 St
	Mudflats	29/6	15.5°C	3 BS																8 Fl 14 SS 6 St
Eurocan Channel	Tidal Channel	13/7-14/7	14.5°C	Set Net					1	1	51.0		3 fry 1 smolt	3 1	42.5 ± 11.7 98.5	35,56				1 Fl 3 SS 4 Sl 36 St
	Main Tide Channel	14/7	14-15.5°C	4 BS					2	2	96.5 ± 0.71	97,96							8	6 Fl. 6 SS 30 St
	Mudflats	14/7	15.5-16	4 BS																2 Fl 29 SS 12 St

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Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Eurocan Channel	Small Tide Channel	30/7-31/7	14.5°C	Set Net	3	3	81.3 ± 3.7	79-86					1 smolt	1	85.5					2 Fl 7 SS 107 SI 53 St
	Main Tide Channel	31/7	13-14.5°C	4 BS															7	1 Fl 10 SS 2 St 18 SI
	Mudflats	31/7	14.5°C	4 BS																19 Fl 45 SS 33 St
Eurocan Channel	Small Tide Channel	10/8-11/8	17°C	Set Net									1 smolt	1	96.0					1 Fl 251 St 1 SS 1 SI 1 SP
	Main Tide Channel	11/8	16°C	4 BS	1	1	52		25	25	97.1 ± 10.6	71-105.5	2 smolt	2	76 ± 2.1	77.5, 74.5			5	14 F 1 SS 21 St 9 SP
	Mudflats	11/8	17-19°C	3 BS																9 Fl 22 SS 8 St

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TABLE 3
CENTRAL ESTUARY SET NET AND BEACH SEINES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Central Estuary	Small Tide Channel	16/4-17/4	6.0°C	Dipnetted	21	21	40.2 ± 1.85	38-45	4	4	41.6 ± 1.7	39.5-43	4	4	40.6 ± 2.1	37.5-42		8 fry		Fl & SS observed
	Main Tide Channel	17/4	6.5°C	4 BS	14	-	-	36.5-45	1	2	42.3 ± 1.1									13 Fl 3 Sc 1 Ool
	Open Flats by River Mouth	17/4	6.0°C	4 BS	9	14	40± 2.13	-	2	1	42.0	41.5, 43.5								2 Fl
Central Estuary	Small Tide Channel	4/5-5/5	8.0°C	Set Net	41	41	43.5±4.7	35.5-59	6 fry	6	41.7 ± 2.67	38-46	13 smolt	13	84.5 ± 8.7	72.5-108		10 fry		2 Fl 2 SS
									4 smolt	4	84.8 ± 10.2	74-93.5	Pink 8	8	35.2 ± 0.9	34-37				3 St 2 H
	* NO SEINING CONDUCTED																			
Central Estuary	Small Tide Channel	18/5-19/5	8.0°C	Set Net	7	7	49.1 ± 11.2	34-66.5	5 fry	5	44.5 ± 2.1	42.5-48.0	1 fry	1	37.0		2 sm	2 fry 1 sm		23 SS 56 St
	Main Tide Channel	19/5	7.0°C	5 BS	1	1	44.5		1 fry	1	42.5 ±							1 fry		8 Fl 8 SS
									1 smolt	1	86.0									
	Open Flats Gravel	19/5	7.0°C	2 BS																1 SS 2 Sc
Central Estuary	Small Tide Channel	2/6-3/6	15°C	Set Net	1	1	55.5		2 fry	2	51.8 ± 0.35	51.5, 52	6 smolt	6	84.8 ± 13.9	65-107		2 fry	4	29 St 1 H
									3 smolt	3	84.6 ± 6.4	80-92	1 fry	1	36.5					
	Main Tide Channel	3/6	15.5°C	5 BS	1	1	52.0		4 fry	4	54.9 ± 2.9	51.5-58.5	1 smolt	1	73.0					23 Fl 11 SS
									3 sm	3	82.7 ± 11.1	70-91								
	Open Flats Gravel	3/6	15-19°C	2 BS					1 Cl	1	79									1 Fl 6 SS

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TABLE 3
CENTRAL ESTUARY SET NET AND BEACH SEINES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Central Estuary	Small Tide Channel	16/6-17/6	13.0°	Set Net									9 fry	7	35 ± 1.6	32-37			11	2 SS 21 St
													1 sm	1	99.5					
	Main Tide Channel	17/6	11-13.5°	5 BS					2	2	64 ± 2.8	62,66	7 fry	7	60.8 ± 4.5	56.5-69		1 fry		20 Fl 13 SS 50 St
	Open Flats, gravel	17/6	14.0°	2 BS																2 Fl 1 SS
Central Estuary	Small Tide Channel	29/6-30/6	13.5°	Set Net	11	11	61.3 7.6	51-73	18 fry	18	67.6 ± 7.6	57-81.5	1 fry	1	40.0			1 fry	6	2 Fl 15 SS
									2 Cl	2	100.8 ± 7.4	95.5, 106	7 smolt	7	79.3 ± 12.4	66-99.5				258 St 3 SP
	Main Tide Channel	30/6	13.5-14°	6 BS					1	1	80		16 fry	16	41.7 ± 4.7	34-51		3 fry	3	1 Fl 7 SS
									1 Cl	1	95		4 sm	4	80.3 ± 11.1	65-90				7 Sc 2 St
	Open Flats, gravel	30/6	14.5°C	2 BS					1 fry 1 smolt				17 fry 2 sm						3	4 Fl 5 SS
Central Estuary	Small Tide Channel	14/7-15/7	11°	Set Net	2	2	49.3 1.06	48.5-50	4	4	77.1 ± 8.0	68-87.5	3 fry	3	48 ± 10.5	37-58			6	6 Fl 29 SS 2 s.p. 1 p.s.
	Main Tide Channel	15/7	11-11.5°	6 BS	1	1	55		16	16	72.2 ± 7.8	55.5-85							1	23 Fl 26 SS
	Open Flats, gravel	15/7	12.5°	3 BS	2	2	61.3 11.7	53-69.5	21	21	78.9 ± 10.5	59.5-92							7	4 Fl 1 SS 2 Sc

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TABLE 3
CENTRAL ESTUARY SET NET AND BEACH SEINES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Central Estuary	Small Tide Channel	31/7-1/8	13.0°	Set Net	2	2	55.8 ± 6.0	51.5, 60	3	3	77.7± 4.5	73-82	6	6	82.6± 9.5	46.5 74.5		1 fry	18	40 Fl 54 St 11 sp 29 SS
	Main Tide Channel	1/8	12°	6 BS									5	5	50.2± 8.6	40-58				19 Fl 14 SS
	Open Flats gravel	1/8	13°	4 BS					16	16	88.4± 11.9	72-113								7 Fl 4 SS
Central Estuary	Small Tide Channel	11/8-12/8	14°	Set Net					1	1	78		5 fry	5	71.9± 12.4	50-80.5				23 Fl
													2 sm	2	101.3 ± 3.2	103.5 99				12 St 63 sp 5 Sl
	Main Tide Channel	12/8	14-15°	6 BS					1	1	82		7	7	68.3 ± 7.4	58-78.5				25 Fl 27 SS 1 sc 1 St
	Open flats, gravel	12/8	15°	4 BS									2	2	75.8 ± 1.77	74.5, 77				8 Fl 8 SS 3 sp 1 A.sc

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Table 4
MINETTE BAY SET NET AND BEACH SEINES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Minette Bay	Tidal Channel	13/4-14/4	-	Set Net	87	30	39.1 ± 2.0	37.5-42	5	3	41.7 ± 0.29	41.5-42	3	3	40.3 ± 1.04	39.5-41.5		1 ad	1	21 SS 4 pk 87731 oks 2 sp 1 SI 13 EP 70 Pb
	Mudflats	14/4	-	3 BS	20	20	40.2 ± 1.9	38-45	3	3	40.8 ± 1.0	40-42							17 Fl 13 SS	
Minette Bay	Tidal Channel	2/5-3/5	8.0°C	Set Net	116	50	46.5 ± 6.01	38-57.5	6 fry	6	43.7 ± 5.5	39.5-54.5	48 smolts	47	82.4 ± 9.4	68-112				
									7 smolts	7	85.6 ± 7.6	71.5-94.0	Pinks 13	13	35±1.92	32.5-39.5		1 fry (36.5)		3 SS 49 P 139 St 3 Fl 3 Sp 6 H 6 Si 6 EP
	Mudflats	5/5	12.0°C	2 BS	18	18	44.5 ± 3.9	38-50.5	1	1	42.0		Pink	1	32.0					31 Fl 17 SS
Minette Bay	Tidal Channel	14/5-15/5	12o C	Set Net	33	30	52.2 ± 6.1	42.5-76.5	15 fry	14	44.3 ± 3.5	41-52	2 fry	2	45±2.8	43,47		8 fry	1	31 SS 452 St 222 Pb
									11 smolts	11	82.7 ± 11.1	73-102.5	67 smolts	56	78.3 ± 7.8	66-104		3 sm		88 Sp 3 EP 2 H
									9 Cl fry	9	73.1 ± 7.5	59-80.5	Pink 1	1	38.0					1 Fl
	Mudflats	15/5	12°C	6 BS	2	2	43.3 ± 4.6	40, 46.5	3	3	41.0 ± 1.0	40-42						10 fry		4 Fl 6 SS
Minette Bay	Tidal Channel	31/5-1/6	10°C	Set Net	14	14	50.9 ± 6.8	44.5-64	6 fry	5	47.0 ± 3.8	41.5-52	1 fry	1	36.0			1 fry	5	2 Fl 4 SS
									2 smolt	2	81.8 ± 0.35	81.5, 82	34 smolt	34	85.7 ± 7.8	57.5-99.5				3724St 2 Pb
	Mudflats	1/6	10.5°C	4 BS	5	5	46.6 ± 5.0	43.5-55.5	1	1	50.5		1	1	81.5			2 fry		18 Fl 25 SS 157 St 1 Pb

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Table 4
MINETTE BAY SET NET AND BEACH SEINES

Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum F.L. (mm) ($\bar{x}$ ± SD)	Chum Range	Chinook Σ	Chinook Subsample n	Chinook F.L. (mm) ($\bar{x}$ ± SD)	Chinook Range	Coho Σ	Coho Subsample n	Coho F.L. (mm) ($\bar{x}$ ± SD)	Coho Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Minette Bay	Tidal Channel	14/6-15/6	14.0°C	Set Net	31	31	50.2± 4.8	42-58	34 fry	34	54.8 ± 6.7	44-66	9 fry	9	55.8 ± 10.0	33.5-69.0		22 fry		24 SS 5400 St
									6	6	82.6 ± 7.9	75-96	11	11	88.4 ± 11.4	79-119				9 H 6 Pb
									3 Cl	3	76.8 ± 22	51.5-92								
	Mudflats	15/6	16.0°C	4 BS					1	1	59.0	59.0	2	2	63±2.1	62, 64.5			1	342 Fl 1025SS
									3	3	99.2 ± 10.2	92.5-111	8	8	92.8 ± 6.3					1120St
Minette Bay	Tidal Channel	27/6-28/6	12°C	Set Net	30	30	56.9 ± 6.0	48-70.5	3	3	51.7±5.5	45.5-56	4	4	62.5 ± 17.4	41.5-80.5		8 fry		20 SS 1271St
									1 Cl	1	90.5		1	1	106.5					65 Pb
	Mudflats	28/6	-	7 BS	10	10	56.3 ± 7.1	48-71	3	3	72±7.0	64-77								160 Fl 731 SS
									1	1	101		5	5	72.1 ± 7.1	62-80		8 fry		
													3	3	102.7 ± 10.3	94-114				1684St 5 Sp
Minette Bay	Tidal Channel	12/7-13/7	14.5°C	Set Net	8	8	53.3 ± 6.4	44.5-58.5	6	6	76.3 ± 10.9	65-96	1	1	53.5				2	3 Fl
													1	1	96.0					62 SS 1641St 66 Sp 34 Pb
	Mudflats	13/7	15-15.5°C	6 BS	21	21	51.9 ± 3.7	47-58	5	5	86.5 ± 16.2	71.5-110	1	1	40			2 fry		107 Fl
													1	1	92					237 SS 888 St
Minette Bay	Tidal Channel	29/7-30/7	15°C	Set Net	2	2	60.5 ± 7.1	55.5, 65.5					19	19	62.2 ± 5.4	54.5-73				22SS 558 St
													1	1	85.0					154 Sp 3 Pb 4 SI 1 H
	Mudflats	30/7	15.5°C	6 BS	1	1	65.0		1	1	74.0									164 Fl 147 SS 697 St 52 Sp

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Location	Habitat Type	Date	Temp (°C)	Sampling Effort	Chum Σ	Chum Subsample n	Chum Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chum Subsample Range	Chinook Σ	Chinook Subsample n	Chinook Subsample F.L. (mm) ($\bar{x}$ ± SD)	Chinook Subsample Range	Coho Σ	Coho Subsample n	Coho Subsample F.L. (mm) ($\bar{x}$ ± SD)	Coho Subsample Range	Rainbow Trout	Cutthroat Trout	Dolly Varden	Other
Minette Bay	Tidal Channel	9/8-10/8	9.0°C	Set Net									2	2	63.2 ± 12.4	54.5, 72				6 Fl 16 SS 65 St 871Sp 1 Sl 33 Pb
	Mud Flats	10/8	11.0°C	6 BS																256Fl 64SS 5003 St 1 Sp 2 Sl