Reconnaissance 1:20,000 Fish and Fish Habitat Inventory of the Sub-Basins between and including Lorne and Mill Creeks on the North Side of the Skeena River within the Kispiox Forest District

WSC 400-301700- Lorne Creek - WSC 400-362300-Mill Creek





Reconnaissance 1:20,000 Fish and Fish Habitat Inventory of the Sub-Basins between and including Lorne and Mill Creeks on the North Side of the Skeena River within the Kispiox Forest District

WSC 400-301700- Lorne Creek - WSC 400-362300-Mill Creek

Prepared for:

Skeena Cellulose Inc. Carnaby Operations #10 North Boundary Rd. South Hazelton, B.C. VOI 2R0

January 2001

Prepared by:



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Reviewed by:

Bryan Williams, B.Sc., R.P. Bio.

PROJECT REFERENCE INFORMATION

FDIS Project Number: 3476

MELP Project Number: SCI_C172_010_2001

FRBC Project Number: 712318

FRBC Region: Skeena-Bulkley Region

MELP Region:06MELP District:SkeenaFW Management Unit:6-15

Fisheries Planning Unit:

DFO Sub-district:

Forest Region:

Prince Rupert

Kispiox

Forest Licensee and Tenure #: Skeena Cellulose Inc.

First Nation Traditional Area: Gitskan

WATERSHED INFORMATION

Watershed Group: Skeena

Watershed Code: 400-000000-00000-00000

UTM at Mouth: NA

Watershed Area: 777.3 km² **Total of All Stream Lengths:** 1652.9 km

Stream Order: NA

BGC Zones: CWH, AT, ESSF, MH, ICH

NTS Maps: 103I/15 103I/16

103P/01 103P/02

TRIM Maps: 103I.087 103I.088

 103I.089
 103I.097

 103I.098
 103I.099

 103P.007
 103P.008

 103P.009
 103P.010

 103P.018
 103P.019

 103P.020
 103P.030

Air Photos: 30BCB92077 #167-173, #178-190

30BCB92078 #217-229

30BCB92083 #103-117, #120, #122,

#124-130

Air Photos cont.: 30BCB92085 #62-66, #68, #88, #89

30BCB92086 #144-155, #87, #94-96

30BCB92091 #77-88, #94-106 30BCB92135 #41-49, #122, #124

#189-198, #201-210

30BCB92137 #154-169, #175-178

#180-194, #224, #91

30BCB92138 #209-213, #62-77,

#80-92

SAMPLE DESIGN SUMMARY

Total number of Reaches:1701Random Sampling Sites:41Biased Sampling Sites:75Total Sampling Sites:116

Field Sampling Dates:July 24 – August 7, 2000 **Fish Species Captured:**BT, CH, CO, CT, DV

CONTRACTOR INFORMATION

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DISCLAIMER

"The Province has not accepted the contents of this product* for the purposes of the Forest Practices Code, and reserves the right to dispute the validity of summarized results. The province does not necessarily agree with the classification assigned to any individual stream reach, for use in logging plans, silviculture prescriptions or any other application."

* Product refers to the information detailed in the following pages of this report.

ACKNOWLEDGMENTS

Triton would like to thank Todd Mahon of Skeena Cellulose for his assistance throughout the planning and field phases of this project. Darren Fillier, Forest Ecosystem Specialist for the Kispiox Forest District for his feedback and approval of the Non Fish Bearing Status Report and Stream Classifications associated with this project. Chris Schell for his Quality Assurance participation and support in meeting Reconnaissance (1:20,000) Fish and Fish Habitat Inventory Standards for British Columbia. Paul Giroux, Fisheries Inventory Specialist for the Skeena Region was the principal contract monitor.

Forest Renewal BC – a partnership of forest companies, workers, environmental groups, First Nations, communities and government, provided funding for this inventory. Forest Renewal BC funding – from stumpage fees and royalties that forest companies pay for the right to harvest timber on Crown lands – is reinvested in the forest, forest workers and forest companies.

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Appendix I Reach Cards/Site Cards/Fish Collection Forms and Photographs

Appendix II Phase Completion Reports

Appendix III Quality Assurance Forms and Correspondence

Appendix IV Phase I-III Project Plan (with attachments)

Appendix V Project/Interpretive Maps

LIST OF ATTACHMENTS AVAILABLE AT MELP REGIONAL OFFICE

Attachment I Planning Document

Triton Environmental Consultants Ltd., July 2000. Phase I-III Pre-field Project Planning Report Reconnaissance (1:20,000) Fish and Fish Habitat Inventory of Sub-basins between and including Lorne and Mill Creeks on the North Side of the Skeena River within the Kispiox Forest District. Prepared for Skeena Cellulose

Inc. (Carnaby Operations)

Attachment II Field Notes

Site Cards/Fish Collection Forms

Attachment III Photodocumentation

Photo Summary Report

Photo CD

Prints in Plastic Sleeves Negatives in Plastic Sleeves

Attachment IV Digital Data

Watershed Report Files

FDIS Files Mapping Files

Attachment V FISS Update Data

FISS Update Forms FISS Update Maps

1.0 INTRODUCTION

Triton Environmental Consultants Ltd. (Triton, Terrace) was retained by Skeena Cellulose Inc. (SCI) to conduct a Reconnaissance (1:20,000 scale) Fish and Fish Habitat Inventory in SCI's Carnaby operating area, which is located within the Kispiox Forest District.

This project commenced as a result of BC Fisheries and Ministry of Environment, Lands and Parks (MELP) initiatives to gather information about fish distribution, population status, and the condition and capability of stream habitats (Resource Inventory Committee, 1998). Forest Renewal of British Columbia (FRBC) funding and MELP supervision facilitated the commencement of this sample-based survey of the sub-basins between and including Lorne and Mill Creek on the northwest side of the Skeena River. The inventory provides information regarding the characteristics, the distribution and the relative abundance of fish species, as well as information on biophysical lake and stream data. This information can be used for the interpretation of habitat sensitivity and fish production capability (Resource Inventory Committee, 1998).

1.1 Project Scope/Objectives

Fish and fish habitat values were the primary components of the inventory:

- Fish
 - identify and map fish-bearing stream reaches and lakes using existing information and new field information (field inventory).
- Fish Habitat
 - identification and coding of all waterbodies.
 - identification and characterization of stream reaches utilizing topographic maps and aerial photographs, with confirmation via field sampling.

The results of the inventory are presented on 1:20,000 scale TRIM based maps, BC Ministry of Environment, Lands and Parks (MELP) Field Data Information Summary (FDIS) data forms, and in the body of this report.

1.2 Location

The Lorne to Mill Creek Study Area is comprised of the tributaries on the right bank of the Skeena River upstream of and including Lorne Creek (WSC 400-301700) and downstream of and including Mill Creek (WSC 400-362300). The Study Area is outlined in Figure 1, and is located southwest of the town of Kitwanga, B.C. The Study Area lies within the heart of the Hazelton Mountain's and is situated in the Coast Mountains Ecoprovince within the Nass Ecoregion (Demarchi, 1996). The Study Area is approximately 77,730 ha and covers 14 TRIM map sheets (Figure 1.)

The biogeoclimatic zonation for the Study Area is a mixture of Coastal Western Hemlock (CWH), Engelmann Spruce - Subalpine Fir (ESSF), Alpine Tundra (AT), Mountain Hemlock (MH), and Interior Cedar Hemlock (ICH) (Meidinger and Pojar, 1991). The ICH portion of the Study Area occurs adjacent to the Skeena River and in the low elevation areas along Mill Creek. The CWH portion occurs west of Mill Creek in the middle elevation areas of the Skeena River tributaries and the MH portion of the Study Area occurs in the middle to upper elevation areas west of Mill Creek. The ESSF portion of the Study Area occurs along the middle to upper elevation slopes of the Mill Creek drainage, and the AT portion occurs in all upper elevation areas within the Study Area.

1.2.1 Access

Kitwanga is situated at the northeast corner of the Study Area. Directions from Kitwanga to the sample locations within the northern portion of the Study Area are as follows:

- From Kitwanga take Highway 37 north approximately 13 km,
- Turn left (west) onto Mill Main,
- Drive northwest for approximately 7 km on Mill Main into the Study Area,
- Various spur roads along the Mill Main access sample site locations.

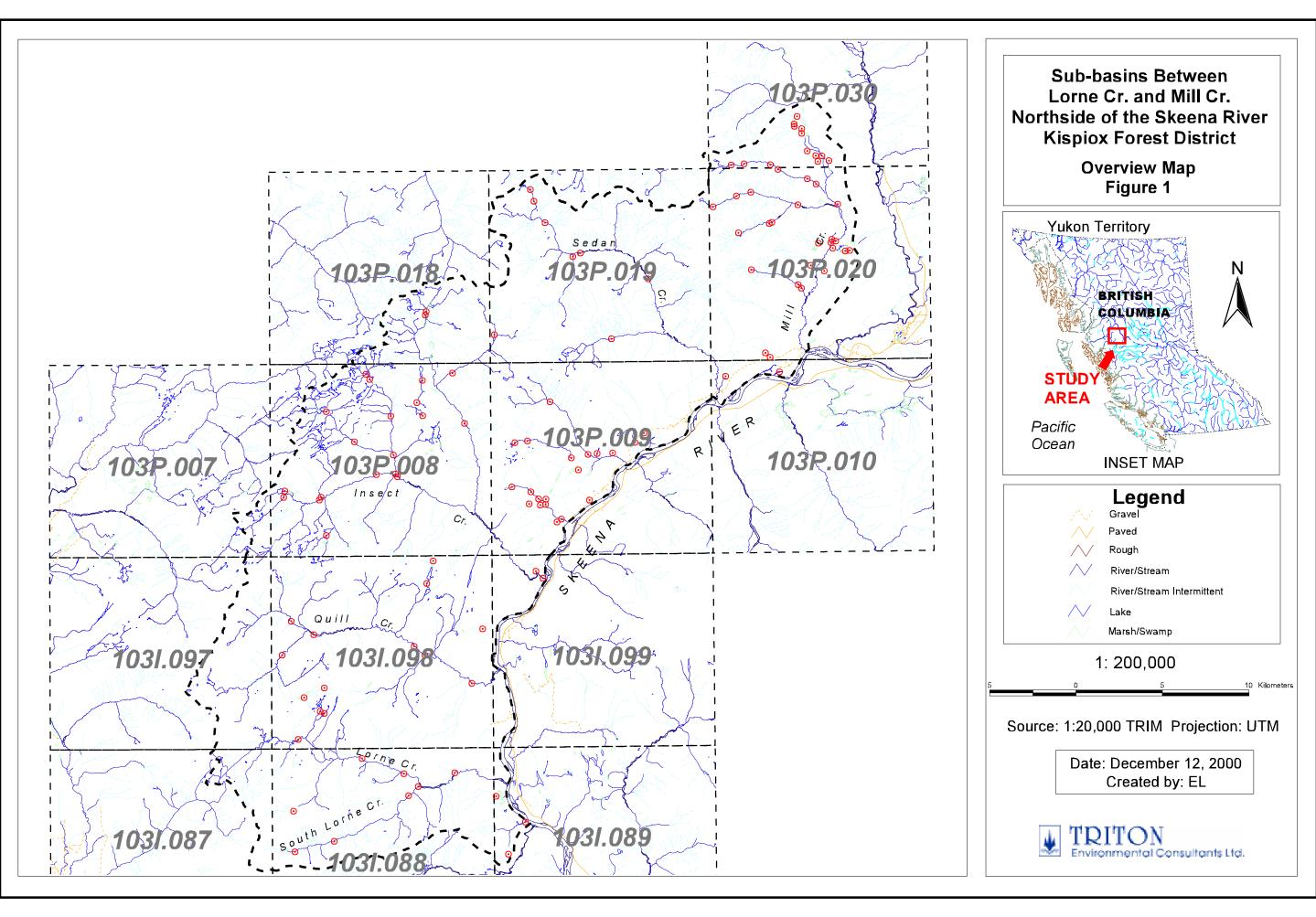
Directions from Kitwanga to the southeast portion of the Study Area are as follows:

• From Kitwanga take the Cedarvale Backroad west approximately 3 km to the start of the Study Area.

Most of the sample sites (74 of 116) were accessed via helicopter. The lack of road networks in this rugged country allowed for limited road access.

2.0 RESOURCE INFORMATION

Resource values within the Study Area are primarily forestry based. SCI's Carnaby Operations is currently logging throughout the area. Most of the Study Area has low capability for agriculture due to adverse climate, topography, bedrock, or poor drainage. Several small farming operations are located in the lower elevation portions of the Study Area. These farms are located adjacent to the Skeena River where the topography has allowed for land clearing.



The Study Area lies within the Gitskan's traditional territory where the following Gitskan House's are represented: SAKXUM HIGOOKX, HAAKXW, SAKXUMHIGOOKX, TE WHLAGXW, LELT, TENIGYET, WII HLENGWAX, and SIMA DIIK.

No active mines were observed in the Study Area. Background research found that a gold molybdenum property (Morningstar Property) is located near the Skeena River at Woodcock (Remington, 1995).

The Study Area is well known for its wild mushroom harvest. During the late summer and fall mushroom enthusiasts explore the areas adjacent to the Skeena River in search of pine mushrooms. Often these mushrooms are sold to local buyers who export to buyers throughout the world.

No existing water quality data was identified during the pre-field planning stages.

2.1 Existing Fisheries Information

FISS (1995) and Stream Summary Catalogue (FHIIP, 1991) records indicate that chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), pink salmon (*O. gorbuscha*), chum salmon (*O. keta*) steelhead (*O. mykiss*), rainbow trout (*O. mykiss*), Dolly Varden char (*S. malma*) and cutthroat trout (*O. clarkii*) occur within the Study Area. The species identified from existing sources are placed in the FDIS database and mapped according to RIC standards for historical information. Several barriers and obstructions were also identified from the Stream Summary Catalogue and FISS information. The barrier and obstruction information was incorporated into the FDIS database and placed on the maps as historical features.

MELP (Smithers) stream and lake files were reviewed and found to support the FISS and Stream Summary Catalogue information.

Historical fisheries information indicated the presence of chinook, pink, Dolly Varden, and rainbow trout within the Lorne Creek (WSC 400-301700) drainage; coho and pink within the Quill Creek (WSC 400-313700) drainage; coho, chinook, pink, steelhead, rainbow trout, and Dolly Varden within the Insect Creek (WSC 400-324400) drainage; coho, pink, rainbow trout, and Dolly Varden within the Wilson Creek drainage; pink, rainbow trout, and Dolly Varden within the Sedan Creek (WSC 400-350300) drainage; and chinook, chum, coho, pink, cutthroat trout, and Dolly Varden within the Mill Creek (WSC 400-362300) drainage.

3.0 METHODS

The 1:20,000 Scale Fish Stream Identification inventory was completed in six phases:

- Phase 1: Existing Data Review
- Phase 2: Map and Air Photo Analysis

- Phase 3: Sampling Design and Project Plan
- Phase 4: Field Data Collection
- Phase 5: Data Compilation
- Phase 6: Report and Map preparation.

The methods employed for each phase of the project followed those outlined in the *Reconnaissance* (1:20,000) Fish and Fish Habitat Inventory: Standards and Procedures, April 1998 (Resource Inventory Committee, 1998). Alterations were made to the project plan in Phase 4 and are outlined in the sections below.

3.1 Phase 4: Field Data Collection

The following sections describe the methods and approaches taken to complete field sampling and data collection.

3.1.1 Pre field Preparations

The stream reaches inventoried were identified by two methods: random sites generated by the FDIS planning tool and biased sites identified by SCI and Triton. Biased sites were selected to address gaps within the randomly generated sampling plan. The final sample sites incorporated into the contract were reviewed by Todd Mahon (SCI FRBC Coordinator), Paul Giroux (FIS, MELP Skeena Region 6), and Triton to ensure that sample sites met the requirements of SCI, MELP and the FDIS planning model.

Required fish collection permits were obtained from MELP and DFO prior to the commencement of field activities.

3.1.2 Field Procedures

All sampling procedures followed those outlined in the *Reconnaissance* (1:20,000) Fish and Fish Habitat Inventory: Standards and Procedures, April 1998 (Resource Inventory Committee, 1998) and the Forest Practices Code Fish Stream Identification Guidebook, (BC Forest Practices Code, 1998).

Fieldwork was conducted from July 24th to August 7th, 2000 by two, two person field crews. In watersheds where road access was available, the crews used 4X4 pick-up trucks. In watersheds where road access was unavailable transportation was provided by Quantum's Bell Jet Ranger helicopter.

Field data was collected on RIC field site and fish collection cards. In addition, the following information was collected at each site and recorded in the comments section of the site card:

- stream classification.
- comment supporting stream classification,

- comments regarding fish access (i.e. downstream barriers), and
- general comments regarding rearing, spawning and overwintering habitats were also included in the Habitat Quality section of the site card.

Each crew was equipped with the following field gear:

- Smith-Root Model 12A backpack electrofisher
- electrofisher safety gear (leak proof waders, wading belts, Linesman's gloves, hat with a brim, polarized sunglasses)
- minnow traps and bait
- clinometer
- compass
- hip chain
- 50 m tape
- meter stick
- VHF radio
- first aid kit
- water quality kit (hand held pH and conductivity meters)
- thermometer
- Canon waterproof camera and slide film
- voucher specimen container
- MELP Site cards
- MELP Fish collection forms
- MELP Individual fish data cards
- field maps

Fish sampling within stream reaches was conducted using three primary sampling techniques: electrofishing, minnow trapping, and visual observation. Electrofishing is the most efficient method of sampling in shallow stream habitats and was the preferred sampling method for all habitat types in small streams and shallow water habitats. In these habitats and where using an additional sampling method would not provide additional information (i.e. species, relative abundance), it was the only fish sampling technique employed. In a few cases, minnow traps baited with salmon roe were employed in streams of greater depth and in ponded habitats. Visual observation was also used when other methods failed to catch fish. A combination of techniques were employed where the use of only one method would not have effectively sampled all habitats and in areas that were not suited to electroshocking (deep pools, wetlands, etc.).

Where appropriate, and where return visits were practical, minnow traps baited with salmon roe were set and allowed to soak for a 24-hour period.

3.2 Field Data Compilation

Following each field day, field crews met to compile field notes, review field data and summarize the field findings onto hard copy maps. This system ensured that all information was thoroughly documented, allowing for preliminary stream classifications and changes to the sampling plan. Field crews were in constant contact with Paul Giroux (Fisheries Inventory Specialist) and Todd Mahon (SCI FRBC Coordinator) when the originally proposed plan needed modifications. In most cases sites downstream of known fish bearing reaches were moved to reduce sampling redundancy. These sites were placed in other locations to address potential barriers, identify species composition, establish fish distribution and provide additional sampling data.

3.2.1 Site Cards

Site Cards and Reach Forms were entered into MELP's FDIS database following the completion of the Phase 4 field inventory. Hard copy versions of the Reach/Site Cards are presented in Appendix I.

3.2.2 Fish Collection Cards

The Fish Collection Cards were entered into MELP's FDIS database following the completion of the Phase 4 field inventory. Hard copies of the Fish Collection Forms are presented in Appendix I following the Reach/Site cards.

4.0 RESULTS AND DISCUSSION

4.1 Logistics

Weather conditions were highly variable over the field sampling dates. Rain caused turbid and high water conditions at several sample sites. Field crews often made the decision to sample streams, which were not affected by the high runoff. The turbid streams were then revisited when sampling conditions were favorable. The timing of the field sampling helped reduce the number of dry/intermittent streams. The number of dry intermittent streams was low (3 of 116 sample sites). Several sites were moved in the field due to lack of helicopter access (no landing available).

4.2 Survey Information

Table 1 provides an overview of the survey information compiled for the Study Area.

Table 1. Summary Information for the Study Area.

Major Watershed Code:	400-000000-00000-00000-0000-0000-000-00
Watershed Name:	Skeena River
Drainage:	Study Area → Skeena River → Chatham Sound
NTS Maps:	103I/15 103I/16 103P/01 130P/02
TRIM Maps:	103I.087 103I.088 103I.089 103I.097 103I.098 103I.099
	103P.007 103P.008 103P.009 103P.010 103P.018 103P.019
	103P.020 103P.030
Total Number of Lakes:	38
Total Number of Reaches:	1701
Stream Field Sampling Dates:	July 24 to August 7, 2000
Number of Random Sites Sampled:	41
Number of Bias Sites Sampled:	75
Total Number of Sampling Sites:	116

4.3 Summary of Sub-Basin Biophysical Information

Five major sub-basins make up approximately 90% of the Study Area. The biophysical information for each sub-basin is presented below in Table 2.

Table 2. Biophysical Information for Major Sub-basins within the Study Area.

Gazetted	WSC	UTM at	Watershed	Stream	Stream	NTS	BCG Zones
Name		Mouth	Area (ha)	Length	Order	Maps	
				(km)			
Lorne	400-	9.539296	10753	204	4	103I/15	ICH, CWH,
Creek	301700	6081712				103I/16	MH, AT
Quill	400-	9.538838	13823	203	5	103I/15	ICH, CWH,
Creek	313700	6088318				103I/16	MH, AT
Insect	400-	9.541490	19533	455	5	103P/01	ICH, CWH,
Creek	324400	6093566				103P/02	MH, AT
						103I/15	
Sedan	400-	9.551293	12431	315	5	103P/01	ICH, CWH,
Creek	350300	6104057					MH, AT
Mill	400-	9.539296	10752	206	4	103P/01	ICH, ESSF,
Creek	362300	6081712					AT

4.4 Fish Age, Size and Life History

Fish were captured in 36 of 116 sample locations. Table 3 provides a summary of the reaches in which fish were captured. Coho salmon, chinook salmon, Dolly Varden char, bull trout, and cutthroat trout were captured within the Study Area. Length frequency distributions are provided in the figures below for sport species captured. Bull trout

were not found in significant numbers (3), so a length frequency distribution was not created. Aging data was not collected. Quantitative abundance figures were not generated for this project, as sampling methods to determine abundance were not utilized.

Cutthroat trout

Cutthroat trout were captured at one sample site within the Study Area. These fish were found at the headwaters of Mill Creek, adjacent to two small lakes. The cutthroat trout captured were fry and juveniles, which indicates they are likely utilizing the stream as juvenile rearing/refuge habitat. No adult cutthroat trout were captured during the survey and it is assumed that the adults are present within the upstream and downstream lakes. Adult cutthroat trout likely utilize the stream habitat for spawning during the spring.

Cutthroat trout live to a maximum of 10 years and can reach sexual maturity in as little as 2 years. Spawning takes place in the spring (February to May) in streams with adequate flows and suitable gravel substrates. Redds are constructed and the eggs hatch within 6-7 weeks depending on temperatures. Fry usually emerge from redds in 1-2 weeks after hatching (Scott & Crossman 1985).

Dolly Varden

Dolly Varden were found in habitats that ranged from high energy glacial streams to low gradient stagnant pools. Fry and juvenile Dolly Varden were found to inhabit the smaller secondary streams adjacent to overwintering habitat (larger mainstems and lakes), and the larger (mature) Dolly Varden were found in mainstems/larger tributary streams. Dolly Varden reach sexual maturity in 3-6 years and spawn in streams with cobble/gravel substrates and moderate flows. The fry hatch in the spring and reside (3-4 years) in their natal stream until reaching a size large enough to move downstream into larger bodies of water. Northern and high elevation populations are often stunted and rarely exceed 30 cm. Dolly Varden are a relatively long-lived species reaching ages of 10-12 years (Scott & Crossman 1985).

Coho salmon

Coho were captured at 3 locations within the Study Area. Juvenile coho were only captured immediately upstream of the Skeena River. Two of the capture locations were adjacent to off-channel habitats (slough & beaver complex). The third capture location was in Reach 1 of Insect Creek (WSC 400-324400). The juveniles captured in the off-channel habitats likely seek refuge in these habitats during spring runoff and high-flow conditions.

Table 3. Summary of Fish Capture Locations within the Study Area.

Site	ILP/WSC	Reach	Order	Species	Stage	Number	Minimum Length	Maximum Length (mm)
2	400-330700	2	3	DV	J	9	48	111
	10303	 	i	CO	J	4	55	90
8	400-324400	 	5	CO	j	4	38	44
13	400-330700	3	2	DV	1	5	65	117
	400-362300-	 			 			
17	33000	1 1	3	DV	J	1	61	61
21	400-362300	3	4	DV	j	2	65	112
123	400-301700	1 2	4	DV	 	1	110	110
	400-324400-				 			
151	29000	3	5	DV	j	2	83	111
	400-350300-				 			
152	30200	2	3	DV] j]	2_	99	107
153	400-350300	6	4	DV		3	45	97
602	400-297600	1	3	<u>co</u>	 	10	45	68
	400-301700-	 						
604	28100	1	3	BT	A	3	220	280
612	400-324400	7	5	DV	A	2	240	380
	400-324400-	 		<u>-</u>	 			
613	52900	1 1	5	DV	j	3	115	165
623	400-350300	6	4	DV	l j	6	149	187
023	400-350300-	 			 		117	107
624	70500	1 1	3	DV	A	10	122	165
626	400-339200	3	4	DV		11	86	121
020	400-362300-							
631 .	67500	3	3	DV	3	3	126	150
031	400-362300-	3	3				120	130
(12	74700	1 , [3	DV] , [6	115	156
633	400-362300	6	3	CT	1	7	35	110
	400-362300	8		DV	F	9	42	56
640		8	2 2	DV DV	F J	5	86	129
641	11069			<u>Dv</u>	 '- 			129
(43		i , '	. 1	DV			2.5	110
643	49200	!	1	DV	J	4	75	110
	400-339200-	1		517	ł , l		l	127
646	20200	3	3	DV	J	10	74	127
650	10288	!	_2	DV	J	7	65	126
70:	400-362300-		, 1	D	,	,	110	157
701	67500-35100	2	3	DV	A	4	110	175
50.3	400-362300-	_	_ ,	5.11		_	21.5	2/2
703	67500	2	4	DV	A	5	215	265
=0.0	400-362300-		. 1	n		_		
709	74700	1	4	DV	A	6	175	235
720	11005	1	1	DV	J	1	60_	60
722	11009	1	1	DV	J	1	125	125
723	11008	1	2	DV	3	1	65	65
723	11008	1	2	CH	J	5	32	48
723	11008		2	CH	3	2	60	75
723	11008		2	DV	J	5	80	126
723	11008	!!		DV	F	6	42	60

Figure 2. Length frequency distribution for Dolly Varden char captured in the Study Area (n=128).

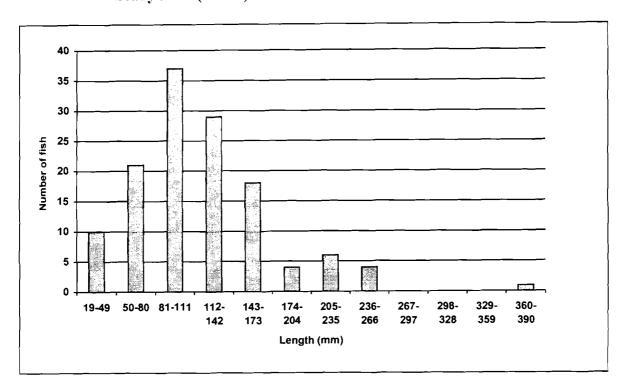


Figure 3. Length frequency distribution for cutthroat trout captured in the Study Area (n=7).

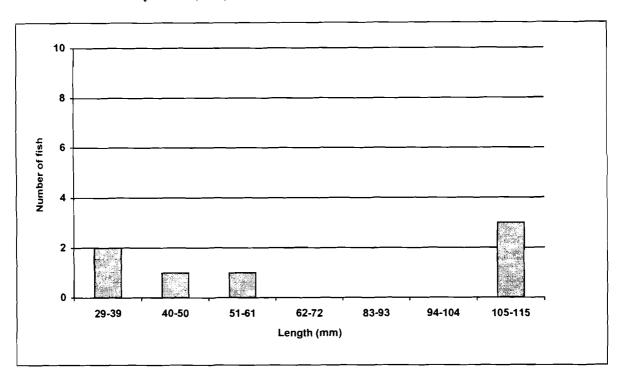


Figure 4. Length frequency distribution for chinook salmon captured in the Study Area (n=7).

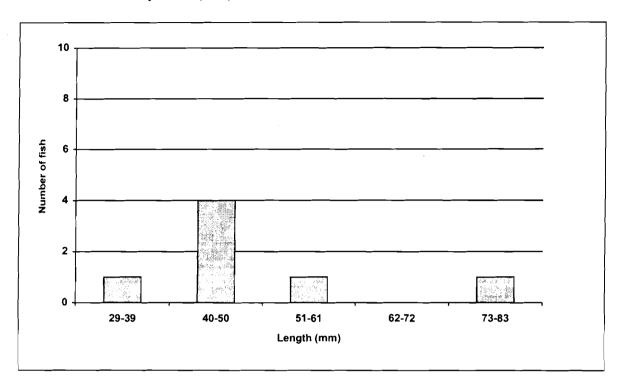
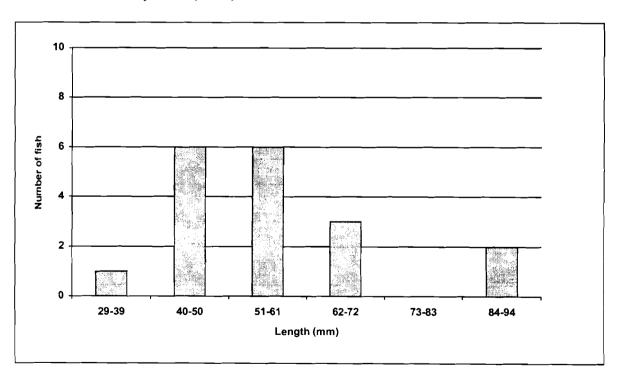


Figure 5. Length frequency distribution for coho salmon captured in the Study Area (n=18).



Historical information (SISS, FISS) identified coho (life stage unknown) in Reach 3, 6, and 8 of Insect Creek. This suggests that the juvenile coho captured in Reach 1 are likely part of an Insect Creek population. Coho fry emerge from the gravel in the spring and early summer (March to July) and juveniles usually remain in fresh water for 1-2 years before migrating (downstream) to the ocean for 1 to 3 years

Chinook salmon

Juvenile chinook were captured in two locations within the Study Area. Both capture locations were within 300 m of the Skeena River. The first capture location was adjacent to an off-channel (beaver complex). Due to the absence of flowing water and suitable substrate it is unlikely that adult chinook are using this habitat for spawning. The juveniles likely seek refuge in these habitats during spring runoff when the Skeena River is high and for rearing until outmigration. The second capture location was in Reach 1 of Insect Creek. Historical information (SISS) has identified chinook upstream of the capture location. It is possible that the rearing juveniles captured at this location are juveniles from spawning adults within this system. Chinook salmon are late summer to late fall spawners (August to October). Spawning habitat can be characterized as the larger rivers and tributaries containing moderate to large gravels. The fry emerge from the gravel in the spring and rear for up to 1 year in freshwater before migrating to the ocean for 2-5 years (Scott & Crossman 1985).

Bull trout

Bull trout were captured at one location within the Study Area. The bull trout captured were in South Lorne Creek (WSC 400-301700-28100), a large tributary to Lorne Creek (WSC 400-301700). Bull trout are known to occupy a wide spectrum of habitat types. Bull trout often occupy unproductive habitats where rainbow and cutthroat do not thrive. Within the Study Area there is the possibility of 3 different bull trout life histories:

- resident-the stream resident that spends its entire life within small headwater streams, often above physical barriers;
- fluvial-the large river type which spends its adult life within large rivers and spawns in smaller tributaries. The large river offspring rear in these smaller tributaries until they grow large enough to compete within the large river habitat; and,
- adfluvial-the lake type, which spends its adult life in a lake habitat and uses the tributary streams for rearing and spawning.

The bull trout captured in this location are thought to be resident fish. Due to the numerous obstructions located downstream (small falls and cascades) it is unlikely that these fish are fluvial.

4.5 Habitat and Fish Distribution

Fish were captured in 1st to 5th order streams and fish distribution was generally associated with perennial fish habitat and reaches contiguous to other fish bearing streams. Perennial habitat includes the presence of overwintering, spawning, and rearing habitat. Instream overwintering habitat was identified as containing residual pool depths

greater than 0.5 m. Other overwintering habitat included wetlands and lakes with depths greater than 0.5 m. Spawning habitat was characterized by the presence of suitable spawning substrates and adequate flows. Rearing habitat was characterized as containing water where fish can live and grow.

Fish bearing 1st order streams were not located far from perennial fish habitat. Habitat quality within these 1st order streams was generally poor with smaller average channel widths and low water flows. Field observations indicated that the small channel widths and ephemeral nature of these streams likely limit or prevent their ability to sustain fish populations, throughout the year.

No fish were captured in reaches with an average channel width of less than 0.35 m, or with an average gradient greater than 16.0%. Fish bearing 1st order streams had an average channel width of 0.96 m. Fish-bearing 2nd order streams had an average channel width of 1.73 m. Fish-bearing 3rd order streams had an average channel width of 8.78 m. Fish bearing 4th and 5th order streams had average channel widths of 19.59 m and 31.42 m respectively.

Fisheries values within the project area are largely associated with the limited occurrence of quality spawning and rearing habitats for fish species. The prevalence of high gradients (>15%) and cascade pool morphology appears to be the primary limiting factors for spawning and rearing habitats.

4.6 Significant Features and Fisheries Observations

4.6.1 Fish and Fish Habitat

No critical fish habitat such as staging areas or large spawning grounds were identified. No special populations or rare and sensitive wild stocks were identified within the study area. No high value sport fishing opportunities were identified within the study area.

4.6.2 Habitat Protection Concerns

4.6.2.1 Fisheries Sensitive Zones

A fish bearing slough located at ILP 10303 (Reach 1) contains sensitive juvenile rearing habitat. Off-channel rearing and cover is abundant within the slough and juvenile coho were present. The Ministry of Environment and Department of Fisheries and Oceans should ensure land owners and local user groups are aware of this sensitive fish habitat and take steps to preserve it.

4.6.2.2 Fish above 20% Gradients

No fish were identified above 20% gradient.

4.6.2.3 Restoration and Rehabilitation Opportunities

One culvert (Table 4) was identified as a barrier to upstream fish migration. This culvert occurs at the CN Railway crossing immediately upstream of the Skeena River in Reach 1 of WSC 400-297600. The culvert has blocked 600 m of high quality off-channel rearing habitat and 4.8 km of available stream habitat. The culvert was perched 1.5 m above the outlet pool creating a barrier at all flow levels. Restoration of the natural watercourse through culvert replacement is a possible restoration option.

Beaver activity is relatively extensive in the project area and may limit or reduce habitat values for salmonids. However, no sites were observed that require remedial action at this point as trapping beaver, blowing dams etc., are short term solutions that would not generate any long-term benefits to fish.

4.7 Fish Bearing Status

4.7.1 Fish Bearing Reaches

Fish species were captured in 32 of the 43 reaches classified as fish bearing (Table 5). Twelve (12) reaches in the fish bearing classification table were classified as fish bearing by default. Eleven (11) of these reaches were identified as accessible from downstream fish bearing waters and could be utilized for a portion of the year. It was determined that fish can access these reaches (from downstream fish bearing waters) and further sampling is not recommended. One stream was identified where further sampling may confirm fish bearing or non-fish bearing status.

The fish bearing status of streams may be directly supported by sampling data or inferred based on the presence of fish habitat and available access from fish bearing waters (inferred seasonal use). For example, if the fish habitat within a given reach is suitable for rearing and/or spawning, and the reach is contiguous to a fish bearing reach, but no fish were captured and no barriers were observed, the reach would be classified as fish bearing. If the reach does not provide suitable rearing, spawning and overwintering habitat, or where barriers prevent fish from accessing and utilizing the reach, it would be classified as non-fish bearing.

Inferred fish bearing status was given to reaches not sampled with the following criteria:

• The average stream gradient was less than 20% (through map interpretation) and access to fish bearing waters is present.

Table 4. Summary of Features identified within the Study Area.

			Feature	Feature Height	Feature	
Site	ILP/WSC	Reach	Type	(m)	Length (m)	Comments
1	10298	1	F	50	20	Falls observed from Sedan Creek.
2	400-330700	2	F	7	0	Dolly Varden captured upstream of falls.
6	10810	1	F	12	0	Barrier to upstream fish migration.
12	400-330700	4	C	3	2	Barrier to upstream fish migration.
15	10239	1	C	8	20	Barrier to upstream fish migration.
122	10772	3	C	60	120	Barrier to upstream fish migration.
124	400-301700	4	F	7	0	Barrier to upstream fish migration.
125	400-301700	5	C	10	2	Located in non fish bearing section
130	400-301700	7	F	3	0	Located in non fish bearing section
131	400-313700	3	F	8	0	Located in non fish bearing section
135	400-313700-58800	1	F	4	0	Located in non fish bearing section
138	400-313700-38800	9	F	8	0	Located in non fish bearing section
140	400-324400	2	F	10	0	Located in non fish bearing section
141	400-324400	8	F	6	0	Barrier to upstream fish migration.
142	400-324400	2	F	30	0	Located in non fish bearing section
150	400-324400-32900	5	F	4	0	Barrier to upstream fish migration.
156	400-324400-29000	4	F	8	0	•
158	10250	2	BD	3	25	Barrier to upstream fish migration. Inferred fish bearing upstream
138	10230		ър	3	23	interred fish bearing upstream
						Calculation of the control of the co
602	400 207 600		CV	0.0	20	Culvert located at railway crossing. Barrier to
602	400-297600	1	CV	0.9	20	fish migration (1.5 m drop with no plunge pool).
604	400-301700-28100	1	C	50	150	Cascade is impassible to fish.
609	400-313700	6	LS	600	10	Large landslide blocks stream.
611	400-313700	2	F	8	2	Barrier to upstream fish migration.
613	400-324400-52900	1	F	4	2	Potential barrier to upstream fish migration.
		_	_	4.0	_	Barrier to upstream fish migration. Located
613	400-324400-52900	1	F	10	2	approximately 100 m upstream of lower falls.
510	400-324400-52900-	•	-	10		
618	17700	2	F	10	3	Falls located upstream of confluence.
623	400-350300	6	LS	10	60	Landslide into channel.
624	400-350300-70500	11	F	17.5	2	Barrier to upstream fish migration.
625	400-350300	7	F	20	5	Barrier to upstream fish migration.
630	11085	1	F	7	3	Falls are located at the bottom of this reach.
631	400-362300-67500	3	C	100	100	Impassible falls/cascades (top of Reach 3).
633	400-362300-74700	2	C	6	2	Barrier to upstream fish migration.
644	400-362300-25100	1	LS	30	15	Bank is slumping directly into stream.
644	400-362300-25100	1	C	2.5	2	Cascade
644	400-362300-25100	1	F	3	1	Barrier to upstream fish migration.
644	400-362300-25100	1	F	5	2	Barrier to upstream fish migration.
644	400-362300-25100	1	F	4	1	Barrier to upstream fish migration.
646	400-339200-20200	3	F	5	1	Barrier to upstream fish migration.
647	10256	1	CV	0.9	15	Partial barrier to fish migration.
647	10256	1	С	2	2	Located in non fish bearing section
						Barrier to upstream fish migration (numerous
647	10256	1	С	3	50	bedrock cacades).
						Barrier to upstream fish migration (cascade
701	400-362300-67500	2	С	40	30	contains 2.5 m falls).
704	400-362300-67500	3	С	100	100	Cascade with numerous 10-30 m falls.
704	400-362300-67500	3	F	5	0	Falls are located upstream of the cascades.

Table 5. Summary of Fish Bearing Reaches within the Study Area.

Site 2	ILP/WSC	Reach	Width (m)	Gradient (%)	Species	Stream Class	Follow-up Sampling (y or n)	Comments
	ILP/WSC	Reach	Width (m)		Species	Stream Class		Comments
2						Ducum Ciuss	01.11	Comments
_2		i	1 1					
_2			1					Dolly Varden captured upstream of 7 m falls
$-\frac{2}{}$				12.5	DV.	63	_	Spawning, rearing and overwintering habitat
	400-330700	2	2.32	12.5	DV	<u>\$3</u>	n	is present within sample site.
ľ						}		Slough adjacent to the Skeena River. High
								value rearing, with good overwintering
5	10303	1	23.33	0	CO	FSZ	n	habitat. No spawning habitat present.
			11					Fair rearing habitat, but spawning habitat is
8	400-324400	1	45.00	0.75	CO, CH	SI	n	limited by high velocity.
j	ſ		ļ l			1 1		
l		i	[}		Barrier (3 m cascade) in upper portion of
	400 220700		227	7.5	NEC	C2#/64	_	reach prevents upstream fish migration. Fish bearing based on access below cascade.
12	400-330700	4	2.27	7.5	NFC	S3*/S6	n	Moderate spawning and rearing habitat,
13	400-330700	3	1.78	7.75	DV	S3	n	limited overwintering.
-13	400-350700		1.70	7.15				No permanent barriers were identified. Fish
16	10242	1	1.00	11	NFC	S4*	n	bearing based on access.
			1					Moderate spawning and rearing habitat.
Ī	400-362300-		1					Overwintering habitat is limited by pool
17	33000	1	1.88	2.5	DV	S3	_ n	depth.
								No barriers to upstream fish migration were
19	11063	1	1.22	4.25	NFC_	S4*	n	identified.
		_				00		High value rearing and overwintering habitat
21	400-362300		16.67	3.75	DV_	S2	n	moderate spawning. Wetland reach. Potential fish habitat.
				-				Rearing and overwintering habitat is
22	11062	1	NA	NA	NS	Wetland	n	abundant.
	11002		1.1/1	14/1	113	- vvenana		No spawning habitat present (large substrate
						l		size). Marginal rearing and overwintering
123	400-301700	2 _	27.17	4.25	DV	SI	n	habitat.
	400-324400-							Moderate rearing, poor spawning and limited
151	29000	3	19.00	6.5	DV	_S2	n	overwintering habitat.
	400-350300-	_	<u>.</u>					Moderate spawning and rearing with limited
152	30200		11.23	9.75	DV	S2	n	overwintering.
153	400-350300	6	27.42	4.25	DV	SI	n	Moderate to high value rearing and spawning habitat.
	400-330300			7.23		- 31		naorut.
	ļ							Stream reach has been heavily impacted by
158	10250	2	14.50	0	NFC	Wetland	n_	beavers (inferred fish bearing).
	1		ļ					
	ļ		[]			1		No permanent barriers to upstream fish
1	Ì		,			Į į		migration were identified. Numerous beaver dams may temporarily limit fish access to
601	10778	2	0.88	2.5	NFC	S4*	v	this reach.
	10778	_ 	0.88		IVIC	. 34	<u>y</u>	Fish were captured downstream of CN Rail
	(ſ				crossing. A culvert blocks upstream fish
1	J		1					migration (perched 1.5 m) to high quality
602	400-297600	11	1.88	4.25	CO, CH	S3	n	rearing habitat.
I .	400-301700-						_	Poor spawning and rearing with moderate
604	28100	1	22.57	16	BT	S1	n	overwintering habitat.
								High quality rearing, poor spawning and
612	400-324400	7	40.83	4.5	DV	Sı	n	limited overwintering habitat present.
			-					
	400-324400-		j l					High quality rearing, poor spawning and
/13 I	52900		20.85	4	DV	Si	n	limited overwintering habitat present.
613			1					Moderate rearing, poor spawning and limited
623	400-350300	6	38.92	4.5	DV	S1	n	overwintering habitat present.
623	400-350300 400-350300-	6	38.92	4.5	<u>DV</u>	51	n	Falls (17.5 m) located 600 m upstream of

Table 5. Summary of Fish Bearing Reaches within the Study Area.

				Gradient		T	Follow-up Sampling (y	
Site	ILP/WSC	Reach	Width (m)	(%)	Species	Stream Class	or n)	Comments
		{						
								High quality rearing, poor spawning and
626	400-339200	3	7.53	5.25	DV	S2	<u>n</u>	limited overwintering habitat present.
	400-362300-					}		High quality rearing, poor spawning and
631	67500	3	13.95	13.5	DV	S2	n	limited overwintering habitat present.
	400-362300-	 	15.70	13.5		<u> </u>		
633_	74700	2	7.97	7. <u>75</u>	DV	S2	n	Moderate rearing and poor spawning.
								Potential fish access to the lower 400 m of
		Į.	[this reach. Upstream of that point no fish
636	11000	1	0.69	4.75	NFC	S4*/S6	n	habitat is available.
ļ]						Moderate rearing and spawning habitat.
						Į.		Overwintering habitat is present in upstream
637	400-362300	6	1.58	0.75	CT	S3	n	and downstream lakes.
								Fish may access this reach from downstream
638	11002	1	0.63	3.5	NFC	S4*	n	fish bearing water.
			Ì Ì					Fish may access this reach from downstream
639	11003	i	0.83	5	NFC	S4*	n	lake.
(40	400 262200	8	0.04	2.5	DV	54		Poor rearing and spawning habitat. No
640	400-362300	<u> </u>	0.96	3.5		<u>\$4</u>	n	overwintering habitat present.
		l	1				1	Moderate spawning and rearing habitat. No
641	11069	1	1.93	1.375	DV	S3	n	overwintering habitat present.
								Fish may access this reach from downstream
642	11064	1	0.48	1	NFC	S4*	n	fish bearing water.
	400-362300-	١.			D1/	64		Moderate rearing and poor spawning habitat
643	49200	1	1.41	3.5	DV	S4	n	present. No overwintering habitat observed. Moderate rearing and poor spawning habitat
	400-339200-					\		present. Limited overwintering habitat
646	20200	3	8.68	14.25	DV	S2/S5	n	observed.
								No barriers to upstream fish migration were
648	11905	1	2.41	6.75	NFC	S3*	у	identified. Potential fish access to this reach.
								No book and a second colored and a second
649	10285	1	0.65	1.625	NS	S4*	_	No barriers to upstream fish migration were identified. Potential fish access to this reach.
049	10265		0.03	1.625	N3	34	ח	identified. Folential fish access to this reach.
								Moderate spawning and poor rearing habitat
650	10288	1	2.95	1.625	DV	S3	n	present. No overwintering habitat observed.
	400-362300-							High value rearing, spawning, and
701	67500-35100	2	10.08	12.5	DV	S2	n	overwintering habitat.
	400.3/2200			i				
703	400-362300- 67500	2	9.67	6.5	DV	S2		High value rearing and spawning habitat. Moderate overwintering habitat.
703	400-362300-	<u> </u>	9.07	6.5	_υν	32	n	Moderate overwintering habitat. Moderate rearing, spawning and
709	74700	1	9.78	4.75	DV	S2	n	overwintering habitat.
			-		<u> </u>			Limited spawning and rearing habitat. No
720	11005	1	0.35	6.75	DV	S4	n	overwintering habitat present.
721	11006	1	0.40	8	NFC	S4*	n	Potential fish access below cutblock.
					n			Low rearing potential. No spawning or
722	11009	<u>l</u>	1.12	5.75	DV	S4	n	overwintering habitat present.
								Moderate rearing and small pockets of suitable spawning habitat observed. No
723	11008	1	1.02	4.5	DV	S4	n	overwintering habitat present.
123	11000	L	1.0≟	7.3	<u>Dv</u>	J 37	- 11	overwintering national present.

High gradient sections, cascades and falls were the dominant physical barriers to upstream fish migration in the Study Area. Other features (Table 4) effecting fish habitat in the Study Area included beaver dams, fisheries sensitive zone, and culverts.

4.7.2 Additional Sampling Recommendations

Two reaches are recommended for additional sampling (Table 6). Additional sampling will clarify fish presence/absence and establish if any barriers exist in downstream reaches. No fish were captured in reaches recommended for additional sampling.

The reaches selected for additional sampling represent small tributaries with limited habitat values. Based on additional sampling efforts in the past, these reaches often provide limited values for salmonids, and even under optimal conditions, fish are often present at low densities and are not always captured. The reaches selected for additional sampling were required by default due to a lack of water, or inconclusive sampling results. The lack of identified barriers and gradients less than 20% are additional rationale for resampling.

The timing of additional sampling efforts is critical to ensuring optimal conditions and maximizing the potential for fish to occur. In particular, additional sampling should be conducted in the spring immediately following peak runoff, which usually occurs in the early part of May. Reaches classified as fish bearing and selected for additional sampling could also be deferred by accepting this default classification, however the reaches selected for additional sampling would contribute valuable information to aid in determining fish presence and distribution for future stream classification work.

4.7.3 Non-Fish Bearing Status

Non-fish bearing status was assigned to 76 of the 116 sample sites within the Study Area (Table 7). A non-fish bearing classification has been assigned to all sampled reaches within the non-fish bearing table. Non-fish bearing classifications are associated with reaches that lack suitable habitat to sustain salmonids or are inaccessible to fish. Non-fish bearing status was assigned to reaches where:

- The stream was labeled a non-visible channel containing no potential fish habitat;
- The stream was deemed inaccessible from fish bearing waters and did not have perennial fish habitat upstream of the barrier;
- Permanent barriers (cascades, falls, etc.) prevented upstream fish migration and the stream did not have perennial fish habitat upstream of the barrier;
- Permanent barriers (cascades, falls, etc.) prevented upstream fish migration and the stream habitat was found to be non fish bearing through sampling above the barrier;
- The stream gradient is >30% (through map interpretation); Gradients were calculated during the pre field planning phases.

Table 6. Summary of Additional Sampling Recommendations for the Study Area

				Gradient		Stream		Additional Sampling
Site	ILP/WSC	Reach	Width (m)	(%)	Species	Class	Comments	Recommendations
601	10778	2	0.88	2.5	NFC	\$4*	No permanent barriers to upstream fish migration were identified. Numerous beaver dams may temporarily limit fish access to this reach.	Additional sampling in Reach 1 may identify a potential barrier to upstream fish migration. Reach should be sampled during increased flow conditions (late spring/early summer).
648	11905		241	675	NEC	S3*		Reach should be sampled during increased flow conditions (late
648	11905	l]	2.41	6.75	NFC	S3*	reach.	spring/early summer).

• The stream gradient is >30% (through map interpretation) in the lower section of stream (i.e. reach 1) and all reaches upstream of that reach are >20%;

Inferred non-fish bearing status was given to non sampled reaches with the following criteria:

- Reaches above a stream section found to contain no stream channel (NVC) with no potential fish habitat;
- Reaches above a stream section with an average gradient greater than or equal to 20% (through map interpretation) with no headwater lake present.

Insufficient discharge often results in a lack of connectivity between the channelized portion of stream and downstream watercourses. Lack of connectivity can be described as the channelized portion of stream being isolated from downstream watercourses in which no surface connection or subsurface channel exists (joining the two at any time of the year). Evidence of no surface connection includes a lack of surface scour, no alluvial substrates and no evidence of surface ponding or seasonal flooding. These small streams with no connectivity to fish bearing waters were adequately sampled upstream of the loss of connectivity to verify fish presence or absence.

Reaches that are classified as NVC (NCD, non-RIC term used by the timber industry) are not streams as they do not possess a continuous channel and/or mineral alluvium, criteria necessary to be classifed as a stream. The reaches classified as NVC are largely drainages where no stream exists, often an error in mapping. They may also be watercourses that lack evidence of surface scour, contain no continuous definable channel, lack alluvium deposits, and exhibit no evidence of extensive ponding. Wetlands with extensive ponding and wetlands that lack surface water are both considered NVC as they do not possess stream channels or properties of streams. It should be recognized that a NVC classification does not necessarily mean that the reach is not fish bearing unless otherwise stated. For example, a ponded wetland reach could sustain fish but be classified NVC due to the lack of a continuous definable channel and fluvial substrates. In cases where ponded wetland reaches (NVC) are identified as fish bearing they should not be treated as streams because they do not meet the criteria of a stream. They should be managed to maintain the integrity of the fisheries resources identified within that reach. In most cases the level of concern is low with respect to protecting fish habitats sustained within NVC reaches due to the poor habitat values (for salmonids) associated with wetland habitats. However, the maintenance of fish passage is a concern.

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

[21				Stream			Elec	ctrofishing				Other	Methods		
Site	ILP/WSC	Reach	Width (m)	Gradient (%)	Class	Date	Diet (m)	Time (c)	Cond.	Stage	Turb.	Temp.	There	14-3 - 3	Comments	Additional Rationale
							Dist. (m)	ime (s)	(uS)	(vis)	(vis)	(₆ C)_	Турс	Method	Barrier (50 m falls) prevents upstream fish migration to this reach. Average pool depth of 28 cm. Barrier to anadromous and resident species.	Sampling upstream of the 50 m falls confinns non fish bearing status
٠, ١	10299	1	1,12	2,25	S6	00:08	110	230	80	Med	С	12	NA	NA	resident species.	
3	10301	3	0.93	3.75	S6*	00.08	NA	NA	NA	Low	NA	NA NA	NA	NA NA	Inferred non fish bearing. Barrier downstream (Reach 2 average gradient is 26%). Average pool depth of 10 cm.	No fish habitat was identified with two sample sites upstream the barrier. Stream is inferred non fish bearing due to no fish sampling on site.
4	10628		NA	NA	NVC	00-08	NA	NA	NA	NA	NA	NA	NA	NA NA	No visible channel. No evidence of surface scour or alluvial substrates. No potential fish habitat.	First order drainage with approximately 600 m of mapped stream above the sampled reach.
6	10810		0.77	19.5	\$6	00.08	70	150	90	Med		8.5			Barrier (12 m falls) prevents upstream fish migration to this reach. Average pool depth of 8 cm. Barrier to anadromous and resident species.	Sampling upstream of the 12 m falls confirms non fish bearing status. Sampled portion of the reach was the only section less than 20%.
7	10893	1	NA	19.3 NA	NVC	00.08	NA	NA NA	90 NA	NA	NA NA	8.3 NA	NA NA	NA NA	No visible channel No evidence of surface scour or alluvial substrates. No potential fish habitat.	First order drainage with approximately 1200 m of mapped stream above the sampled reach.
9	10236	11	NA	NA	NVC	00 08	NA	NA	NA_	NA	NA	NA NA	NA	NA	No visible channel. Not a stream. No potential fish habitat	None
10	10244	1	NA	NA	NVC	00 08	NA	NA	NA	NA_	NA	NA_	NA	NA	No visible channel. Not a stream. No potential fish habitat	None
11	10239	2	1.07	4.75	S6	00-08	110	278	80	Low	c		NA NA	l NA	Barrier (8 x 20 m cascade) prevents upstream fish migration to this reach. Average pool depth of 13 cm. Barrier to resident species.	Two sample sites upstream of the 8 m cascade confirms non fish bearing status. Combined EF effort of 598 seconds over 510 m of habitat.
															Barrier (3 x 2 in cascade) in upper portion of reach prevents upstream fish migration. Fish bearing based on access below the cascade. Average pool depth of 38 cm. Barrier to resident species.	First order stream with the majority o mapped stream length over 20%. Two sample sites above the cascade confirm non fish bearing status. Combined EF effort of 627 seconds over 290 m.
12	400-330700	4	2.27	7.5	\$3*·\$6	00 08	150	282	80	Low	<u>c</u>	11	NA NA	NA NA	Barrier (3 x 2 m cascade) prevents upstream fish migration to this	Two sample sites upstream of the 3 m cascade confirms non fish bearing
14	400-330700	5	2.20	13.75_	S6	00/08	220	472_	80	Med	С	11	NA.	NA_	reach. Average pool depth of 17 cm. Barrier to resident species.	status. Combined EF effort of 627 seconds over 290 m of habitat
15	10239		1.60	9	S6	00/08	400	320	80	Med	C	l ti	NA .	NA	Barrier (8 x 20 m cascade) prevents upstream fish migration to this reach. Average pool depth of 19 cm. Barrier to resident species	Two sample sites upstream of the 8 m cascade confirms non fish bearing status. Combined EF effort of 598 seconds over 510 m.

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

								Elec	troffshing S	pecificati	ons		Other	Methods		Additional Rationale
	This .		DIP ALL COL	Gradient (%)	Stream	Date			Cond.	Stage	Turb.	Temp.			Comments	Adomonas Ranousie
e	ILP/WSC	Reach	Width (III)	Gradienic (10)	Class		Dist. (m)	Time (s)	(uS)	(vis)	(vis)	(oC)	Type	Method	No visible channel. Not a stream.	First order drainage with a small
4															No potential fish habitat	catchment area.
				1 1	\ \ \				l Ì					NA	No potential risk traction	
	11061		NA	NA	NVC	00 08	NA_	NA.	NA_	Low	NA	NA_	NA_	NA	No visible channel. Not a stream.	First order drainage with a small
+									i 1	1					No potential fish habitat	catchment area and approximately
- 1	1							\	i 1)			1			800 m of mapped stream above site.
- }	Ì						1		١ ١	. 1	NA	NA	NA	NA NA		
,	11123	1	NA	NA	NVC	00:08	NA_	NA_	NA_	Low	INA_	1971	1.7.7		Barrier (60 x120 m cascade)	Sampling upstream of cascade
+						l	Į.	ļ	l			1	١	1	prevents upstream fish migration to	confirms non fish bearing status.
- }	}		l	}		ł	l	l	1 1			1	1	1	this reach. Average pool depth of 7	Gradient is over 20%.
- (1		1	1	1]						,	1		cm. Barrier to anadromous and	1
ļ	ł		ł	1)	[}	Į l		l	[1		resident species.]
Į		3	0.92	22.75	S 6	00-08	50_	290	40	Med	C	7	NA_	NA_	Barrier (7 in falls) prevents upstream	Six sample sites upstream of the 7 m
22	10772		0.72	-					Ì		1	l	1	1	fish migration to this reach.	falls confirms non fish bearing status
- 1			Į.	1	1	1		1	1		1	1	ł	l	Average pool depth of 88 cm.	Combined EF effort of 2240 second
ì			1	1		1	1	1	1		1	}		1	Barrier to resident species.	over 1065 m of habitat.
	·		1	1	l	l		470	60	Med	L	8	NA.	NA.	l	(4-7-
24	400-301700	4	23.33	4.75	S5	00:08	110	470	1 00	Ivied	 ~	 				Six sample sites upstream of the 7 m
_			1	ì	i	l	l	1	1	1	1	1	1	}	fish migration to this reach.	falls confirms non fish bearing statu Combined EF effort of 2240 second
	}		}	}	}	1	l	(1	((}	1	1	Average pool depth of 32 cm.	over 1065 m of habitat.
	1		1	1	1)		ł	l	ľ	[}	}	1	Barrier to resident species.	Over 1003 in of national.
		5	25.83	7	S5	00:08	120	610	60	Med	L	8_	NA	NA	Barrier (7 m (alls) prevents upstream	n Six sample sites upstream of the 7 i
25	400-301700		25.65	+							l	l	1	1	fish migration to this reach.	falls confirms non fish bearing state
			1	I .	1	1	1	1	1		1	ł	l		Average pool depth of 19 cm.	Combined EF effort of 2240 second
	Ì		l	l	1	1	1	1	1	1	1	1	1		Barrier to resident species.	over 1065 m of habitat.
	1		1	-		00.00	150	420	40	Med	l c	1 5	NA	NA.		ai disconnection 7
126	400-301700-54800	3	5.30	4	\$5	00.08	130	420	 ~ ~-	- Nica	1				Barrier (7 m falls) prevents upstrea	m Six sample sites upstream of the 7 falls confirms non fish bearing star
			1	1		1	1	1	1	1	1	1	1		fish inigration to this reach.	Combined EF effort of 2240 secon
	}		1	1		1	1	}	}	}	}	}	}	1	Average pool depth of 60 cm. Barrier to resident species.	over 1065 m of habitat.
	1	l	1	j	1	1	(1	1	l	1 .	9	1	NA	Barrier to resident species.	·
127	400-301700	8	7.02	2	55	00-08	110	340	70	Med	C	+9	NA.	- NA	Barrier (8 m falls) prevents upstrea	m Ten sample sites upstream of the 8
121	400-301700						1	1	1	1	1	1	- 1		fish migration to this reach.	falls confirms non fish bearing state
	ļ	1	1	1	1		1		1	l	1	(1	1	Average pool depth of 13 cm.	Combined EF effort of 3140 secon
	l	ļ	- {	1	1	1	1	1	1	ł	(1	- [Barrier to anadromous and residen	over 1400 m of habitat. Inlet and outlet of lakes sampled.
	Į.	l	1	1	1		1	1	i	1	1	l l	l	1	species.	ouner of taxes sampled.
	400-313700-71700	1 .	0.75	5.75	S6	00.0	3 40	81	50	Med	C	15	NA.	NA_	No visible channel. Not a stream.	First order drainage with
128	36000	3		3.75	+					1			- l	- (No potential fish habitat	approximately 700 m of mapped
	1	i	l	1	-	1		1	1	1	1	N.	. NA	NA.		stream.
129	10879	1	NA	4	NVC	00.0	8 NA	NA NA	NA.	NA.	N/	N/	197	<u> </u>	Barrier (8 m falls) prevents upstre	
	1				[1	1			ì]		1	fish migration to this reach. Avera	ige falls confirms non fish bearing sta
	}	1	1		1	- 1	- 1	- 1	1	1		1	1		pool depth of 40 cm. Barrier to	Combined EF effort of 3140 second over 1400 m of habitat. Inlet and
	1		i	Ì	1	- (ļ	- 1	1	1	1	1	ĺ	Ì	anadromous and resident species	outlet of lakes sampled.
	}	1	1		1	1	1	1	}	1	1	1	1		Ī	1
	400 313700	7	17.1	0 4.25	S 5	00 0	8 80	363	45	Med			N/	NA NA	Barrier (8 m falls) prevents upstr	eam I en sample sites upstream of the
130	400-313700	+	17.1	·	1			1	1	1		1	1		fish migration to this reach.	falls confirms non fish bearing st
	(1	1		ł		1		1	{	1	Average pool depth of 102 cm.	Combined EF effort of 3140 second
	1	1	- (1	1	1)			1	ļ	1	1	- 1	Barrier to anadromous and reside	ent over 1400 m of habitat. Inlet and
		l	1	1	1	1	1	1		i	ľ	Ţ	J	- }	species.	outlet of lakes sampled.
	1	1	1	- {		1		38	5 45	Me	4 [I	. [8	N.	A NA		
131	400-313700	3	25.3	33 6.5	S5	00	08 60	, 38	- 43	ivie	ئىت					

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

					Stream			Elec	trofishing	Specificat	ions		Other	Methods	<u> </u>	
Site	ILP/WSC	Reach	Width (m)	Gradient (%)	Class	Date	Dist (m)	Time (s)	Cond. (uS)	Stage (vis)	Turb.	Temp.	T	Method	Comments	Additional Rationale
135	1400-313700-58800		13.15	4.5	S5	00:08	100	608	40	Med	(vis)	(oC)	Type	Method	Barrier (8 m falls) prevents upstream fish migration to this reach. Average pool depth of 28 cm. Barrier to anadromous and resident species.	Ten sample sites upstream of the 8 m falls confirms non fish bearing status. Combined EF effort of 3140 seconds over 1400 m of habitat. Inlet and outlet of lakes sampled.
															fish migration to this reach. Average pool depth of 11 em.	Ten sample sites upstream of the 8 m falls confirms non fish bearing status Combined EF effort of 3140 seconds over 1400 m of habitat. Inlet and outlet of lakes sampled.
136	10834	6	0.98	7.5	S6	00.08	80	255	25	Med Med	C	6	NANA	NA NA	Barrier (8 m falls) prevents upstream fish migration to this reach. Average pool depth of 14 cm. Barrier to anadromous and resident species.	Ten sample sites upstream of the 8 m falls confirms non fish bearing status. Combined EF effort of 3140 seconds over 1400 m of habitat. Inlet and outlet of lakes sampled
137	400-324400	9	31.50	6	S5	00 08	200	720	50	Med	C	9	NA NA	NA NA	Barrier (6 m falls) prevents upstream fish migration to this reach. Average pool depth of 63 cm. Barrier to anadromous and resident species.	Six sample sites upstream of the 6 m falls confirms non fish bearing status Combined EF effort of 2139 seconds over 850 m of habitat.
								210				7			Barrier (6 m falls) prevents upstream fish migration to this reach. Average pool depth of 19 cm. Barrier to anadromous and resident species.	Six sample sites upstream of the 6 m falls confirms non fish bearing status. Combined EF effort of 2139 seconds over 850 m of habitat.
139	10163	<u> </u>	3.00	5.75	S5	00:08	50		45	Med	С		NA_	NA	fish migration to this reach.	Six sample sites upstream of the 6 m falls confirms non fish bearing status. Combined EF effort of 2139 seconds over 850 m of habitat.
	400-324400-75200		6.17	25.5	S5	00.08	100	185	20	Med	_ C	4	NA_	NA _	Barrier (6 m falls) prevents upstream fish migration to this reach. Average pool depth of 80 cm. Barrier to anadromous and resident species.	Six sample sites upstream of the 6 m falls confirms non fish bearing status. Combined EF effort of 2139 seconds over 850 m of habitat.
141	400-324400	88	20.67	8.5	S5 S5	00 08	110	242	50 40	Med Med	L_C	9	NA NA	NA NA	Barrier (10 m falls) prevents upstream fish migration to this reach. Average pool depth of 23 cm. Barrier to anadromous and resident species.	Eight sample sites upstream of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.
143	400-324400-52900 84100-0410		2.27	2.75	S6	00.08	100	103	40	Med	<u> </u>	10	NA NA	NA NA	Barrier (10 m falls) prevents upstream fish migration to this reach. Average pool depth of 13 cm. Barrier to anadromous and resident species.	Eight sample sites upstream of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

		T	each Width (m)) Gradient (%)	Stream Class	I Date	Γ	Elec	cuofishing	Specificat	ions :		Other	Methods	 _	Additional Rationale
Site	ILP/WSC	Reach					Dist. (m)	Time (s)	Cond. (uS)	Stage (vis)	Turb. (vis)	Temp.	Туре	Method	Comments	
144	400-324400-52900	7	4.75	2	\$5	00-08	40	208	40	Med	(vis)	10	NA NA	NA	Barrier (10 m falls) prevents upstream fish migration to this reach. Average pool depth of 13 cm. Barrier to anadromous and resident species.	Eight sample sites upstream of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.
145	400-324400-52900 51900	4	0.57	4.75	S 6	00.08	30	96	35	Med	C	12	NA	NA	Barrier (10 m falls) prevents upstream fish migration to this reach. Average pool depth of 4 cm. Barrier to anadromous and resident species.	Eight sample sites upsweam of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.
146	10041	 	NA	NA NA	NVC	00-08	NA NA	NA	NA	NA	NA	NA NA	NA	NA NA	No visible channel. Not a stream. No potential fish habitat.	First order drainage with approximately 300 m of mapped stream.
	400-324400-29000	5	19.17	10.75	\$5	00 08	110	331	45	Med	L	6	NA NA	NA NA	Barrier (4 m falls) prevents upstream fish migration to this reach. Average pool depth of 50 cm. Barrier to resident species.	Two sample sites upstream of the 4 m falls confirms non fish bearing status. Combined EF effort of 692 seconds over 410 m of habitat.
154	400-350300		3.17	2	S5	00.08	70	211	60	Med	C	9	NA	NA NA	Barrier (20 m falls) prevents upstream fish migration to this reach. Average pool depth of 9 cm. Barrier to resident species.	Three sample sites upstream of the 20 m falls confirms non fish bearing status. Combined FF effort of 750 seconds over 330 m of habitat.
155	10541		1.32		S6	00.08	60	210	30	Low	C	9	NA	NA NA	Barrier (20 m falls) prevents upstream fish migration to this reach. Average pool depth of 7 cm. Barrier to resident species.	Three sample sites upstream of the 20 m falls confirms non-fish bearing status. Combined EF effort of 750 seconds over 330 m of habitat
		'		'											Barrier (8 m falls) prevents upstream fish migration to this reach. Average pool depth of 27 cm. Barrier to resident species.	One sample sire upstream of the 8 m falls confirms non fish bearing status.
156	400-339200	5	6.65	9,25	S5	00:08	70	350	40	Med	С	12	NA_	NA_	Barrier (3 x 2m cascade) prevents upstream fish migration to this reach. Average pool depth of 8 cm. Barrier to resident species.	Two sample sites upstream of the 3 m cascade confirms non fish bearing status. Combined EF effort of 627 seconds over 290 m of habitat
157	400-330700	6	1.22	0	S6	00.08	70	155	80	Low	C	14	NA	NA	Barrier (50 x 150 m cascade) prevents upstream fish migration to this reach. Average pool depth of 72 cm. Barrier to resident species.	Three sample sites upstream of the 50 m cascade confirms non fish bearing status. Combined LF effort of 1781 seconds over 1000 m of habitat.
603	400-301700-28100	2	30.42	11.25	\$5	00/08	400	745	60	Low	С	7	NA_	NA NA	Barrier (50 x 150 m cascade) prevents upstream fish migration to this reach. Average pool depth of 31 cm. Barrier to resident species.	Three sample sites upstream of the 50 m cascade confirms non fish bearing status. Combined EF effort of 1781 seconds over 1000 m of habitat.
605	400-301700-28100	4	5.80	5.5	S5	00/08	300	610	60	Med	_c_	6_	NA_	_ NA		

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

			-	Gradient (%)	Stream		Electrofishing Specifications							Methods	_	
Site ILP/WSC	ILP/WSC	Reach	h Width (m)		Class	Date			Cond.	Stage	Turb.	Temp.	-	1 44 4	Comments	Additional Rationale
:			<u> </u>				Dist. (m)	Time (s)	(uS)	(vis)	(vis)	(oC)	Туре	Method	Barrier (50 x 150 m cascade) prevents upstream fish migration to this reach. Average pool depth of 44 cm. Barrier to resident species.	Three sample sites upstream of the 50 m cascade confirms non fish bearing status. Combined EF effort of 1781 seconds over 1000 m of habitat.
606	400-301700-28100	4	15,93	8.75	S5_	00.08	300	426	60	Med	c	6	NA	NA NA		}
	400-301700-65700	4	1.64	10	\$6	00.08	200	369	30	Med	C	7	NA	NA NA	Barrier (7 m falls) prevents upstream fish migration to this reach. Average pool depth of 24 cm. Barrier to resident species.	Six sample sites upstream of the 7 m falls confirms non fish bearing status. Combined EF effort of 2240 seconds over 1065 m of habitat.
608	10885	2	0.45	8.5	\$6	00/08	200	206	30	Med	C	7	NA	NA NA		Six sample sites upstream of the 7 m falls confirms non fish bearing status. Combined EF effort of 2240 seconds over 1065 m of habitat.
609	400-313700	6	33.98	4,62	S5	00-08	400	510	60	Low		10	NA	NA NA	Barrier (8 m falls) prevents upstream fish migration to this reach. Average pool depth of 59 cm. Barrier to anadromous and resident species.	Ten sample sites upstream of the 8 m falls confirms non fish bearing status. Combined EF effort of 3140 seconds over 1400 m of habitat. Inlet and outlet of lakes sampled.
809	400-313/00		33.46	4.02	33	00 08	400	310		Low					Barrier (8 m falls) prevents upstrean fish migration to this reach. Average pool depth of 57 cm. Barrier to anadromous and resident species.	Ten sample sites upstream of the 8 m falls confirms non fish bearing status. Combined EF effort of 3140 seconds over 1400 m of habitat. Inlet and outlet of lakes sampled.
610	400-313700	4	44.17	4.75	S5	00 08	300	284	60	Low	С	7	NA NA	NA NA	Barrier (8 m falls) prevents upstream fish migration to this reach. Average pool depth of 82 cm. Barrier to anadromous and resident species.	Ten sample sites upstream of the 8 m falls confirms non fish bearing status. Combined EF effort of 3140 seconds over 1400 m of habitat. Inlet and outlet of lakes sampled.
611	400-313700	2	25.18	6	<u>S5</u>	00.08	250	478	60	Low	C	7	NA NA	NA NA	Barrier (6 m falls) prevents upstrear fish migration to this reach. Average pool depth of 43 cm. Barrier to anadromous and resident species.	Six sample sites upstream of the 6 m falls confirms non fish bearing status. Combined EF effort of 2139 seconds over 850 m of habitat.
614	10176		5.03	8.75	S5	00.08	200	217	60	Med	C	13	NA NA	NA NA	Barrier (6 m falls) prevents upstrear fish migration to this reach. Average pool depth of 33 cm. Barrier to anadromous and resident species.	n Six sample sites upstream of the 6 m falls confirms non fish bearing status. Combined EF effort of 2139 seconds over 850 m of habitat.
615	10173	31	2.35	2.25	S6 S5	00.08	250	281	60	Med	C	7	NA NA	NA NA	Barrier (10 m falls) prevents upstream fish migration to this reach. Average pool depth of 56 cm. Barrier to anadromous and resident species.	Eight sample sites upstream of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

		Τ	T^-		G:-			Elec	trofishing	Specificat	tions		Other			
Site	ILP/WSC	Reach	Width (m)	Gradient (%)	Stream Class	Date			Cond.	Stage	Turb.	Temp.			Comments	Additional Rationale
617	400-324400-52900 17700	6	8.18	4	\$5	00-08	Dist. (m)	Time (s)	(uS) 50	(vis)	(vis)	(oC)	NA Type	Method NA	Barrier (10 m falls) prevents upstream fish migration to this reach. Average pool depth of 39 cm. Barrier to anadromous and resident species.	Eight sample sites upstream of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.
618	400-324400-52900 17700	3	7.37	7.25	<u>\$</u> 5	00 08	300	268	70 _	Med	C	9	ŅA	NA	Barrier (10 m falls) prevents upstream fish migration to this teach. Average pool depth of 53 cm. Barrier to anadromous and resident species.	Eight sample sites upstream of the 10 m falls confirms non fish bearing status. Combined EF effort of 1230 seconds over 730 m of habitat.
619	400-324400-29000 59400-0130	2	1.38	3.75_	\$6	00-08	200	186	40	Med	С	8	NA.	NA NA	Gradient (34%) in Reach 1 prevents upstream fish migration to this reach. Average pool depth of 23 cm.	Two sample sites upstream of the high gradient section confirms non fish bearing status.
620	400-324400-29000	7	26.07	6.5	\$5	00 08	300	361	50	Med	L	5	NA NA	NA NA	Barrier (4 in falls) prevents upstream fish migration to this reach. Average pool depth of 32 cm. Barrier to resident species.	Two sample sites upstream of the 4 m falls confirms non fish bearing status. Combined EF effort of 692 seconds over 410 m of habitat.
	400-324400-29000														Gradient (34%) in Reach 1.1 prevents upstream fish migration to this reach. Average pool depth of 68 cm.	Two sample sites upstream of the high gradient section confirms non fish bearing status. Combined EF effort of 973 seconds over 500 m of habitat
621	59400	5	4.47	2.25	\$5	00 08	300	759	60	Med	_ c	7	NA NA	NA_	Gradient (34%) in Reach 1.1 prevents upstream fish migration to this reach. Average pool depth of 48 cm.	Two sample sites upstream of the high gradient section confirms non fish bearing status. Combined EF effort of 973 seconds over 500 m of habitat
622	59400-7810 400-350300-70500	1	2.80	8,75	\$6 \$2 \$5	00 08	200	336	60	Med Low	<u>C</u>	7	NA NA	NA	Barrier (17.5 m falls) prevents upstream fish migration to this reach. Average pool depth of 58 cm. Barrier to resident species.	The majority of mapped stream above the falls is greater than 20%
625	400-350300	8	8.63	11	\$5	00.08	200	329	60	Low	L	7	NA NA	NA NA	Barrier (20 m falls) prevents upstream fish migration to this reach. Average pool depth of 82 cm. Barrier to resident species.	Three sample sites upstream of the 20 m falls confirms non fish bearing status. Combined EF effort of 750 seconds over 330 m of habitat.
	400-339200-20200	8	1,30	2.5	S6	00.08	300	291	70	Low	C	17	NA NA	NA NA	Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth of 20 cm. Barrier to resident species.	Two sample sites upstream of the 5 m falls confirms non fish bearing status. Combined EF effort of 527 seconds over 500 m of habitat.
	400-339200-20200	6	1.59	2	S6	00.08	200	136	60	Low	С	16	NA NA	NA NA	Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth of 11 cm. Barrier to resident species.	Two sample sites upstream of the 5 m falls confirms non fish bearing status Combined EF effort of 527 seconds over 500 m of habitat

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

		Reach			Stream		Electrofishing Specifications							Methods		
Site	ILP/WSC		Width (m)	Gradient (%)	Class	Date			Cond.	Stage	Turb.	Temp.			Comments	Additional Rationale
		<u></u>					Dist. (m)	Time (s)	(uS)	(vis)	(vis)_	(oC)	Type .	<u>Method</u>	Upstream wetland is non channelized and dry. No evidence of ponded water. Average pool depth of 8 cm.	First order stream with a small catchment area and low discharge. Upstream wetland was dry. Stream consists of isolated pools and a vegetated channel. 100 % fines substrates. NFC
629	11066	1	1.04	0.875	S6	00/08	200	98	70	Low	С	12	NA	NA		
630	11085		2.20	6.75	\$6	00:08	300	326	60	Med	C	7	NA	NA	Barrier (40 x 30 m cascade) prevents upstream fish migration to this reach. Average pool depth of 40 cm. Barrier to resident species.	Two sample sites upstream of the 40 m cascade confirms non fish bearing status. Combined EF effort of 776 seconds over 700 m of habitat.
	400-362300-74700	2	6.27	7.5	S5	00.08	500	896	20	Med	С	9	NA	NA	Barrier (6 x 2 m cascade) prevents upstream fish migration to this reach. Average pool depth of 62 cm. Barrier to resident species	Four sample sites upstream of the 6 m cascade confirms non fish bearing status. Combined EF effort of 3096 seconds over 1950 m of habitat.
	400-362300-25100	5	16.55	11.5	S5	00/08	100	215	40	Low	С	8	NA	. NA	Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth of 27 cm. Barrier to resident species.	Three sample sites upstream of the 5 m falls confirms non fish bearing status. Combined EF effort of 991 seconds over 700 m of habitat.
635	11001		NA.	2	NVC	00.08	NA	NA NA	NA NA	NA.	NA NA	NA NA	NA NA	NA.	Isolated pockets of standing water. No fish habitat observed. No defined channel or evidence of scour.	First order drainage with approximately 800 m of mapped stream length.
636	11000	; 	0.69	4.75	S4*/S6	00.08	200	139	50	Low	С	10	NA	NA NA	Potential fish access to the lower 400 m of this reach. Above that point no fish habitat is available. Average pool depth of 7 cm.	Upstream of the lower 400 m the channel becomes poorly defined and offers no fish habitat. Gradient increases to 10 -15%, NFC
	400-362300-25100	1	5.72	8.75	SS	00 08	100	517	50	Med	С	10	NA	NA NA	Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth of 33 cm. Barrier to resident species.	Three sample sites upstream of the 5 m falls confirms non fish bearing status. Combined FF effort of 991 seconds over 700 m of habitat.
	400-362300-25100	,	5.40	15	S5	00.08	200	259	50	Med	C	10	NA NA	NA	Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth of 34 cm. Barrier to resident species.	Three sample sites upstream of the 5 m falls confirms non fish bearing status. Combined EF effort of 991 seconds over 700 m of habitat.
											c				Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth of 33 cm. Barrier to resident species.	Two sample sites upstream of the 5 m falls confirms non fish bearing status. Combined EF effort of 527 seconds over 500 m of babitat
646	400-339200-20200 10256	3	8.68	6.5	\$2 \$5 \$6	00.08	300	346	50	Low	0	10	NA NA	NA NA	Barrier (30 x 50 m cascade) prevents upstream fish migration to this reach. Average pool depth of 6 cm. Barrier to resident species.	One sample site upstream of the 30 m cascade confirms non fish bearing status. Total stream length is approximately 600 m

Table 7. Summary of Non Fish-Bearing Reaches in the Study Area.

_								Elec	trofishing	Specificat	ions		Other	Methods	Comments	Additional Rationale
Site	ILP/WSC	Reach	Width (m)	Gradient (%)	Stream Class	Date			Cond. (uS)	Stage (vis)	Turb. (vis)	Temp.	Type	Method		
					_		Dist. (m)	Time (s)	(us)	(vis)	(VIS)				Barrier (40 x 30 m cascade) prevents upstream fish migration to this reach. Average pool depth of 63 cm. Barrier to resident species.	Two sample sites upstream of the 40 m cascade confirms non fish bearing status. Combined EF effort of 776 seconds over 700 m of habitat.
702	400-362300-67500	2	8.50	9,75	S5	00 08	400_	450	90	Med	L_	9	NA_	NA_	this reach. Average pool depth of 78	Two sample sites upstream of the 10 m cascade confirms non fish bearing status. Combined EF effort of 950
704	400-362300-67500	4	11.83	11.25	S5	00:08	500	380	90	Med	L_	8	NA_	NA_	cm. Barrier to resident species. Basrier (100 x 100 m cascade)	seconds over 700 m of habitat Two sample sites upstream of the 10
												8	NA	NA NA	prevents upstream fish migration to this reach. Average pool depth of 4: cm. Barrier to resident species.	e status. Combined EF effort of 950 seconds over 700 m of habitat
705	400-362300-67500	4_	5.50	7	S5	00 08	200	570	90	Med				NA NA	Barrier (6 x 2 m cascade) prevents upstream fish migration to this reach. Average pool depth of 48 cm. Barrier to resident species.	Four sample sites upstream of the 6 cascade confirms non fish bearing status. Combined EF effort of 3096 seconds over 1950 in of habitat.
706	400-362300-74700	3	6.15	6.75	S5	00.08	350	520	80	Med	С	8	NA		Barrier (6 x 2 m cascade) prevents upstream fish migration to this reach. Average pool depth of 68 cm. Barrier to resident species.	Four sample sites upstream of the cascade confirms non fish bearing status. Combined EF effort of 309 seconds over 1950 m of habitat.
707	400-362300-74700	3	5,10	7.5	S5_	00:08	350	480	80	Med	С	8	NA	NA	Barrier (6 x 2 m cascade) prevents upstream fish migration to this reach. Average pool depth of 75 cm. Barrier to resident species	Four sample sites upstream of the cascade confirms non fish bearing status. Combined EF effort of 30% seconds over 1950 m of habitat.
708	400-362300-7470	,	7.27	5.75	S5	00 08	750	1200	80	Med	c	8_	NA	NA.		

5.0 STREAM CLASSIFICATION SUMMARY
Table 8 provides a summary of stream inventory information collected during the project and Riparian Management Area (RMA) classifications for each reach sampled.

Table 8. Stream Classification Summary for the Study Area.

			Map	1	Gradient]		
Site	ILP/WSC	Reach	Number	Width (m)	(%)	Species	Stream Class	Barrier (50 m falls) prevents upstream fish
								migration to this reach. Average pool depth
								of 28 cm. Barrier to anadromous and resident
1	10299	1	103P.010	1.12	2.3	NFC	S6	species.
								Dolly Varden captured upstream of 7 m falls.
								Spawning, rearing and overwintering habitat
2	400-330700	2	103P.009	2.32	12.5	DV	S3	is present within sample site.
		ĺ						1 Country of the Lordon Bandar
								Inferred non fish bearing. Barrier downstream (Reach 2 average gradient is
	10201	١,	1020 020	0.03	3.8	NS	S6*	26%). Average pool depth of 10 cm.
3	10301	3	103P.020	0.93	3.0	1113	30.	No visible channel. No evidence of surface
		l						scour or alluvial substrates. No potential fish
4	10628	1	103P.020	NA	NA	NS	NVC	habitat.
<u> </u>				İ		_		
						ļ		Slough adjacent to the Skeena River. High
		ļ						value rearing, with good overwintering
5	10303	1	103P.010	23.33	NA	CO	FSZ	habitat. No spawning habitat present.
								Barrier (12 m falls) prevents upstream fish
			Ï					migration to this reach. Average pool depth
								of 8 cm. Barrier to anadromous and resident
6	10810	1	1031.098	0.77	19.5	NFC	S6	species. No visible channel. No evidence of surface
								scour or alluvial substrates. No potential fish
7	10893	1	1031.099	NA	NA	NS	NVC	habitat.
	10893	1	1031.099	INA	INA	143	INVC	Fair rearing habitat, but spawning habitat is
8	400-324400	1 1	1031.099	45.00	0.8	СО, СН	SI	limited by high velocity.
	100 32 1,00		10011077	10.00				No visible channel. Not a stream. No
9	10236	1	103P.009	NA	NA	NS	NVC	potential fish habitat
					-			No visible channel. Not a stream. No
10	10244	11	103P.009	NA_	NA	NS	NVC	potential fish habitat
							l l	Barrier (8 x 20 m cascade) in Reach 1
						l vino	0.6	prevents upstream fish migration to this
11	10239	2	1031.009	1.07	4.8	NFC	S6	reach.
						1		Barrier (3 m cascade) in upper portion of
		ĺ						reach prevents upstream fish migration. Fish
12	400-330700	4	103P.009	2.27	7.5	NFC	S3*/S6	bearing based on access below cascade.
								Moderate spawning and rearing habitat,
13	400-330700	3	103P.009	1.78	7.8	DV	S3_	limited overwintering.
					_			
							İ	Barrier (3 x 2 m cascade) prevents upstream
				1 . 1				fish migration to this reach. Average pool
14	400-330700	5	103P.009	2.20	13.8	NFC	S6	depth of 17 cm. Barrier to resident species.
		,						Barrier (8 x 20 m cascade) prevents upstream
							1	fish migration to this reach. Average pool
15	10239	1	103P.009	1.60	8.0	NFC	S6	depth of 19 cm. Barrier to resident species.
	1022_	<u> </u>	10011001	1				No permanent barriers were identified. Fish
16	10242	1	103P.009	1.00	11.0	NFC	S4*	bearing based on access.
							1	Moderate spawning and rearing habitat.
	400-362300-							Overwintering habitat is limited by pool
<u>17</u>	33000	1	103P.020	1.88	2.5	DV	S3	depth.
						1	l	No visible channel. Not a stream. No
18	11061	1	103P.020	NA	NA	NS	NVC	potential fish habitat
10	11043	,	1038.030	, , ,	4.7	NEC	C1*	No barriers to upstream fish migration were
19	11063	1	103P.020	1.22	4.3	NFC	S4*	identified. No visible channel. Not a stream. No
20	11123	ı	103P.020	NA	NA	NS	NVC	potential fish habitat
20	11123	- '-	1001.020	11A	11/1	110	1,110	High value rearing and overwintering habitat
21	400-362300	3	103P.020	16.67	3.8	DV	S2	moderate spawning.
				12.07				Wetland reach. Potential fish habitat.
			[Rearing and overwintering habitat is
22	11062	1 1	103P.020	NA	NA	NS	NVC	abundant.

Table 8. Stream Classification Summary for the Study Area.

			Map		Gradient			
Site	ILP/WSC	Reach	Number	Width (m)	(%)	Species	Stream Class	
								Barrier (60 x120 m cascade) prevents
							1	upstream fish migration to this reach.
}								Average pool depth of 7 cm. Barrier to
122	10772	3	1031.089	0.92	22.8	NFC	S6	anadromous and resident species.
1	!							No spawning habitat present (large substrate
122	400 201700	١ ,	1031 000	27.17	1.2	DV	S1	size). Marginal rearing and overwintering habitat.
123	400-301700	2	1031.088	27,17	4.3	DV	31	naonat.
								Barrier (7 m falls) prevents upstream fish
			J					migration to this reach. Average pool depth
124	400-301700	4	1031.088	23.33	4.8	NFC	S5	of 88 cm. Barrier to resident species.
								Barrier (7 m falls) prevents upstream fish
				i l				migration to this reach. Average pool depth
125	400-301700	55	1031.088	25.83	7.0	NFC	S5 _	of 32 cm. Barrier to resident species.
								Damies (7 m falls) massents smatroom fink
	400 301700		ĺ	1				Barrier (7 m falls) prevents upstream fish migration to this reach. Average pool depth
126	400-301700-	,	1021 000	5 20	4.0	NFC	S5	of 19 cm. Barrier to resident species.
126	54800	3	1031.088	5.30	4.0	INIC	رد ا	Darrier to restuent species.
								Barrier (7 m falls) prevents upstream fish
								migration to this reach. Average pool depth
127	400-301700	8	1031.098	7.02	2.0	NFC	S5	of 60 cm. Barrier to resident species.
								Barrier (8 m falls) prevents upstream fish
								migration to this reach. Average pool depth
	400-313700-							of 13 cm. Barrier to anadromous and
128	71700-36000	3	1031.098	0.75	<u>5</u> .8	NFC	S6	resident species.
								No visible channel. Not a stream. No
129	10879	<u> </u>	1031.098	0.00	4.0	NS	NVC	potential fish habitat
								Barrier (8 m falls) prevents upstream fish
								migration to this reach. Average pool depth
	400 21220	_			4.3		0.5	of 40 cm. Barrier to anadromous and
130	400-313700	7	1031.098	17.10	4.3	NFC	S5	resident species. Falls (8 m) in Reach 2 prevents upstream fish
131	400-313700	3	1031.098	25.33	6.5	NFC	S5	migration to this reach.
131	400-313700		1031.098	23.33		INFC	33	Barrier (8 m falls) prevents upstream fish
								migration to this reach. Average pool depth
	400-313700-							of 28 cm. Barrier to anadromous and
135	58800	1	1031.098	13.15	4.5	NFC	S5	resident species.
								Barrier (8 m falls) prevents upstream fish
								migration to this reach. Average pool depth
]		of 11 cm. Barrier to anadromous and
136	10834	1	1031.098	0.98	7.5	NFC	S6	resident species.
								Barrier (8 m falls) prevents upstream fish
]		migration to this reach. Average pool depth
	400-313700-		1031.000	, 70	4.0	NEC	000	of 14 cm. Barrier to anadromous and
137	34400	6	1031.098	1.78	4.0	NFC	S6	resident species. Barrier (6 m falls) prevents upstream fish
								migration to this reach. Average pool depth
						1		of 63 cm. Barrier to anadromous and
138	400-324400	9	103P.008	31.50	6.0	NFC	S5	resident species.
1,00	700-227700		000.1001	31.50	0.0		33	Barrier (6 m falls) prevents upstream fish
	ļ					[migration to this reach. Average pool depth
]				of 19 cm. Barrier to anadromous and
139_	10163	J	103P.008	3.00	5.8	NFC	S5	resident species.
								Barrier (6 m falls) prevents upstream fish
ļ	ĺ							migration to this reach. Average pool depth
	400-324400-							of 8 cm. Barrier to anadromous and resident
140	75200	5	103P.008	6.17	25.5	NFC	S5	species.
	ĺ							Barrier (6 m falls) prevents upstream fish
								migration to this reach. Average pool depth
	400 334 :00	•	1035 000	20.1-		NEC	0.5	of 80 cm. Barrier to anadromous and
141	400-324400	8	103P.008	20.67	8.5	NFC_	<u>S5</u>	resident species.

Table 8. Stream Classification Summary for the Study Area.

			Map		Gradient			
Site	ILP/WSC	Reach	Number	Width (m)	(%)	Species	Stream Class	Comments
								Barrier (10 m falls) prevents upstream fish
		l						migration to this reach. Average pool depth
	400-324400-							of 23 cm. Barrier to anadromous and
142	52900	_3	103 P .008	4.98	2.0	NFC	S5	resident species.
	400 304400							Barrier (10 m falls) prevents upstream fish
	400-324400-							migration to this reach. Average pool depth of 13 cm. Barrier to anadromous and
1.42	52900-84100-		103P.008	2 22	2.8	NFC	S6	resident species.
143	0410 400-324400-		1031.006	2.27		INC	30	Falls (10 m) in Reach 1 prevent upstream fish
144	52900	7	103P.008	4.75	2.0	NFC	S5	migration to this reach.
								Barrier (10 m falls) prevents upstream fish
								migration to this reach. Average pool depth
	400-324400-						1	of 4 cm. Barrier to anadromous and resident
_145	52900-51900	4	103P.008	0.57	4.8	NFC	S6	species.
	10041	١.	1020 000	,,	214	NC	NVC	No visible channel. Not a stream. No
146	10041	1	103P.008	NA	NA_	NS _	INVC	potential fish habitat.
								Barrier (4 m falls) prevents upstream fish
	400-324400-						1	migration to this reach. Average pool depth
150	29000	5	103P.008	19.17	10.8	NFC	S5	of 50 cm. Barrier to resident species.
	400-324400-							Moderate rearing, poor spawning and limited
151	29000	3	103P.008	19.00	6.5	DV	S2	overwintering habitat.
	400-350300-				_			Moderate spawning and rearing with limited
152	30200	2	103P.019	11.23	9.8	DV	S2	overwintering.
							l	Moderate to high value rearing habitat.
153	400-350300	6	103P.019	27.42	4.3	DV	S1	Moderate spawning habitat
							1	Barrier (20 m falls) prevents upstream fish
				i				migration to this reach. Average pool depth
154	400-350300	11	103P.019	3.17	2.0	NFC	S5	of 9 cm. Barrier to resident species.
13.	.00 330300		1031.017	7.1.7				<u> </u>
				ļ				Falls (20 m) in Reach 7 of Sedan Creek
155	1054 <u>1</u>	l	103P.019	1.32	1.0	NFC	S6	prevent upstream fish migration to this reach.
	_					1		
			-					Barrier (8 m falls) prevents upstream fish
1.54	400 220200	-	1020 000		0.3	NEC	65	migration to this reach. Average pool depth
156	400-339200	5	103P.009	6.65	9.3	NFC	S5	of 27 cm. Barrier to resident species.
]				Barrier (3 x 2m cascade) prevents upstream
				l J				fish migration to this reach. Average pool
157	400-330700	6	103P.009	1.22	0.0	NFC	S6	depth of 8 cm. Barrier to resident species.
				ĺ				Stream reach has been heavily impacted by
158	10250	2	103P.009	14.50	NA NA	NFC	Wetlan <u>d</u>	beavers. Inferred fish bearing.
				***		,	-	Nie zamo za zak bamiera ka umakuzu Gab
				1				No permanent barriers to upstream fish migration were identified. Numerous beaver
				ĺ				dams may temporarily limit fish access to
601	10778	2	1031.089	0.88	2.5	NFC	S4*	this reach.
70,	10770	-	- 331.007	0.00			-	Fish were captured downstream of CN Rail
								crossing. A culvert blocks upstream fish
1								migration (perched 1.5 m) to high quality
602	400-297600		1031.089	1.88	4.3	CO, CH	S3	rearing habitat.
								Barrier (50 x 150 m cascade) prevents
	400 201200							upstream fish migration to this reach.
(0)	400-301700-	_	1021 000	30.42		NEC	C.e	Average pool depth of 72 cm. Barrier to
603	<u>28100</u> 400-301700-	2	1031.088	30.42	11.3	NFC	S5	resident species.
604	28100	1	1031.088	22.57	16.0	 ВТ	SI	Poor spawning and rearing with moderate overwintering habitat.
	20100	 '	1031.000	/			01	Barrier (50 x 150 m cascade) prevents
							'	upstream fish migration to this reach.
	400-301700-							Average pool depth of 31 cm. Barrier to
605	28100	4	1031.088	5.80	5.5	NFC _	S5	resident species.
							_	

Table 8. Stream Classification Summary for the Study Area.

			Мар		Gradient		a	~
Site	ILP/WSC	Reach	Number	Width (m)	(%)	Species	Stream Class	Barrier (50 x 150 m cascade) prevents
								1
	400 201200	1						upstream fish migration to this reach.
	400-301700-	١.	1021 000	15.03	0.0	NEC	66	Average pool depth of 44 cm. Barrier to
606	28100	4	1031.088	15.93	8.8	NFC	S5	resident species. Barrier (gradient) in Reach prevents fish
.	400-301700-		1021.000		10.0	NIEC	64	
<u>60</u> 7	65700	4	103I.098	1.64	10.0	NFC	S6	access to this reach.
								Barrier (7 m falls) prevents upstream fish
								migration to this reach. Average pool depth
608	10885	2	1031.098	0.45	8.5	NFC	S6	of 9 cm. Barrier to resident species.
008	10883	 -	1031.078	0.42	0.5	INC.	30	Barrier (8 m falls) prevents upstream fish
			J					migration to this reach. Average pool depth
							1	of 59 cm. Barrier to anadromous and
609	400-313700	6	1031.098	33.98	4.6	NFC	S5	resident species.
	100 213100	— —	10011070	5,7,0			<u> </u>	Barrier (8 m falls) prevents upstream fish
			ļ					migration to this reach. Average pool depth
				ļ				of 57 cm. Barrier to anadromous and
610	400-313700	4	1031.098	44.17	4.8	NFC	S5	resident species.
								Barrier (8 m falls) prevents upstream fish
			1					migration to this reach. Average pool depth
							1	of 82 cm. Barrier to anadromous and resident
611	400-313700	2	1031.098	25.18	6.0	NFC	S5	species.
			1			ľ		High quality rearing, poor spawning and
612	400-324400	7	103P.008	40.83	4.5	DV	<u>S1</u>	limited overwintering habitat present.
	400-324400-							High quality rearing, poor spawning and
613	52900	1	103P.008	20.85	4.0	DV	SI	limited overwintering habitat present.
						1		Barrier (6 m falls) prevents upstream fish
								migration to this reach. Average pool depth
								of 43 cm. Barrier to anadromous and
614	10176	2	103P.008	5.03	8.8	NFC	S5	resident species.
				1		Į.		Barrier (6 m falls) prevents upstream fish
								migration to this reach. Average pool depth
		_				l		of 33 cm. Barrier to anadromous and
615	10173	3	103P.008	2.35	2.3	NFC	S6	resident species.
								Barrier (10 m falls) prevents upstream fish
	400 224400		1					migration to this reach. Average pool depth
4.14	400-324400-		1020 000	20.17	1.5	NEC	C.F.	of 56 cm. Barrier to anadromous and
616	52900	1	103P.008	29.17	4.5	NFC	S5	resident species. Barrier (10 m falls) prevents upstream fish
								migration to this reach. Average pool depth
	400-324400-							of 39 cm. Barrier to anadromous and
617	52900-17700	6	103P.008	8.18	4.0	NFC	S5	resident species.
017	32900-17700		1001.1001	0.10	4.0	IVIC	33	Barrier (10 m falls) prevents upstream fish
							1	migration to this reach. Average pool depth
	400-324400-	'						of 53 cm. Barrier to anadromous and
618	52900-17700	3	103P.008	7.37	7.3	 NFC	S5	resident species.
0,0	400-324400-		.001.000	7.37	1.0			Gradient (34%) in Reach 1 prevents upstream
	29000-59400-							fish migration to this reach. Average pool
619	0130	2	103P.008	1.38	3.8	NFC	S 6	depth of 23 cm.
]							Barrier (4 m falls) prevents upstream fish
	400-324400-							migration to this reach. Average pool depth
620	29000	7	103P.019	26,07	6.5	NFC	S5	of 32 cm. Barrier to resident species.
								Gradient (34%) in Reach 1.1 prevents
	400-324400-							upstream fish migration to this reach.
621	29000-59400	5	103P.018	4.47	2.3	NFC	S5	Average pool depth of 68 cm.
	400-324400-							Gradient (34%) in Reach 1.1 prevents
	29000-59400-						1	upstream fish migration to this reach.
622	7810	1	103P.018	2.80	1.5	NFC	S6	Average pool depth of 48 cm.
			1			1		
							1	Moderate rearing habitat, poor spawning and
623	400-350300	6	103P.019	38.92	4.5	DV	SI	overwintering habitat present.

Table 8. Stream Classification Summary for the Study Area.

			Map		Gradient			
Site	_ILP/WSC	Reach	Number	Width (m)	(%)	Species	Stream Class	Comments
]					Barrier (17.5 m falls) prevents upstream fish
	400-350300-							migration to this reach. Average pool depth
624	70500	1	103P.019	14.43	8.8	DV	S2/S5	of 58 cm. Barrier to resident species.
								Barrier (20 m falls) prevents upstream fish
						ĺ		migration to this reach. Average pool depth
625	400-350300	8	103P.019	8.63	11.0	NFC	S5	of 82 cm. Barrier to resident species.
								High quality rearing, poor spawning and
_626	400-339200	3	103P.009	7.53	5.3	DV	S2	limited overwintering habitat present.
								Barrier (5 m falls) prevents upstream fish
	400-339200-							migration to this reach. Average pool depth
627	20200	8	103P.009	1.30	2.5	NFC	S6	of 20 cm. Barrier to resident species.
								Deminu (5 m. falla) una anta un atraco. Sab
	400 330300					ļ		Barrier (5 m falls) prevents upstream fish migration to this reach. Average pool depth
628	400-339200- 20200	6	103P.009	1.59	2.0	NFC	S6	of [] cm. Barrier to resident species.
020	20200		1031.007	1.57			-	Upstream wetland is non channelized and
								dry. No evidence of ponded water. Average
629	11066	1	103P.020	1.04	0.9	NFC	S6	pool depth of 8 cm. Barrier (40 x 30 m cascade) prevents
								upstream fish migration to this reach.
								Average pool depth of 40 cm. Barrier to
630	11085	ì	103P.020	2.20	6.8	NFC	S6	resident species.
					_			-
	400-362300-	_		12.05	12.5	DV	62	High quality rearing, poor spawning and
631	67500		103P.020	13.95	13.5	DV	S2	limited overwintering habitat present.
								Barrier (6 x 2 m cascade) prevents upstream
	400-362300-							fish migration to this reach. Average pool
632	74700	2	103P.030	6.27	7.5	NFC	S5	depth of 62 cm. Barrier to resident species.
(22	400-362300-	2	1020 020	7.07	7.8	DV	S2	Moderate rearing habitat and poor spawning habitat.
633	74700		103P.020	7.97			34	naonat.
								Barrier (5 m falls) prevents upstream fish
	400-362300-							migration to this reach. Average pool depth
634	25100	5	103P.020	16.55	11.5	NFC	S5	of 27 cm. Barrier to resident species.
	'							Isolated pockets of standing water. No fish habitat observed. No defined channel or
635	11001	1	103P.030	NA	2.0	NS	NVC	evidence of scour.
033	71007	•	1031.030	1		-		Potential fish access to the lower 400 m of
							ļ	this reach. Above that point no fish habitat is
636	11000	1	103P.030	0.69	4.8	NFC	S4*/S6	available.
								Moderate rearing and spawning habitat.
								Overwintering habitat is present in upstream
637	400 <u>-36230</u> 0	6	103P.030	1.58	0.8	CT	S3	and downstream lakes.
			1020 05		~ -	NEC	0.4*	Fish may access this reach from downstream
638	11002	1	103P.030	0.63	3.5	NFC	S4*	fish bearing water. Fish may access this reach from downstream
639	11003	1	103P.030	0.83	5.0	NFC	S4*	lake.
				1	<u> </u>			Poor rearing and spawning habitat. No
640	400-362300	8	103P.030	0.96	3.5	DV	S4	overwintering habitat present.
								Moderate spawning habitat and rearing
641	11069	1	103P.020	1.93	1.4	DV	S3	habitat. No overwintering habitat present.
U-71	11002	<u>'</u>	.051.020	1.75	1.7	ļ .		Fish may access this reach from downstream
642	11064	1	103P.020	0.48	1.0	NFC	S4*	fish bearing water.
	400.3/2200							Madama mania hakis s B
643	400-362300- 49200	1	103P.020	1.41	3.5	DV	S4	Moderate rearing habitat. Poor spawning habitat. No overwintering habitat observed.
043	49200	<u> </u>	1031.020	1.41	۵,۵	<u>, D</u> ₹	[J 4	mauriai. No overwiniering naultai observed.

Table 8. Stream Classification Summary for the Study Area.

		1	Map		Gradient			
Site	ILP/WSC	Reach	Number	Width (m)	(%)	Species	Stream Class	Comments
	1							Parriar (5 m falls) properts unstream fish
	.00 2/2200							Barrier (5 m falls) prevents upstream fish
	400-362300-							migration to this reach. Average pool depth
644	25100	l	103P.020	5.72	8.8	NFC	S5	of 33 cm. Barrier to resident species.
	400-362300-							Falls (5 m) located at confluence prevent
645	25100	2	103P.020	5.40	15.0	NFC	S5	upstream fish migration
	400-339200-							Moderate rearing habitat. Poor spawning
646	20200	3	103P.009	8.68	14.3	DV	S2/S5	habitat. Overwintering habitat is present.
040	20200		1031.007	0.00				Barrier (30 x 50 m cascade) prevents
						}		upstream fish migration to this reach.
	1							Average pool depth of 6 cm. Barrier to
647	10256	1	103P.009	0.75	6.5	NFC	S6	resident species.
	.0254							
								No barriers to upstream fish migration were
648	11905	1	103P.009	2.41	6.8	NFC	S3*	identified. Potential fish access to this reach
		ĺ						No barriers to upstream fish migration were
								identified. Potential seasonal fish use in thi
649	10285	1	103P.009	0.65	1.6	NS	S4*	reach.
								NA - d
650	10200		1030 000	2.05	1.4	DV	62	Moderate spawning and poor rearing habitat
650	10288		103P.009	2.95	1.6	DV	S3	present. No overwintering habitat observed.
	400-362300-			10.00	10.5	DV.	62	High value rearing, spawning, and
701	67500-35100	2	103P.020	10.08	12.5	DV	S2	overwintering habitat.
						J		Barrier (40 x 30 m cascade) prevents
]		1 1				upstream fish migration to this reach.
	400-362300-	_					0.5	Average pool depth of 63 cm. Barrier to
702	67500	2	103P.020	8.50	9.8	NFC	S5	resident species.
	400-362300-							High value rearing and spawning habitat.
702		2	1020 020	0.47	4.5	DV	S2	Moderate overwintering habitat.
703	67500_	-	103P.020	9.67	6.5	———	3	Barrier (100 x 100 m cascade) prevents
							ł	upstream fish migration to this reach.
	400.763200		ļ	1 1			ļ	Average pool depth of 78 cm. Barrier to
704	400-362300-	١.,	1020 020	,,,,,,	11.2	NEC	C.F	
704	67500	4	103P.020	11.83	11.3	NFC	S5	resident species. Barrier (100 x 100 m cascade) prevents
				[]				
	400.242200							upstream fish migration to this reach.
505	400-362300-			5.50	2.0	NIEG	0.5	Average pool depth of 42 cm. Barrier to
705	67500	4	103P.020	5.50	7.0	NFC	S5	resident species.
707	400-362300-	,	1020 020	(15	<i>(</i> 0	NEC	C.E	Cascade (6 m) in Reach 2 prevents upstream
706	74700	3	103P.030	6.15	6.8	NFC	\$5	fish migration to this reach.
								Barrier (6 x 2 m cascade) prevents upstream
	400-362300-		J					fish migration to this reach. Average pool
707	74700	3	103P.030	5.10	7.5	NFC	S5	depth of 68 cm. Barrier to resident species.
, , , ,	400-362300-	- -		5.10				Cascade (6 m) prevents upstream fish
708	74700	2	103P.020	7.27	5.8	NFC	S5	migration to this reach.
	400-362300-				-			Moderate rearing, spawning and
709	74700	1	103P.020	9.78	4.8	DV	S2	overwintering habitat.
								Limited spawning and rearing habitat. No
720	11005	1	103P.030	0.35	6.8	DV	S4	overwintering habitat present.
721	11006	1	103P.030	0.40	8.0	NFC	S4*	Potential fish access below cutblock.
								No spawning or overwintering habitat. Low
<u>722</u>	11009	1	103P.030	1.12	5.8	DV	S4	rearing potential.
]		1		Madanta annia babita Balanca Carata
777	11000	١.	1020 020	, , ,	4.5	DV.	54	Moderate rearing habitat. Pockets of suitable
723	11008	!	103P.030	1.02	4.5	DV	54	spawning habitat. No overwintering habitat.

6.0 REFERENCES

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APPENDIX I

Reach Cards/Site Cards/Fish Collection Forms and Photographs

(in order of ascending site number)

Reach # ILP Map #

1.0

103P.010

ILP#

	STREAM REFERENCING											
Gazetted Na	ime:				L	ocal Name: Nor	ie					
Watershed Co	ode: 000-000000	-00000-00000-00	00-000-000-000-	000-000-000-0	000		ILP Map #:	103P.010) ILI	P#: 10299		
				RI	EACH							
Reach	n#: 1.0	Uī	M(Zone/East/No	rth): 9.551920	6105588	Sample Ty	/pe: R					
Length (k		Gradient (%		US Elev (m			er: 1		Magnitude:	ı		
Confineme	•	Coupling	: DC	Open wate	er: A	BGC Zor	ne: ICH					
islan	ds: N	Bars: VN	SIDE DU	AG MID	SPAN BF	Riparian Ve	g.: M		Landuse: N	0		
					104-							
Site #: Site Lg (m):		GIS UTM(Zo 9 55192	ne/East/North) 6105339	Date: 2	000/07/24	Agency: 0 Ref. Name:	172		Crew: BW/E	M		
				СН	A (S E S S							
No Vis.Ch.:	Intermittent:			Avg	Min Max	#			Avg % Min % M			
Dw:	Tribs.:		Channel Width Wetted Width		0.800 1.4 0.800 1.4	6			2.25 2 0.28 0.200 0	2 4		
		-	Wb Depth	. ,	0.5 0.8	3	FOOI DE	ptii (iii).	0.28 0.200 0	.400		
Stage: L	M √ H_	Temp (C): 12		pH: 7.2		Cond.: 80		Turb	.: _ T _ N	I □ L ✔ C		
				More	# (*) H(*)(G)Y							
Bed Material:			bdom: NA			Bars: 🗸 N	SIDE	DIAG	MID S	PAN BR		
	D95: 0.01 Pattern: SI		0 (cm): 0.01 slands: N			O1 B1	B2 B3	D1	D2 D3			
	Coupling: PC		ement: OC	D	ISTURBANCE							
	Morph: RP				NDICATORS	C1 C2	C3 C4	C5	S1 S2 S3	S4 S5		
				0.0)//=:							
Total	: A	Ту	pe: SWD I	LWD B	U	DP OV	IV			FSZ:		
(A)		Amor	-	D N	T	N D	N					
		Loc: P/S							CROWN 4	71-90%		
LWD:		DIS		STREAM VEG:	_	M V			,			
RB SHP		Texture: ✓ F		B R		P: D P: D	STG: PS STG: PS					
NID Man	NID Turns	Mat Black-	1 15 1 10		TURES	AL-PL -		11000	(3/F/P)	- /8.8 - AL **		
		Hgt Method 50.0 GE		ethod R:	Photo F:	AirPhot			Zone/East/Nort 545 610466			
Comments:	Barriers observed	from Sedan Cree	ek						- 10 101			
'					IS H							
Site Number	Capture	Number of	Total Length	Total	Voltage	Species	; 7	- Fotal	Minimum	Maximum		
	Method	Events	(m)	Time			1	Fish	Length (mm)	Length (mm)		
1	EF	1	110	230 sec	300	NFC		0				

Reach # ILP Map #

ILP#

Site 1

		PROJI	CT			
Stream Name (gaz.):	Mill Area 1:20K Stream Inver SKEENA RIVER 400-000000-00000-00000-00		-000-000-000	Project Code:		3476
		VANGEK8	S() (=0)			
Gazetted Name:			cal Name: None			
Watershed Code: 000-000000-000	00-0000-0000-0000-000-000		real realite. Trollo			
	10299 NID Map #: 103		D#: 60499	Reach #: 1	.0	Site #: 1
Field UTM(Zone/East/North/N	Method) GIS UTM(Z	one/East/North)	Site Lg: 110	Met	thod: HC	Access: V4
,	9 5519		Ref. Name:			
Date: 2000/07/24 Time: 09:	45 Agency: C172	Crew: BW/	EM	Fish Crd?:	✓	Incomplete:
		CHAN	NEL			
Mtd wid Channel Width (m): MS 1.20 Wetted Width (m): MS 1.2 Pool Depth (m): MS 0.3 Wb Depth: .8	0 1.30 1.10 0.80 20 1.30 1.10 0.80 30 0.40 0.20 0.20	width width width 0.90 1.40 0.90 1.40 0.30 0.30 Method: MS	stage: L	1.12 M 0.28 No	Gadiel lethod I: 2.0 ethod II: 3.0 o Vis.Ch.: In Dw:	nt % Mtd Avg 2.0 AL 2.25 2.0 AL termittent:
Type: SWD LWD Amount: S D Loc: P/S/O:	Total: A B U DF N T N DIST: E	OV IV	CROWN CLO 4 71-9 INSTREAM VI	90%	M V	I
LB SHP: S Texture: F G RIP: D STG: PS	_ C _ В _ R _ /		RB SHP: S Texture: RIP: D STG: P	₽ F □ G □	С В	R 🗌 A
		WAT	F F			
EMS: Temp: 12 pH: 7.2 Flood Signs: NONE	Method: T3 Method: P2 Method: GE	Col		м 🗌 г 🐔 с	Method: S4 Method: GE	
		MORPHO	LOGY			
Bed Material: Dominar D95: 0.01 D (cm Pattern: SI Islands: N Coupling: PC Confinement: QC FSZ	nt: F Subdom: N/n): 0.01 Morph: RI	DISTU	RBANCE C1 Bars: N [B1 B2 B3 C2 C3 C4 SIDE DIAG	D1 D2 D3 C5 S1 S2 MID SF	
		FEATU	g a c			
NID Map NID Type He	gt Method Lg			AirPhoto	UTM (Zone/Fas	st/North/Method)
103P.010 70499 F 50			F: L:	#: 9		5104662 GIS
Comments: Barriers observed for						
1		HABITAT	UALITY			
Name			Comment	9		
	ow value rearing habitat limit	ed by low discharge	- John Hart			
	No overwintering habitat	.,				
	No spawning habitat					
		PHOT	O S			
Photo Foc	La Dir			Comments		

	Watershed Code: 000-00000-00000-00000-0000-0000							00-000-000-000-000	1.0	103P.010	10299	1					
		Pho	oto		F	oc Lg	Dir		Comments								
R:								Upstream photo of a sma	Ill stream with good	overstream cover							
R: 1 F: 2 STD D Downstream photo of abundant LWD																	
	COMMENTS																
			Sec	tion					Comments								
		5	SITE	CARE)	Fish form 3	30470										
CHANNEL NFC downstream barrier prevents upstream fish migration																	
			CHA	NNEL		S6 Stream											

ILP Map #

ILP#

Site

February 12, 2001 Page 2 of 223

Reach #

ILP Map #

ILP#

Watershed Code:

000-000000-00000-00000-0000-0000-000-000-000-000-000

1.0

103P.010

							WAT	ERB	OBY							
Gaze	etted Name	e:								Loca	al: No	one				
Pr	roject Code	e: 400-	000000-0	00000-00000	-0000-0000-	000-0	00-000-0	000-000-	-0							
	WS Code	e: 000-	000000-0	00000-00000	-0000-0000-	000-0	00-000-0	000-000	-000							
Wa	aterbody II	ILP Map #: 103P.010 ILP #: 10299 Reach #: 1 -									1 -					
	Project II				La	ke/Str	eam:	S		Lake Fro	om Date:					
Fis	sh Permit #	t: 25	350K	Date	: 2000/07/2	24	To:	2000/0	7/24	Age	ncy:	C172	Crev	v: BW/E	M Resa	mple:
						S	IITE	/ ME	THO	D						
Site#	NID Map	NIC)# L	JTM:Zone/E	ast/North/M	lthd	MTD/	NO Te	Temp Cond Turbid Comment							
1	103P.010	604	99				EF	_	12	80	С					
						Α.,	GEA	R SE	TTIE	IGS						
Site#	MTD/NO	H/P	Date	In Time	In Date	Out	Time (Out					Comm	ent		
1	EF 1	1	2000/0				09:5	_								
				C.	FLEC	614.0	FISH	ER	SPE	HEI	CAT	IONS				
Site#	MTD	NO	H/P	Encl	Sec		Lnth	W	dth	Volt	tage	Freque	ency	Pulse	Make	Model
1	EF	1	1	0	230		110.0		1.2	30	00	60		6	SMITH ROOT	12B
							ISH	SUM	MAR	Y						
Site#	MTD/	NO	H/P	Species	Stage	Ag	je 1	Total #	Lgth	(Min/M	lax)	FishAct			Comment	
1	EF	1	1	NFC				0								



Site #1, Downstream photo of abundant LWD Roll #1, Frame #2, Date: 2000/07/24



Site #1, Upstream photo of a small stream with good overstream cover Roll #1, Frame #1, Date: 2000/07/24

Reach # ILP Map #

ILP#

2.0

STREAM REFERENCING																
Gazetted Na	ame:									Local	Name: Nor	ne				
Watershed Co	ode: 40	0-330700	-00000	-00000-00	00-0000-000-00	0-000-00	0-000-0	00			1	ILP N	/lap #:		IL	P#:
							Rif	Α 6	11							
Reach	h #:	2.0		UI	M(Zone/East/N	lorth): 9.	541521	.60977	758		Sample Ty	ype:	В			
Length (k	m): 1.50)	Gı	radient (%): 12.07	USI	Elev (m): 366			Ord	er: 3			Magnitude:	5
Confineme)		Coupling			m wate				BGC Zor				Landres 6	
Islan	ds: N		Ва	irs: VN	_SIDEL	IAG		IT E		K F	Riparian Ve	g.:	M		Landuse: N	0
Site #:	2	Г	GI	S LITM/Zo	ne/East/North)		Date: 2				Agency: C	172			Crew: BW/E	M
Site Lg (m):			9	54242			Juic. 2	000/0/	1124	Re	ef. Name:	11/2			Olew. BW/E	141
							(C);	a Ki K	[=]							
No Vis.Ch.:	Inter	mittent:		_		7	Avg	Min	Max	#					Avg % Min % N	lax % #
Dw:		Tribs.:			Channel Widt		2.32	1.8	3	6				ient %:		16 4
				-	Wetted Widt		1.78	1.5	2.200	6		P	ool Dep	tn (m):[0.43 0.200 0	0.600 6
			_	L												
Stage: L ✓	M	н	Ten	np (C): 13			H: 7.1	.00000000			ond.: 80		*************	Turt	o.:	ı □ r ▲ c
		_		_		W)			0 G Y	**********						
Bed Material:	Domina	ant: C)95: 80.00	,		ibdom: B					Bars	:: N	✓ S	IDE	DIAG	MID S	PAN BR
		/95: 60.00 em:Sl	,		0 (cm): 25.00 slands: N					0	1 B1	B 2	В3	D1	D2 D3	
		ing: CO			ement; CO		Di	CTLID	BANCE							
	Mor	rph: CP							TORS	C	1 C2	C3	C4	C5	S1 S2 S3	S4 S5
							0.0	.V# Ξ	R							
Total	: M		Г	Ту	rpe: SWD	LWD	В	T	U	DP	OV	T	IV	1		FSZ:
				Amoi		Т	D	\perp	Т	Т	Т		N	1		
				Loc: P/S	5/0:	V	V	V		V						CLOSURE
LWD	:F			DIS	T: E II	ISTREAM	VI VEG:	N	✓ A		M U				3	41-70%
RB SHP			Textur		_ G _ C		✓ R	_ A		IP: M			G: YF			
LB SHP	: S		Textur	e:	GC	В	√ R	^	R	IP: M		STO	3: YF			
							B ≅/A	#U.;	(Els)							
			Hgt	Method	-3	Method		Phot	_		AirPhot	-			(Zone/East/Nort	
103P.009 7	O512 Photo of	F f a 7 m fal	7.0	GE	0	GE	R: 1	1 F	: 3	L:	#:		9	542	2596 609700	2 GIS
Johnneilts.		. w / III lai														
							***********	(3)	********							
Site Number		oture thod		nber of vents	Total Length (m)		otal ime		Voltage	,	Species	5		tal sh	Minimum Length (mm)	Meximum Length (mm)
2		EF		1	100	141	sec		600		DV		(9	48	111

Reach # ILP Map #

ILP#

Site 2

2.0

			PROU	ECT			
Project Name Stream Name (gaz.) Project Watershed Code	: SKEENA R			-000-000-000	Project Code	:	3476
			WATER	SHED			
Gazetted Name:			L	ocal Name: None			
Watershed Code: 400-330700-0	0000-00000-0	000-0000-000-000-000-	000-000-000				
ILP Map#: ILP	#:	NID Map #: 103P.009	N	ID#: 60512	Reach #:	2.0	Site #: 2
Field UTM(Zone/East/North	n/Method)	GIS UTM(Zone/E	ast/North)	Site Lg: 100	N	Method: HC	Access: V4
	0	9 542421	6097076	Ref. Name:			
Date: 2000/07/24 Time: 1	11:50	Agency: C172	Crew: BW	/EM	Fish Crd?:	\checkmark	Incomplete:
			e HAN	NEL			
Mtd v	vidth width	width width width	width width	width width	width Avg	Gad	ient % Mtd Avg
. ,	20 2.10	3.00 1.80 2.70	2.10		2.32	Method I: 16.0	10.0 AL 12.50
	1.70 1.50 0.30 0.50	1.80 1.70 2.20 0.50 0.60 0.50	0.20	+ + +	0.43	Method II: 11.0	13.0 AL
Pool Depth (m): MS	0.30 0.30	0.50 0.60 0.50	0.20		0.43	No Vis.Ch.:	Intermittent:
Wb Depth: 1.0	.8 .8	Avg: 0.87	Method: MS	Stage: L	/ M H	Dw:	Tribs.:
COVER	Total: M						
Type: SWD LWI	р В	U DP	OV IV	CROWN CL	.OSURE		
Amount: T T	D	ТТ	T N	3 4	1-70%		
Loc: P/S/O:				INSTREAM	VEG: N 🗸 A	M V [
LWD: F	DIST: E			_			
	DIOT. L			RB SHP:			
LB SHP: S Texture: F G	в П с П	B ✓ R ☐ A		Texture:			R A
	,						1 6 1 6
RIP: M STG: YF				RIP: STG:			
			WAT	ER			
EMS:				q#:			
Temp: 13 pH: 7.1		Method: T3 Method: P2	Co	nd.: 80		Method: S	14
Flood Signs: NONE		Method: GE	Ti	ırb.: T	M L V C	Method: G	SE .
			MORPEG	1. O.C.Y			
Bad Madarial Damin		Cubdom B	**************	O1	B1 B2 B3	D1 D2 [03
Bed Material: Domin D95: 80.0 D (c	cm): 25.00	Subdom: B Morph: CP					
	Jiii). 20.00	Worph. Of		JRBANCE CATORS C1	00 00 04	05 04	
Pattern: SI Islands: N				C1	C2 C3 C4	C5 S1 S	S2 S3 S4 S5
Coupling: CO							
Confinement: CO					5		
FSZ				Bars: N	SIDE DIA	G MID	SPAN BR
			E EVANA I	RES			
	Hgt Meth	_		oto	AirPhoto		ast/North/Method)
103P.009 70512 F Comments: Photo of a 7 m fal	7.0 GE	0 GE	R: 1	F: 3 L:	#: 9	542596	6097002 GIS
Comments. Photo of a 7 m fal	iio	***	ABITAT (W: 0 /8 /8 /8 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4			
	т	п	ADIII AII				
Name OverWinter Habitat	Overwinterin	habitat is present in -	nole greater than	Commer	nts		
Rearing Habitat		g habitat is present in p tat is provided by bould		130 011			
Spawning Habitat	_	ue salmonid spawning		y bedrock substrate	es		
			PHOT	os			
Photo Fo	c La	Dir			Comments		

CHANNEL

S3 Stream

Reach # ILP Map #

ILP#

Site

	1	Wate	shed	Code:	400-330	000-000-000-000 2.0	2						
-		Ph	oto		Foo	: Lg	Dir	Comments					
	R: 1 F: 3 STD U Upstream photo of a 7 m falls. Fish were captured upstream.												
	R:												
								COMMENTS					
			Sec	tion				Comments					
	SITE CARD Fish form 30465												
Ī		CHANNEL Resident DV live upstream of the 7 m falls located at the lower end of reach 2.											

Reach #

ILP Map #

ILP#

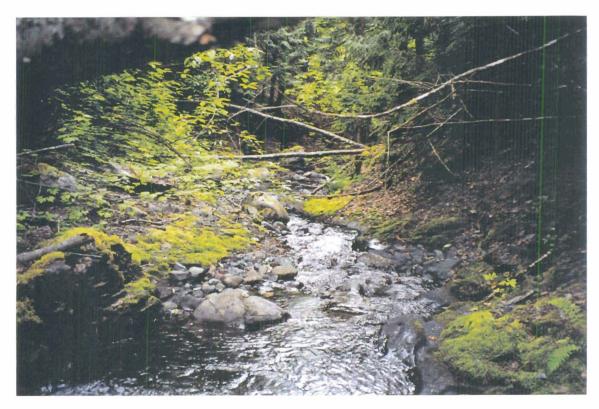
Watershed Code:

2.0

									VY A	W	R B	ODY	•						
Ga	zetted	l Name	:										Loca	al: No	one				
	Proiec	t Code	: 400-	000000-0	0000-000	000-000	0-0000-0	00-00	00-00	0-000-	-000-	-0							
	-			330700-0															
١,		ody ID		000,00	0000 000	,00 000	00000	00 0		Map#		000			ILP	4.		Reach #: 2	-
		ject ID							161	viap n		1	ake/Str	oam.		···	Lake Fro		
		Jeet 15	. 0470										anc/oti	caiii.			Lakerie	om Date.	
1	ish P	ermit #	25	5350K	D	ate: 20	000/07/24	1	To	o: 20	00/0	7/24	Age	ency:	C172	Cre	w: BW/E	M Resam	ple:
								S		1	ME	10 110	D						
Site#	NI	D Map	NIE)# L	JTM:Zone	e/East/N	lorth/Mt	hd	MTI	D/NO	Те	mp	Cond	Turb	id		C	omment	
2	10	3P.009	605	12	T				EF	1	_	13	80	С					
								Α.	G E	a R	SE	TT	NGS						
Site#	M	TD/NO	H/P	Date	In Ti	me In	Date (Out	Time	e Out	T	**********				Com	ment		
2	EF		1 2000/07/24 11:50 2000/07/24 12:10																
C. ELECTROFISHER SPECIFICATIONS																			
Site#		MTD/N	10	H/P	En	cl	Sec	T	Lnth		W	dth	Vol	tage	Frequ	ency	Pulse	Make	Model
2	E	F	1	1	0		141		100.0			1.8	_	00	6	-	6	SMITH	12B
							*****											ROOT	
								F	S	SI		MAR	Y						
Site#		MTD/N	10	H/P	Specie	s St	age	Ag	e	Tota	al#	Lgth	(Min/N	lax)	FishAct			Comment	
2	E	F	1	1	DV	J					9	48	3 1	11	R				
							LA		10			811	27.						
Site#	MTI	D/NO	H/P	Species	Length	Weigh	t Sex	Ma	t	-	Age		Vch#	Ge	netic	Roll#	Frame#	Comn	nent
									1	Str/Sr	npl#/	Age	1	Str/S	Smpl#				
2	EF	1	1	DV	48		U	U											
2	EF	1	1	DV	57		U	U	\top										
2	EF	1	1	DV	110		U	U	\top										
2	EF	1	1	DV	98		U	U											
2	EF	1	1	DV	90		U	U											
2	EF	1	1	DV	87		U	U											
2	EF	1	1	DV	111		U	U											
2	EF	1	1	DV	99		U	U											
2	FF	1	1	DV	100		1.1	1.1	\neg								1		



Site #2, Upstream photo of a 7 m falls. Fish were captured upstream. Roll #1, Frame #3, Date: 2000/07/24



Site #2, Downstream photo of a confined nature of this stream Roll #1, Frame #4, Date: 2000/07/24

Reach # ILP Map #

3.0 103P.020

ILP# 10301

STREAM REFERENCING												
Gazetted Name:		L	ocal Name: Darling Creek									
Watershed Code: 000-000000-0000	00-0000-0000-000-000-000-000	-000-000-000	ILP Map #:	103P.020 ILP#: 10301								
		REACH										
Reach #: 3.0	UTM(Zone/East/North)	: 9.554326.6106917	Sample Type: B									
Length (km): .71		US Elev (m): 379	Order: 2	Magnitude: 2								
Confinement: OC Islands: N B		Open water: A MID SPAN BF	BGC Zone: ICH Riparian Veg.: M	Landuse: FR								
tatation, 14	and green blue	SITE	Topanan veg.	Estimate. Th								
Site #: 3	GIS UTM(Zone/East/North)	Date: 2000/07/24	Agency: C172	Crew: BW/EM								
Site Lg (m): 150 9	554499 6106428		Ref. Name:									
		CHANNEL										
No Vis.Ch.: Intermittent:		Avg Min Max	#	Avg % Min % Max % #								
Dw: Tribs.:	Channel Width (m) Wetted Width (m)		6 Gad 0 Pool Dep	lient %: 3.75 3 4 4 oth (m): 0.10 0.100 0.100 6								
	Wb Depth (m)		3	Str (m): 0.10 0.100 0.100 6								
Stage: L✔ M H Te	emp (C):	pH:	Cond.:	Turb.: T M L C								
		M O REPHOLOGY										
Bed Material: Dominant: F	Subdom: NA		Bars: ✔ N SIDE	DIAG MID SPAN BR								
D95: 0.01	D (cm): 0.01		O1 B1 B2 B3	D1 D2 D3								
Pattern: SI	Islands: N											
Coupling: DC Morph: RP	Confinement: OC	DISTURBANCE INDICATORS										
		INDIONIONS	C1 C2 C3 C4	C5 S1 S2 S3 S4 S5								
		(+(+)\/4=1;										
Total: M	Type: SWD LWE	BU	DP OV IV	FSZ:								
	Amount: T S	N N	N D N									
	Loc: P/S/O:			CROWN CLOSURE								
LWD: F	DIST: E INSTRI	EAM VEG: N 📈 A		3 41-70%								
			P: D STG: MF									
LB SHP: S Textu	ire: 📝 F 🗌 G 🦳 C 🦳	B R A RII	P: D STG: MF									

Reach # ILP Map #

ILP#

Site

3.0

103P.020 10301

		PROJE	CT			
Project Name: Mill Area Stream Name (gaz.): SKEEN Project Watershed Code: 400-000	RIVER		00-000-000	Project Code	e:	3476
		WANTERS	HED.			
Gazetted Name:		Loca	al Name: Darlin	g Creek		
Watershed Code: 000-000000-00000-00000	-000-000-000-000-000					
ILP Map#: 103P.020 ILP #: 10301	NID Map #; 103P.02		#: 60301	Reach #:	3.0	Site #: 3
			Site I =: 450		Method: HC	Access: V4
Field UTM(Zone/East/North/Method)	9 554499	6106428	Site Lg: 150 Ref. Name:		metriod. No	Access. V4
Date: 2000/07/24 Time: 14:30	Agency: C172	Crew: BW/EM		Fish Crd?	: 🗆	Incomplete:
		CHANN	EL			
Mtd width wid	th width width widt	h width width	width width	width Avg	Gad	lient % Mtd Avg
Channel Width (m): T 1.20 1.10	1.10 0.70 0.70	0.80		0.93	Method I: 3.0	4.0 AL 3.75
Wetted Width (m):				0.00	Method II: 4.0	4.0 AL
Pool Depth (m): MS 0.10 0.1	0.10 0.10 0.10	0.10		0.10		
	7		04			Intermittent:
Wb Depth: .1 .1 .1	Avg: 0.10	Method: MS	Stage: L	/ M H	Dw:	Tribs.:
COVER · Total: N						
Type: SWD LWD B	U DP	OV IV	CROWN CL	OSURE		
Amount: T S N	N N	D N	3 4	1-70%		
Loc: P/S/O:	المومامومار		INSTREAM	VEG: N 🗸 A	M V	
	-		4	**		
	5			_		
LB SHP: S			RB SHP:			
Texture: F G C	B R A		Texture:	F G	СПВГ	R A
RIP: D			RIP:	: D		
STG: MF			STG:	: MF		
		WATE	7			
EMS:		Req				
Temp:	Method: T3	Cond			Method: \$	34
pH:	Method: P2					
Flood Signs: NONE	Method: GE	Turb).: [T [M L L C	Method: (3E
		MORPHOL	(8)(6) Y			
Red Material: Deminent: E	Subdom: NA		01	B1 B2 B3	D1 D2	D3
Bed Material: Dominant: F	Subdom: NA				TOTOT	
D95: 0.01 D (cm): 0.01	Morph: RP	DISTUR				
Pattern: SI		INDICA	TORS C1	C2 C3 C4	C5 S1	S2 S3 S4 S5
Islands: N						
Coupling: DC						
Confinement: OC			D [4 44			004N
FSZ			Bars: V N	SIDE DIA	AG MID	SPAN BR
	- 1	ABIII ATE (1				
Name Detection	and the second s	do- A llf	Comme			
	rearing values are limited	due to a lack of poo	ols or stable water	emows		
	ntering habitat available ing habitat available					
Sparring Habitat Into Spawi	a manual available	COMME	Varys:			
Section			Comme	nte		
	vas broken-no photos tak	en	Comme	red .		
	fish located at stream mo		hrosont unitere	177		
	m (Inferred) No fish sam		Progour abougg			
STRUTTEL 30 SUB	THE HEIL AND THE PRINCE	ping conducted.				

Reach # ILP Map #

ILP#

		STRI	A M	REF	REN	OHN(
Gazetted Name: Local Name: None													
Watershed Code: 000-00000	0-00000-00000-0	000-0000-000-000-000-	000-000	-000				ILP Map #:	103P.02	20		ILP#:	10628
				EA6	H								
Reach #: 1.0	ı	ITM(Zone/East/North):	9.5540	24.6106	705	s	ample	Type: R		•••••		•••••	•
Length (km): .50	Gradient (%			(m): 389				rder: 1		Magr	nitude:	1	
Confinement: FC	Couplin			iter: A			BGC Z	one: ICH					
Islands: N	Bars: VN	SIDE DIAG	MID		AN B	R Rip	oarian V	/eg.: M		Lai	nduse:	FR	
Site #: 4		one/East/North)	Date:	2000/0	7/24		gency:			Crew	: BW	/EM	
Site Lg (m): 100	9 5542	24 6106682				Ref.	Name:						
				0/3/5/6	121								
No Vis.Ch.: V Intermittent:			Avg	Min	Max	#	-			_	_	Max %	#
Dw: Tribs.	: 🗌	Channel Width (m): Wetted Width (m):	0.00	0	0	0	1 -		pth (m):	0.00	0	0	0
		Wb Depth (m):	0.00	0	0	0	1 -	100100	pui (iii).	0.00		0	
	T (C):		-11-			-			T	. . \Box			. 🗆 o
Stage: L M H	Temp (C):		pH:	;~~;;~;	************		nd.:		Tur	D.:	Т	М	L C
			W. C.	1261.02	(0)(C)					_			
Bed Material: Dominant: D95:	5	Subdom: D (cm):				Bars:	N	SIDE	DIAG	M	IID	SPAN	BR
Pattern:		Islands:				01	B1	B2 B3	D1	D2	D3		
Coupling:	Confi	nement:		DISTUR	RBANCE								
Morph:					ATORS	C1	C2	C3 C4	C5	S1	S2	S3 S	4 S5
			0	(0)//8=	3								
Total:		Type: SWD LWD	E	3	U	DP	0	V IV					FSZ:
		ount:											
	Loc: P										CRO	WN CLO	SURE
LWD:	DI	ST: INSTRE	AM VE	G: N	Α	N	1 N	V					
RB SHP:	Texture: F			R 🗌 A		RIP:		STG:					
LB SHP:	Texture: F	GCCE	3 🗍 1	R	A R	RIP:		STG:					

Reach # ILP Map #

ILP#

Site

1.0

103P.020

10628

Pro	ject Na	me: Mil	Area 1:	20K Stre	am Inve	entory P	roject						
Stream Na	ame (ga	z.): SK	EENA R	IVER							Project Co	ode:	3476
Project Waters	hed Co	de: 40	0-00000	0-00000-	00000-	0000-00	00-000-0	000-000-	-000-000)-000			
							WA	TER	:XXII = 1				
Gazetted Name:									cal Nam	ne: Non	е		
Watershed Code: 000-													
ILP Map#: 103P.020	IL	_P #: 10	528	NID M	ap #: 10	3P.020		NII	D#: 600	005	Reach #:	1.0	Site #: 4
Field UTM(Zone/E	East/No	rth/Meti	nod)				ast/Nort			Lg: 100)	Method: HC	Access: V4
			į	9	5542	224	61066	582	Ref. N	lame:			
Date: 2000/07/24	Time	: 15:40		Agend	y: C17	2	Crew	BW/	EM		Fish Cr	d?:	Incomplete:
							C	HAN	NEL				
	Mtd	width	width	width	width	width	width	width	width	width	width Avg		Gadient % Mtd Avg
Channel Width (m):											0.00	Method I:	0.00
Wetted Width (m):											0.00	Method II:	
Pool Depth (m):											0.00	No Via Ch	✓ Intermittent:
Wb Depth:				Avg	0.00	N	Method:		St	age: L	M H	Dw:	Tribs.:
COVER		To	tal:										
Type: SWI	L	WD	В	U	D	P	OV	IV	CF	ROWN C	LOSURE		
Amount:													
Loc: P/S/O:									IN	STREAM	VIVEG: N	A _ M _	V
LWD:			DIST:										
LB SHP:										RB SH	P:		
Texture:	F	G	C	В	R	A				Textur	e: F C	G C B	R A
RIP:										RI	P:		
STG:										STO	G:		
								WATI	. R				
EMS:								Red	#:				
Temp:				Method	:			Cor	nd.:			Metho	d:
pH:				Method	:			Tu	rb.:	T	MIL	C Metho	d:
Flood Signs:				Method:									
							MARCH:	12440	L (3) (3)	Y			
Bed Material:	Dor	minant:		Sul	bdom:					0	1 B1 B2	B3 D1 D2	D3
D95:) (cm):			/lorph:			DISTLI	RBANCI				
Pattern:									CATORS		1 C2 C3	C4 C5 S1	S2 S3 S4 S5
Islands:													02 00 07 00
Coupling:													
Confinement:												_	
FSZ									Bars	s:	SIDE	DIAG MID	SPAN BR
						11	ABIT	AT C	UAL	ITY			
Name										Comm	ents		
Other		Nov	risible ch	annel-no	t a stre	am, no				r or alluv	vial substrates, no p	otential fish hab	itat
							0.0	MME	NTS				
Section										Comm	ents		
SITE CARD		Nop	hotos ta	ken cam	era bro	ken							
CHANNEL		NVC	;										

Reach # ILP Map #

ILP#

1.0 103P.010

			S	TREAMR	FERENC	ING				
Gazetted Na	ame:				Lo	cal Name: N	one			
Watershed C	ode: 000-00000	0-00000-00000-00	00-0000-000-000	-000-000-000-00	00		ILP Map #:	103P.01	0 ILI	P#: 10303
				RE	ACH					
Reach	n#: 1.0	UT	M(Zone/East/No	orth): 9.555212.	6105588	Sample	Type: R			
Length (k	m): .60	Gradient (%): 0.67	US Elev (m)	: 170	Oi	der: 1		Magnitude:	1
Confineme		Coupling		Open water	_		one: ICH			
Islan	ds: N	Bars: ✓N	_SIDEDI	AG MID		Riparian \	/eg.: D		Landuse: F	R
				_	ITE					
Site #:			ne/East/North)	Date: 20	00/07/25	Agency:	C172		Crew: BW/El	VI .
Site Lg (m):	300	9 55503	6105588			Ref. Name:				
					NNEL					
No Vis.Ch.:	Intermittent:		Channel Width		Min Max 15 30	6		dient %:	0.00 Min % M	
Dw:	Tribs.:	□	Wetted Width	, ,	15 30	6		epth (m):	2.33 1	3 6
			Wb Depth		1 1	3		()		
Stage: 1	MV H	Temp (C): 18		pH: 7.1		Cond.: 160	1	Turk	э.: П Т П м	LVC
Olage, E		7 cmp (0): 10			10LOGY	OOHa.: To		7011	/ ! N	
Bed Material:	Dominant: G	e,	ıbdom: F	**************************************	***************	ars: 🗸 N	SIDE	DIAG	MID SF	PAN BR
Ded Waterial.	D95: 10.0) (cm): 0.01			ars. V	SIDE	DIAG	MID SI	PAN BR
	Pattern: ST		slands: N			O1 B1	B2 B3	D1	D2 D3	
	Coupling: DC	Confin	ement: UN	DIS	TURBANCE					
	Morph: LC			II	DICATORS	C1 C2	C3 C4	C5	S1 S2 S3	S4 S5
					[
				(0,0)	VIER					
Total	: M	Ту	pe: SWD	LWD B	U	DP O	/ IV			FSZ: 🗸
		Amor		N N	N	D T	_			
		Loc: P/S							CROWN	1-20%
LWD	: N			STREAM VEG:	N A	M 🗸 \	/ 🗸			1-20%
RB SHP			✓ G C	B R [A RIP:		STG: YF			- 1
LB SHP	: S	Texture: F	✓ G C	BR	A RIP:	D	STG: YF			
				f.	SH					
Site Number	Capture	Number of	Total Length	Total	Voltage	Specia	es :	Fotal	Minimum	Maximum
	Method	Events	(m)	Time		1		Fish	Length (mm)	Length (mm)
5	EF	1	70	150 sec	300	NFC		0		
5	MT	2		920 min		NFC		0		
5	MT	2		920 min		СО		4	55	90

Reach #

ILP Map #

ILP#

Site

1.0

103P.010

10303

***************************************		PROJ				
Project Name: Mill Area of Stream Name (gaz.): SKEENA Project Watershed Code: 400-00000	RIVER	0000-000-000-000		Project Code	e:	3476
		WATER	SHED			
Gazetted Name:		Lo	cal Name: None			
Watershed Code: 000-000000-00000-00000-	000-000-000-000-00	0-000-000-000				
ILP Map#: 103P.010 ILP #: 10303	NID Map #: 103P.0		D#: 60502	Reach #:	1.0	Site #: 5
			Sito I at 200		Method: HC	Access: V4
Field UTM(Zone/East/North/Method)	GIS UTM(Zone 9 555038	6105588	Site Lg: 300 Ref. Name:		wiethod. no	ACCESS. V4
	9 555036					
Date: 2000/07/25 Time: 11:20	Agency: C172	Crew: BW/	EM	Fish Crd?	: 🗸	Incomplete:
		CHAN	NEI			
Mtd width width			width width	width Avg		Sadient % Mtd Avg
Channel Width (m): GE 25.00 30.00	20.00 25.00 25.0			23.33		0.0 0.0 AL 0.00
Wetted Width (m): GE 25.00 30.00	20.00 25.00 25.0			23.33	Method II:	0.0 0.0 AL
Pool Depth (m): GE 3.00 3.00	3.00 2.00 2.0	00 1.00		2.33	No Vis.Ch.:	Intermittent:
Wb Depth: 1.0 1.0 1.0	Avg: 1.00	Method: GE	Stage:	MV H	Dw:	Tribs.:
		metriou. OL	otage. L		DW. [Tilba
COVER Total: M						
Type: SWD LWD B	U DP	OV IV	CROWN CL	OSURE		
Amount: N N N	N D	T S	7 1 1	1-20%		
Loc: P/S/O:			INSTREAM	VEG: N A	MV	V
						3
LWD: N DIST: N	A					
LB SHP: S			RB SHP	: S		
Texture: ☐ F ✓ G ☐ C	BRRA		Texture	: F 🗸 G	СПВ	RA
RIP: D			RIP			
STG: YF			STG	: YF		
		WAT	=87			
EMS:						
LIVIO.		Re				
Temp: 18	Method: T3	Re	•		Method	· S4
Temp: 18	Method: T3	Co	nd.: 160		Method	
pH: 7.1	Method: T3 Method: P2 Method: GE	Co	nd.: 160	M □ L 🐼 C	Method Method	
	Method: P2	Co Tu	nd.: 160 rb.:	_м _ г № с		
pH: 7.1	Method: P2	Co	nd.: 160 irb.:		Method	: GE
pH: 7.1	Method: P2	Co Tu	nd.: 160 rb.:	M		
pH: 7.1 Flood Signs: NONE	Method: P2 Method: GE	Co Tu MORPHO	nd.: 160 irb.:		Method	: GE
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G D95: 10.0 D (cm): 0.01	Method: P2 Method: GE	Co Tu M O R P H C DISTU	Ind.: 160	B1 B2 B3	D1 D2	D3
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G D95: 10.0 D (cm): 0.01 Pattern: ST	Method: P2 Method: GE	Co Tu M O R P H C DISTU	nd.: 160 Irb.: T LOGY O1 RBANCE		D1 D2	: GE
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G D95: 10.0 D (cm): 0.01 Pattern: ST Islands: N	Method: P2 Method: GE	Co Tu M O R P H C DISTU	Ind.: 160	B1 B2 B3	D1 D2	D3
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE	Co Tu M O R P H C DISTU	Ind.: 160	B1 B2 B3	D1 D2	D3
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE	Co Tu M O R P H C DISTU	nd.: 160 Irb.: T O1 IRBANCE CATORS C1	B1 B2 B3 C2 C3 C4	D1 D2 C5 S1	D3
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE	Co Tu M O R P H C DISTU	Ind.: 160	B1 B2 B3 C2 C3 C4	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC	Co Tu M O R P H C DISTU	nd.: 160 Irb.: T O1 RBANCE CATORS C1 Bars: V N	B1 B2 B3 C2 C3 C4	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC	MORPHO DISTU	LOGY RBANCE C1 Bars: V N	B1 B2 B3 C2 C3 C4 SIDE DIA	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC	MORPHO DISTU	nd.: 160 Irb.: T O1 RBANCE CATORS C1 Bars: V N	B1 B2 B3 C2 C3 C4 SIDE DIA	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC	MORPHO DISTU	LOGY RBANCE C1 Bars: V N	B1 B2 B3 C2 C3 C4 SIDE DIA	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC	MORPHS DISTUINDE	Bars: V N	B1 B2 B3 C2 C3 C4 SIDE DIA	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC	MORPHS DISTUINDE	Bars: V N DUALITY Comme	B1 B2 B3 C2 C3 C4 SIDE DIA	D1 D2 C5 S1	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC g habitat vintering habitat rearing habitat-deep po	MORPHS DISTUINDE	Bars: V N DUALITY Comme	B1 B2 B3 C2 C3 C4 SIDE DIA	Method D1 D2 C5 S1 AG MID	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC g habitat vintering habitat rearing habitat-deep po	MORPHO DISTLINDIC	Bars: V N Bass from the Skeen	B1 B2 B3 C2 C3 C4 SIDE DIA nts Comments	Method D1 D2 C5 S1 AG MID	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC g habitat intering habitat rearing habitat-deep po	MORPHO DISTL INDIC	Bars: N DBALITY Comme	B1 B2 B3 C2 C3 C4 SIDE DIA This This This This This This This Thi	Method D1 D2 C5 S1 AG MID	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC g habitat vintering habitat rearing habitat-deep po	MORPHO DISTUINDIN HABITAT (DOIS and good acce PHOT Upstream photo of Downstream photo	Bars: N Bars: N Comme Of gravel piled in the oshowing the slo	B1 B2 B3 C2 C3 C4 SIDE DIA nts Comments	Method D1 D2 C5 S1 AG MID	D3 S2 S3 S4 S5
pH: 7.1 Flood Signs: NONE Bed Material: Dominant: G	Method: P2 Method: GE Subdom: F Morph: LC g habitat intering habitat rearing habitat-deep po	MORPHO DISTL INDIC	Bars: N Bars: N Comme Of gravel piled in the oshowing the slo	B1 B2 B3 C2 C3 C4 SIDE DIA This This This This This This This Thi	Method D1 D2 C5 S1 AG MID	D3 S2 S3 S4 S5

ILP# Reach # ILP Map # Site 103P.010 10303 5 1.0 Section Comments SITE CARD Fish form 30467 CHANNEL CO present CHANNEL Slough (Fisheries Sensitive Zone)

February 12, 2001

Reach #

ILP Map

ILP#

Watershed Code:

000-000000-00000-00000-0000-000-000-000-000-000-000

1.0

103P.010

								W	AT		(O.D.)	1						
Ga	zetted	Name	:									Loca	al: N	lone				
	Project	Code	: 400-	000000-0	000-000	000-000	-0000-000)-000-(000-0	000-000	-0							
	WS	Code	: 000-	000000-0	0000-000	000-000	-0000-000)-000-(000-0	000-000	-000							
1	Naterbo	ody ID	:					IL	P Ma	p#: 10	03P.010)		ILP	#: 10	303	Reach #:	1 -
	Proj	ect ID	3476	5							L	ake/Str	eam:	S		Lake Fr	om Date:	
	Fish Pe	rmit #	25	350K	D	ate: 200	00/07/25		To:	2000/0	7/27	Age	ncy:	C172	Cre	w: BW/E	EM Re	sample:
								SII	ΤĒ	/ ME	1866	D						
Site#	NIC	Мар	NIE)# U	TM:Zon	e/East/N	orth/Mtho	ı M	/ITD/N	NO T	emp	Cond	Turl	bid		C	omment	
5		P.010	605					M	/IT	^	18	160	С					
5		P.010	605						\rightarrow	_	18	160	C					
5	_	P.010	605					_	_	_	18	160	С					
5		P.010	605		+	_	_		_	_	18 18	160	0					
5	103	P.010	000	02			A			1 3 S E								
																		
Site#		D/NO	H/P	Date 2000/07		me In 9:30	Date Ou 2000/07/2		17:10	_					Com	ment		
5	MT	1 2	1	2000/07			2000/07/2		17:10									
5	MT	3	1	2000/07	2000/07/2		17:10											
5	MT	4	_	1 2000/07/27 09:30 2000/07/27 17:10 1 2000/07/27 09:30 2000/07/27 17:10														
5																		
						-	N. C. C.			Size	Ø E	68.5		N S				
Site	. 4		B.A	TD/NO.		Н	<u> </u>								Mo	eh	Set	Habitat
5116		A	1T	TD/NO.	1		1	Met	Net Type Length Depth Mesh Set Habit 1.0 BT L									
5				_	2							_					D 1	
														5			BT	
			AT AT	+	3		1			+		-	_	.5			BT BT	L
5	5	N	_	+		-	1 1			+			1	.0				
5	5	N	1T		3		1	O F I	I S H	ER	S P E	CHEL	1	.0	\$		BT	L L
5	5	N N	MT MT	H/P	3 4	1:11	ECTR		***************************************	***************************************	***********	***************************************	1 1 G A 1	.0 .0		Pulse	BT BT	L
5	5	N MTD/N	MT MT	H/P	3	CI CI	1	Lnt	***************************************	W	S P E	***************************************	1 C A I	.0	ency	Pulse 6	BT	L L L
Site#	5	N MTD/N	IT IT		3 4 (En	CI CI	ECTR	Lnt 70	th).0	W 2	dth 20.0	Volt 30	1 C A I	.0 .0 I O N :	ency		BT BT Make	L L L Model
5 5 Site# 5	EF	MTD/N	fT fT IO 1	1	3 4 (En	CI CI	ECTR	Lnt 70	th).0	W	dth 20.0	Volt 30	1 C A I	.0 .0 I O N :	ency		BT BT Make	L L L Model
Site#	EF	MTD/N	IT III III III III III III III III III	1 H/P	3 4 En	CI CI	ECTR	Lnt 70	th 0.0	S U M	dth 20.0 M A R	Volt 30	1 C A I	.0 .0 I O N :	o 0		BT BT Make	L L L Model
Site# 5	EF	MTD/N	10 10 10 4	1 H/P	3 4 En O	CI CI	ECTR	Lnt 70 F I S	th 0.0	S U M otal #	dth 20.0 M A R	Volt 30	1 C A I	.0 .0 Frequ	o 0		BT BT Make SMITH ROOT	L L L Model
Site# 5 5	EF MT	MTD/N	10 10 10 4 3	1 H/P 1	Specie NFC	S Sta	ECTR	Lnt 70 F I S	th 0.0	S U M otal #	dth 20.0 M A R	Volt 30	1 1 C A 3 Rage DO	.0 .0 FION: Frequ	o 0		BT BT Make SMITH ROOT	L L L Model
Site# 5 Site# 5 5	EF MT MT MT	MTD/N	10 1 1 3 2	1 H/P 1 1	Specie NFC NFC	s Sta	ECTR	Lnt 70 F I S	th 0.0	SUM otal#	MAR Lgth	Volt	1 1 1 C. A 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.0 .0 Frequence 6	o 0		BT BT Make SMITH ROOT	L L L Model
Site# 5 Site# 5 Site# 5 5 5 5	EF MT MT MT MT	MTD/N	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 H/P 1 1 1 1 1 1	Specie NFC CO CO	S Sta	ECTR	Lnt 70 F I S	th 0.0	0 0 1 3	dth 20.0 M A R	Volt	1 1 2 A 3 2 age 200	.0 .0 FION: Frequ	o 0		BT BT Make SMITH ROOT	L L L Model
Site# 5 Site# 5 5	EF MT MT MT	MTD/N	10 1 1 3 2	1 H/P 1 1	Specie NFC NFC	s Sta	Sec 150	Ent 70 F I S Age	th 0.0	W 22 S U M 0 O 1 3	MAR Lgth	Volt 30 (Min/M	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.0 .0 Frequence 6	o 0		BT BT Make SMITH ROOT	L L L Model
Site# 5 Site# 5 Site# 5 Site# 5 Site# 5 Site# 5	EF MT MT MT EF	MTD/N	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 H/P 1 1 1 1 1 1 1 1 1	Specie NFC CO NFC	E L	I I I I I I I I I I I I I I I I I I I	Ent 70 FIS Age	th 0.0	W 22 S LJ M O O O O O O O O O	MAR Lgth	Volti	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.0 .0 Frequ Frequ 6	iency 0	6	BT BT Make SMITH ROOT	L L L Model 12B
Site# 5 Site# 5 Site# 5 5 5 5	EF MT MT MT MT	MTD/N	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 H/P 1 1 1 1 1 1	Specie NFC CO NFC	s Sta	I I I I I I I I I I I I I I I I I I I	Ent 70 F I S Age	th 0.0	S U M Otal # O 1 3 O L F Age	MAR Lgth	Volt 30 (Min/M	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.0 .0 Frequence 6 .0 .0 FrishAct	o 0		BT BT Make SMITH ROOT	L L L Model
Site# 5 Site# 5 Site# 5 Site#	EF MT MT MT MT MT MT MT MT MT M	MTD/N	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	H/P 1 1 1 1 1 1 Species	Specie NFC NFC CO NFC Length	E L	Sec 150 IND	Ent 70 FIS Age	th 0.0	W 22 S LJ M O O O O O O O O O	MAR Lgth	Volti	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.0 .0 Frequ Frequ 6	iency 0	6	BT BT Make SMITH ROOT	L L L Model 12B
Site# 5 Site# 5 Site# 5 Site# 5 Site# 5 Site# 5	EF MT MT MT EF	MTD/N	100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 H/P 1 1 1 1 1 1 1 1 1	Specie NFC CO NFC	E L	Sec 150 IND Sex U	Ent 70 FIS Age	th 0.0	S U M Otal # O 1 3 O L F Age	MAR Lgth	Volti	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.0 .0 Frequence 6 .0 .0 FrishAct	iency 0	6	BT BT Make SMITH ROOT	L L L Model 12B
Site# 5 Site# 5 Site# 5 5 5 5 5 Site#	EF MT MT MT MT MT MT MT MT MT M	MMTD/NO	100 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	H/P 1 1 1 1 1 1 1 Species	Specie NFC NFC CO NFC Length	E L	Sec 150 IND Sex U U U	Lnt 70 FIS Age	th 0.0	S U M Otal # O 1 3 O L F Age	MAR Lgth	Volti	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.0 .0 Frequence 6 .0 .0 FrishAct	iency 0	6	BT BT Make SMITH ROOT	L L L Model 12B



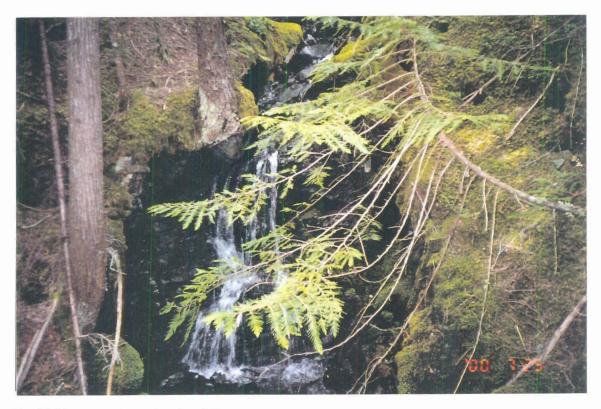
Site #5, Downstream photo showing the slough off of the Skeena mainstem Roll #2, Frame #2, Date: 2000/07/25



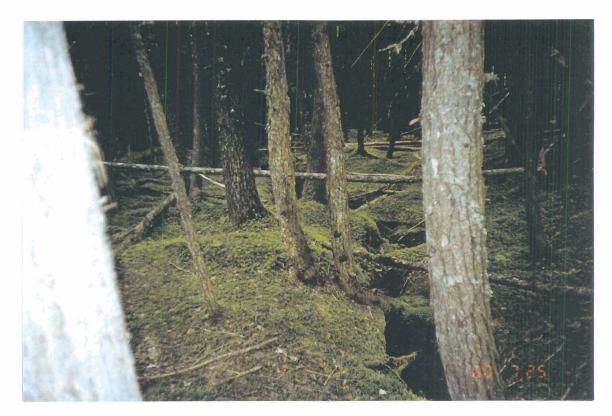
Site #5, Upstream photo of gravel piled in the channel from machinery Roll #2, Frame #1, Date: 2000/07/25



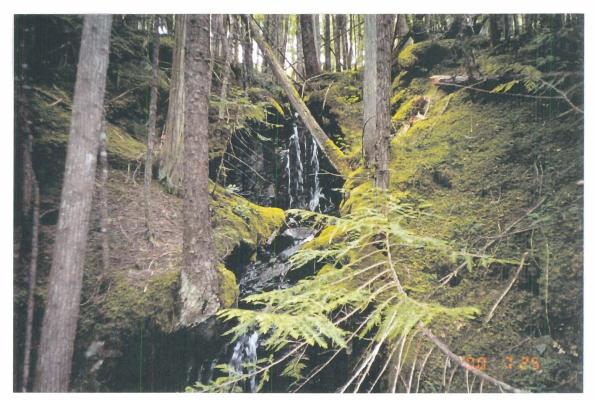
Site #6, Upstream photo of a narrow channel Roll #2, Frame #3, Date: 2000/07/25



Site #6, Upstream photo of a 12 m falls Roll #2, Frame #6, Date: 2000/07/25



Site #6, Downstream photo showing sections of underground flow Roll #2, Frame #4, Date: 2000/07/25



Site #6, Upstream photo of a 12 m falls Roll #2, Frame #5, Date: 2000/07/25

Reach # ILP Map # ILP #

			83	REAM	(d≅ia	F171F1X	OHN	G				
Gazetted Na	me:						Local N	lame: None				
Watershed Co	de: 000-000000	-00000-00000-00	00-0000-000-000-	000-000-00	0-000			ILP N	Map #: 10	031.098	ILI	P#: 10810
					REA	911						
Reach	#: 1.0	U1	「M(Zone/East/No	rth): 9.536	727.6090	0513		Sample Type:	R	•••••		
Length (kr		Gradient (%	,	US Elev				Order: 1			Magnitude:	.
Confineme	*	Coupling	•		ater: A			BGC Zone:				
Island	is: N	Bars: VN	SIDE DIA	AG MII	SF	PAN B	R Ri	parian Veg.:	С		Landuse: Fi	R
						E						
Site #: 6			ne/East/North)	Date	: 2000/0	07/25		Agency: C172			Crew: BW/E	VI
Site Lg (m): 1	00 [9 53786	1 6090724		************************	***************************************	Ref	. Name:	***************************************			
	1 .				HAN		T	_				
No Vis.Ch.:	Intermittent:		Channel Width	(m): 0.77		Max 1	#	-	Gadie		lvg % Min % M 19.50 15	30 4
Dw:	Tribs.:		Wetted Width		_	1	6	P	ool Depth			0.100 6
			Wb Depth	(m): 0.43	0.4	0.5	3					
Stage: L	M✔ H	Temp (C): 9		pH:	7.2		Co	ond.: 90		Turb	.:	I 🗌 L 🗸 C
				M O I	12110	1 (0) (1)						
Bed Material:	Dominant: G	S	ubdom: C				Bars:	VN S	SIDE _	DIAG	MID SI	PAN BR
	D95: 30.0		D (cm): 5.00				01	B1 B2	В3	D1	D2 D3	
	Pattern: SI Coupling: PC		slands: N ement: FC		DIOTIL	DDANOE			T			
	Morph: CP					RBANCE CATORS	C1	C2 C3	C4	C5	S1 S2 S3	S4 S5
					0 0 1/1	17						
Total:	A	T	/pe: SWD I	LWD	В	U	DP	OV	IV			FSZ:
		Amo		S	T	D	N	T	N			
		Loc: P/S									CROWN 3	I CLOSURE 41-70%
LWD:				STREAM VI		✓ A		и 🗌 v 🗌				411070
RB SHP: LB SHP:		Texture: ✓ F Texture: ✓ F	h				RIP: C	1-1	G: YF G: YF			
LD SHF.		rexture.							G, 11			
					ATU							
	NID Type	Hgt Method	-	GE R:	Pho 2	oto F: 6	L:	AirPhoto #:	9	-	Zone/East/Nort	
	Roll 2 Frame 7 a		1 0 1	GE IK:		1. 0	1	#.	9	238	120 009008	U GIS
Cita Nove ba	0	Month	Total I		FIS	******		Sanai		-1	B.B.im.in	Bilancia
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time		Voltage	*	Species	Tota Fisa		Minimum Length (mm)	Maximum Length (mm)
6	EF	1	70	150 se	С	300		NFC	0			

Reach #

ILP Map#

ILP#

Site 6

1.0

1031.098

PROJECT												
Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Project Watershed Code: 400-00000-0000-0000-0000-0000-000-000-0												
WATERSHED												
Gazetted Name: Local Name: None												
Watershed Code: 000-00000-00000-00000-0000-0000-000-00												
ILP Map#: 103I.098 ILP #: 10810 NID Map #: 103I.098 NID #: 23099 Reach #: 1.0 Site #: 6												
Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: V4	4											
9 537861 6090724 Ref. Name:												
Date: 2000/07/25												
CHANNEL												
Mtd width width width width width width width width width Avg Gadient % Mtd	Avg											
	9.50											
Wetted Width (m): T 0.80 0.70 0.70 0.90 1.00 0.50 0.77 Method II: 17.0 16.0 AL												
Pool Depth (m): MS 0.10 0.05 0.10 0.05 0.05 0.05 0.08												
Wb Depth: .4												
COVER Total: A												
Type: SWD LWD B U DP OV IV CROWN CLOSURE												
Amount: T S T D N T N 3 41-70%												
Loc: P/S/O: A M V												
LWD: F DIST: E												
LB SHP: O												
Texture: ✓ F G C B R A Texture: ✓ F G C B R A												
RIP: C RIP: C												
STG: YF												
WATER												
EMS: Req #:												
Temp: 9 Method: T3 Cond.: 90 Method: S4												
pH: 7.2 Method: P2 Turb.: ☐ T ☐ M ☐ L ✔ C Method: GE Flood Signs: NONE Method: GE												
MORPHOLOGY												
Bed Material: Dominant: G Subdom: C O1 B1 B2 B3 D1 D2 D3												
D95: 30.0 D (cm): 5.00 Morph: CP DISTURBANCE												
Pattern: SI INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4	S5											
Islands: N												
Coupling: PC												
Confinement: FC												
FSZ												
FEATURES												
NID Map NID Type Hgt Method Lg Method Photo AirPhoto UTM (Zone/East/North/Method												
103I.098 71099 F 12.0 GE 0 GE R: 2 F: 6 L: #: 9 538150 6090680 C Comments: Roll 2 Frame 7 as well	GIS											
The state of the s												
HABITAT QUALITY												
HABITAT QUALITY Name Comments												
Name Comments Other No fisheries values available. No perennial habitat available for overwintering. No access througout reach. Pool depth is 0.10 m a	at most											
Name Comments	at most											
Name Comments Other No fisheries values available. No perennial habitat available for overwintering. No access througout reach. Pool depth is 0.10 m a	at most											

Reach # ILP Map #

ILP#

Site

1.0

1031.098

10810

							PHOTOS								
Photo Foc Lg Dir					: Lg	Dir	Comments								
R:	2	F:	4	ST	D	D	Downstream photo showing sections of underground flow								
R:	2	F:	5	ST	D	U Upstream photo of a 12 m falls									
R:	2	F:	6	ST	STD U Upstream photo of a 12 m falls										
	COMMENTS														
Section Commer						Comments									
SITE CARD Fish form 30468						30468									
CHANNEL No fish present upstream of the 12						sent upstream of the 1	2 m falls								
	CHANNEL S6 Stream														

FDIS Fish Form

Reach #

ILP Map#

ILP#

Watershed Code:

000-00000-00000-00000-0000-0000-000-000-000-000-000

1.0

1031.098

							WAT	E R E	(O) (D)	Y							
Gaz	etted Nam	e:								Loca	al: No	one					
Pr	roject Cod	e: 400-	400-000000-00000-00000-0000-0000-000-00														
	WS Cod	e: 000-	000-00000-00000-0000-0000-0000-000-000-000-000-000														
Wa	aterbody II Project II		ILP Map #: 103I.098										1 -				
Fish Permit #: 25350K Date: 2000/07/25 To: 2000/07/25 Agency: C172 Crew: BW/EM Resample:																	
SITE / METHOD																	
Site#	NID Map	NIC)# U1	ithd	MTD/N	IO T	emp	Cond	Turb	id	d Con						
6	1031.098	230	99				EF 1 8.5			90	С						
						Α.	GEAF	(S)	TI	NGS							
Site#	MTD/NC	H/P	Date Ir	Time	In Date	Out	Time C	Out				(Comme	nt			
6	EF 1	1	2000/07/			_	13:50										
				C.	ELEC	0.00	FISH	E (*)	SPE	CIFI	C A I	IONS					
Site#	MTD	/NO	H/P	Encl	Sec		Lnth	V	/dth	Voltage		Frequen	су	ulse	Make	Model	
6	EF	1	1	0	150		70.0		0.7	300		60		6 S		12B	
							ISH	SUM	M A	: Y							
Site#	MTD	NO	H/P	Species	Stage	Ag	e T	otal #	Lgth	(Min/M	ax)	FishAct			Comment		
6	EF	1	1	NFC				0									

Reach # ILP Map #

ILP#

1.0 1031.099

STREAM REFERENCING													
Gazetted Name: None													
Watershed Code: 000-00000	0-00000-00000-0	000-000-000-000-0			ILP#:	10893							
	REACH												
Reach #: 1.0	Reach #: 1.0 UTM(Zone/East/North): 9.540425.6094575 Sample Type: R												
Length (km): .95	Gradient (%	%): 10.21	US Elev	(m): 260)		Ord	er: 1		Magnitud	de: 1		
Confinement: OC	Couplin		-	ater: A	_		BGC Zor	ne: ICH					
Islands: N	Bars: ✓N	SIDE DIA	G MID	SP	ANE	BR Rip	arian Ve	g.: M		Landu	se: FR		
SITE													
Site #: 7		one/East/North)	Date	2000/0	7/25	A	gency: C	172		Crew:	BW/EM		
Site Lg (m): 100	Lg (m): 100 9 540944 6094061 Ref. Name:												
			C	HANN									
No Vis.Ch.: ✓ Intermittent:			Avg	Min	Max	#	_			Avg % Mir			
Dw: Tribs.:		Channel Width (0	0	0			dient %:	0.00		0	
		Wetted Width (-	0	0	0	L	Pool De	ptn (m):	0.00	0	0	
		via a opini (i	,				I						
Stage: L M H	Temp (C):	emp (C): pH: Cond.: Turb.: T										L C	
			MOR	12110	(O)								
Bed Material: Dominant:	S	Subdom:				Bars:	N	SIDE	DIAG	MID	SPAN	BR	
D95: Pattern:		D (cm): Islands:				01	B1	B2 B3	D1	D2 D3			
Coupling:		nement:											
Morph:				DISTURBANCE			C2	C3 C4	C5	S1 S2	S3 S	4 S5	
						C1		C3 C4		31 32	33 3	35	
) (0) V/E	7								
Total:	Т Т	ype: SWD L		В	U	DP	Ιον	l IV	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			FSZ:	
i otali.		ount:				Di	100	- 10	\dashv			F32	
	Loc: P/							CROWN CLOSUF			SURE		
LWD: DIST: INSTREAM VEG: N A M V													
RB SHP:	Texture: F	GCC	В	R	A F	RIP:		STG:					
LB SHP:	Texture: F	GC	В	R	A F	RIP:		STG:					

Reach # ILP Map #

ILP#

Site

10893 1.0 1031.099

	PROJECT															
Stream N	Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Project Watershed Code: 400-00000-0000-0000-0000-000-000-000-00															
							WA	TER:) (ED)							
Gazetted Name:								Lo	cal Nam	e: None	9					
Watershed Code: 000	-000000	-00000-	0-0000	000-000	0-000-00	0-000-0	00-000-	000								
ILP Map#: 1031.099	IL	_P #: 108	393	NID M	ap #: 10	31.099		NIC	#: 230	61	Rea	ach #:	1.0	Site	#: 7	
Field UTM(Zone/l	East/No	rth/Meth	nod)	GIS	S UTM(Z	one/Ea	st/North	1)	Site	Lg: 100			Method: HC		Access:	V4
Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: V4 9 540944 6094061 Ref. Name:																
Date: 2000/07/25	Time	: 16:10		Agend	:y: C1/2		Crew:	BVV/E	IVI			FISH C	crd?:	inc	omplete	e:
							C	HANI	VEL.							
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg	Γ	Gadient %	Mtd	Avg
Channel Width (m):												0.00	Method I:			0.00
Wetted Width (m):												0.00	Method II:			
Pool Depth (m):												0.00				_
										. /				✓ Intermi		
Wb Depth:				Avg	: 0.00	M	ethod:		Sta	age: L	M	H	Dw:		ribs.:	
COVER		Tot	al:													
Type: SWI	D L	WD	В	U	DF		ov	IV	CR	OWN C	LOSURE					
Amount:									7							
Loc: P/S/O:									INS	TREAM	VEG:	N	A _ M _	V		
LWD:			IST:						_							
LB SHP:										DD CUD						
Texture:		6	•	p 🗆	D .	Α.				RB SHP		_				
	F	G	C	В	R	A				Texture		F	G C B	R	A	
RIP:										RIP						
STG:										STG						
							Y	VATE	i i							
EMS:								Req	#:	*****						
Temp:				Method				Con					Metho	d:		
pH:				Method	:			Tur	h ·	Т	M	L	C Metho	d.		
Flood Signs:				Method				141) Wetho	u.		
							MOR	PHO	E(8)(8)	7						
Bed Material:	Den	ninant:		C	odom:					01	B1	B2	B3 D1 D2	D3		
D95:					Norph:											
	L) (cm):		N	noipii.				RBANCE							
Pattern:								INDIC	ATORS	C1	C2	C3	C4 C5 S1	S2 S	3 S4	S5
Islands:																
Coupling:																
Confinement:									Bars:	N	SI	DE 🗍	DIAG MID	SPAN	BR	
FSZ									Dai o.		011		DIAG MID			
						11/	(BIIT	AT @	UALI	ΤY						
Name	Name Comments															
Other		No vi	sible ch	annel-no	t a strea	m. No	evidence	of surfa				trates. N	lo potential fish ha	abitat		
								MME								
Section									·	Comme	nts					
SITE CARD		No n	hotos ta	ken												
CHANNEL		NVC		NOTI												
CHAINNEL		INVC														

Reach # ILP Map #

ILP#

	STREAM REFERENCING											
Gazetted Na	me: INSECT CR	REEK				Loca	I Name: Insect C	reek				
Watershed Co	ode: 400-324400	-00000-00000-00	00-000-000-000	-000-000-000-0	00		ILP	Map #:	IL	P#:		
				RI	ACH							
Reach	1.0	U.	TM(Zone/East/No	orth): 9.541287	6093665		Sample Type:	R				
Length (k	m): .24	Gradient (%		US Elev (m			Order:		Magnitude: 3	33		
Confineme		Coupling	g: DC	Open wate			BGC Zone:					
Islan	ds: N	Bars: N	✓SIDE DI	AG MID		BR	Riparian Veg.:	М	Landuse: N	10		
	_			8	ITE							
Site #: 8			ne/East/North)		000/07/25		Agency: C172		Crew: BW/E	М		
Site Lg (m):	150	9 54135	5 6093648			R	Ref. Name:					
	7				ANNEL		_	-				
No Vis.Ch.:	Intermittent:		Channel Width	Avg (m): 45.00	Min Ma: 20 80	(#	_		Avg % Min % N			
Dw:	Tribs.:	□	Wetted Width		12 20	6		Gadient %: Pool Depth (m):	0.75 0 1.33 1	1 4		
		ŀ	Wb Depth	' '	2 3	3		ooi beptii (iii).	1.00	2 0		
Phone: 1 4	МП	Tamp (C): 11		-U. 7.0			G	w				
Stage: LV	Stage: L ☑ M ☐ H ☐ Temp (C): 11 pH: 7.2 Cond.: 20 Turb.: ☐ T ☐ M ☑ L ☐ C											
				MORE	HOLOG							
Bed Material:	Dominant: C D95: 100.0		ubdom: B			Bar	rs: N 🗸	SIDE DIAG	MID S	PAN BR		
	Pattern: IR		D (cm): 100.00 slands: O			(O1 B1 B2	B3 D1	D2 D3			
	Coupling: CO		ement: FC			_ [
	Morph: RP	-			STURBANC NDICATORS		C1 C2 C3	C4 C5	S1 S2 S3	04 05		
						- (01 02 03	C4 C5	S1 S2 S3	S S4 S5		
					Maria P					11111		
Total:	A	Т	/pe: SWD	LWD B	U	Пр	P OV I	IV		FSZ:		
7.41411		Amo	.,	T D	N	S		N		F32.		
		Loc: P/S	5/0:			V			CROW	N CLOSURE		
LWD:	F	DIS	T: C INS	STREAM VEG:	N V	A 🔲	MUV		0	0%		
RB SHP:	v .	Texture: F	G V C	BR	A	RIP: N	1 ST	G: YF				
LB SHP:	٧ .	Texture: F	✓ G C	B R	Α	RIP: N	st st	G: YF				
				000000000000000000000000000000000000000	Si							
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Volta	ge	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)		
8	EF	1	80	420 sec	300		CO	4	38	Lengar (mm)		
8	EF	1	80	420 sec	300	\neg	CH	5	32	49		

Reach # ILP Map #

ILP#

Site

1.0 8 PROJECT Project Name: Mill Area 1:20K Stream Inventory Project 3476 Stream Name (gaz.): SKEENA RIVER **Project Code:** Water at the second **Gazetted Name: INSECT CREEK** Local Name: Insect Creek NID #: 61058 Site #: 8 Reach #: 1.0 ILP Map#: ILP#: NID Map #: 1031.099 Method: HC Access: V4 GIS UTM(Zone/East/North) Site Lg: 150 Field UTM(Zone/East/North/Method) 541355 6093648 Ref. Name: Crew: BW/EM Fish Crd?: V Incomplete: Agency: C172 Date: 2000/07/25 Time: 17:00 CHANNEL width | width | width | width | width | width | width | width | width | width | Avg **Gadient %** Mtd Avg Mtd 50.00 20.00 45.00 0.0 1.0 AL 0.75 Method I: 70.00 30.00 20.00 Channel Width (m): GE 80.00 Wetted Width (m): GE 15.00 12.00 15.00 15.00 20.00 15.00 15.33 Method II: 1.0 AL Pool Depth (m): GE 1.00 1.00 2.00 1.50 1.50 1.00 1.33 No Vis.Ch.: Intermittent: Stage: L V M H 3.0 2.0 2.0 Avg: 2.33 Method: GE Dw: Tribs.: Wb Depth: COVER Total: A **CROWN CLOSURE** DP OV IV Type: SWD LWD B H N N N S Amount Loc: P/S/O: INSTREAM VEG: N 🗸 A 🗌 M 🗍 V 📗 **V V** LWD: F DIST: C RB SHP: V LB SHP: V Texture: ☐ F ☐ G ✓ C ☐ B ☐ R ☐ A Texture: F G C B R A RIP: M RIP: M STG: YF STG: YF WATER Reg #: FMS: Method: T3 Cond.: 20 Method: S4 Temp: 11 Method: P2 pH: 7.2 Turb.: T M V L C Method: GE Flood Signs: DEBRIS JAMS Method: GE MORPHOLOGY 01 B1 B2 **B**3 D1 D2 D3 Subdom: B Dominant: C D95: 100.0 D (cm): 100.00 Morph: RP DISTURBANCE **INDICATORS** Pattern: IR C1 C2 C3 C4 C5 51 **S2 S3** 54 \$5 Islands: O Coupling: CO Confinement: FC □ N 🗸 SIDE □ DIAG □ MID □ SPAN **FSZ** NAMES OF STREET Comments Fair spawning values are limited by high velocity riffles Spawning Habitat Rearing Habitat Fair salmonid rearing habitat Photo Foc Lg Dir Comments F STD D Downstream photo of a confined section of stream F STD Upstream photo of a wide floodplain R: 8 9 R: 2 F: STD U Upstream photo of clumped woody debris COMMENTS

Comments

Section

February 12, 2001

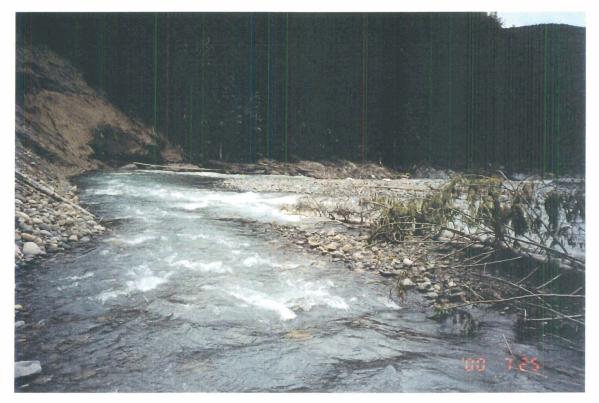
Page 115 of 223



Site #8, Upstream photo of a wide floodplain Roll #2, Frame #8, Date: 2000/07/25



Site #8, Upstream photo of clumped woody debris Roll #2, Frame #9, Date: 2000/07/25



Site #8, Downstream photo of a confined section of stream Roll #2, Frame #7, Date: 2000/07/25

Reach # ILP Map # ILP #

	STR	≅/AU/	(iii)	REN	CING	1			
Gazetted Name:				L	ocal Na	ame: None			
Watershed Code: 000-000000	-00000-00000-0000-000-000-000	-000-000-	-000			ILP Map #:	103P.009	ILP#:	10236
		į.	E/A(6)	H					
Reach #: 1.0	UTM(Zone/East/North)	: 9.54183	8.60969	80	Sa	ample Type: B		***************************************	
Length (km): .88		US Elev (Order: 2	Magnitude	. 2	
Confinement: CO	, ,	Open wa			1	BGC Zone: ICH		-	
Islands: N	Bars: N SIDE DIAG	arian Veg.: M	Landuse	FR					
			SINE						
Site #: 9	GIS UTM(Zone/East/North)	Date:	2000/07	//25		gency: C172	Crew: B\	V/EM	
Site Lg (m): 100	9 542173 6096902				Ref.	Name:			
	_	(0)	ZA KUK	EL					
No Vis.Ch.: ✓ Intermittent:		Avg	Min	Max	#		Avg % Min 9		
Dw: Tribs.:	Channel Width (m) Wetted Width (m)		0	0	0	Gad Pool Dep	th (m): 0.00 0	0	0
	Wb Depth (m)		0	0	0	Poor Dep	oti (iii). 0.00 0		
	T (0):	-11			0		Title . T T	7 M	
Stage: L M H	Temp (C):	pH:	~~~~~~~~~~	000-000-0000	Cor	10.:	Turb.: T	_ M	L C
B-4M-4-4-1- B1	0.14	iù • kt		****		ON ODE	DIAC DAID D	T open	
Bed Material: Dominant:	Subdom: D (cm):				Bars:	N SIDE	DIAG MID	SPAN	BR
Pattern:	Islands:				01	B1 B2 B3	D1 D2 D3		
Coupling:	Confinement:	1	DISTUR	BANCE					
Morph:		•	INDICA		C1	C2 C3 C4	C5 S1 S2	S3 S	4 S5
		0	(),'/J=3						
Total:	Type: SWD LWI) B		U	DP	OV IV			FSZ:
	Amount:								
	Loc: P/S/O:						CRO	OWN CLC	SURE
LWD:	DIST: INSTR	EAM VEG	6: N	A	M	V 🗌			
RB SHP:	Texture: F G C	B F			P:	STG:			
LB SHP:	Texture: F G C	В	? A	RI	IP:	STG:			

Reach # ILP Map #

ILP#

Site 9

1.0

103P.009

		128.02	A = 3.00 A			
Project Name	: Mill Area 1:20K Stream	Inventory Project				
Stream Name (gaz.)		,		Project Co	de:	3476
Project Watershed Code		000-0000-0000-000-000	0-000-000-000			
110,000 110,0000						
		WATE	(SHED)			
Gazetted Name:			Local Name: None			
Watershed Code: 000-000000-00	0000-0000-0000-0000-00	00-000-000-000-000				
			NID #: 60506	Reach #:	1.0	Site #: 9
Field UTM(Zone/East/North		TM(Zone/East/North)	Site Lg: 100		Method: HC	Access: V4
Field OTM(2016/East/North	2 1 2	542173 6096902	Ref. Name:		Wethou. NO	Access. V4
<u> </u>			ACCORDING TOWN SHOP TOOLS	197		
Date: 2000/07/25 Time: 1	8:20 Agency:	C172 Crew: BV	V/EM	Fish Cro	17:	Incomplete:
		CHA	VINEL			
Mtd w	vidth width width wi	idth width width wid		width Avg	Г	Gadient % Mtd Avg
Channel Width (m):	viatri wiatri wiatri wi	idth Width Width Wid	in width width	0.00	Method I:	0.00
Wetted Width (m):				0.00	Method II:	0.00
Pool Depth (m):			+ + +	0.00		
i soi septii (iii)i					No Vis.Ch.:	✓ Intermittent:
Wb Depth:	Avg: (0.00 Method:	Stage: L	M H	Dw:	Tribs.:
COVER	Total:					
			CROWN CL	OSUBE		
Type: SWD LWI	D B U	DP OV IV	CROWN CL	OSURE		
Amount:				V== N		v 🗆
Luc. P/3/0.			INSTREAM	VEG: N A	A M	v
LWD:	DIST:					
LB SHP:			RB SHP:			
	C B R	□ A	Texture:		□с□в	RA
		^				
RIP:			RIP:			
STG:			STG:	:		
		WA	ER			
EMS:		F	leq #:			
Temp:	Method:	C	ond.:		Method	d:
pH:	Method:		Turb.:	MIL	C Method	4.
Flood Signs:	Method:		Idib	_ IM L	o Welliot	4.
		MORPH	OLOGY			
D-IM-t-i-l Di-			01	B1 B2 B	3 D1 D2	D3
Bed Material: Domin						
D95. D (0	cm): Mor	חוסום	URBANCE			
Pattern:		INL	C1	C2 C3 C	4 C5 S1	S2 S3 S4 S5
Islands:						
Coupling:						
Confinement:			Bars: N	SIDE	DIAG MID	SPAN BR
FSZ						
		HABITAT	G I S /A S I S I Y			
Name			Comme	nts		
Other	No visible channel. Not	a stream. No potential fish		1110		
	1464	PHO				
Dhoto -	ala =-			0	4	
	c Lg Dir		a with no visible cha	Commen	ıs	
	TD II		A AAUTH THO AIRIDIE CUIST	mist.		
	TD U					
	rD U	COMM	ENTS			
Section						
Section SITE CARD	No photos taken		ENTS			
Section			ENTS			



Site #9, Photo of an area with no visible channel. Roll #2, Frame #10, Date: 2000/07/25

Reach # ILP Map #

ILP#

1.0 103P.009

	STREAM REFERENCING								
Gazetted Name:			Local N	lame: None					
Watershed Code: 000-00000	0-00000-00000-0000-0000-000	-000-000-000		ILP Map #:	103P.009 ILP#:	10244			
		REAC	Н						
Reach #: 1.0	UTM(Zone/East/No	orth): 9.543775.60984	51 S	Sample Type: B					
Length (km): .76	Gradient (%): 6.18	US Elev (m): 197		Order: 2	Magnitude: 3				
Confinement: FC	Coupling: DC	Open water: A		BGC Zone: ICH	Landuse: AG				
Islands: N	Bars: VN SIDE DI	Bars: ✔N SIDE DIAG MID SPAN BR Riparian Veg.: M							
		Date: 2000/07	••••••	Agency: C172					
Site #: 10 Site Lg (m): 100	GIS UTM(Zone/East/North) 9 544043 6098174	Crew: BW/EM							
One Eg (III). 100	0 : 04400; 0000114	CHANN		. Name:					
No Vis.Ch.: ✓ Intermittent:		Avg Min	Max #	٦	Avg % Min % Max %	#			
Dw: Tribs.:	Channal Width		0 0	Gad	ient %: 0.00 0 0	0			
DW IIIbs	Wetted Width	. ,	0 0	Pool Dep	th (m): 0.00 0 0	0			
	Wb Depth	(m): 0.00 0	0 0						
Stage: L M H	Temp (C):	pH:	Co	ond.:	Turb.: T M	L C			
		MORPHOL	Ø G Y						
Bed Material: Dominant:	Subdom:		Bars:	N SIDE	DIAG MID SPAN	BR			
D95:	D (cm):		01	B1 B2 B3	D1 D2 D3				
Pattern: Coupling:	Islands: Confinement:	DIOTI ID							
Morph:		DISTURI INDICA		C2 C3 C4	C5 S1 S2 S3 S	64 S5			
		E8/4/9	2						
Total:	Type: SWD	LWD B	U DP	OV IV]	FSZ:			
	Amount:				CROWN CL	SELIDE			
LWD:		STREAM VEG: N	AN		CROWN CLC	SURE			
RB SHP: LB SHP:	Texture: F G C Texture: F G C	B R A B R A		STG: STG:					

Reach # ILP Map #

ILP#

Site

1.0

103P.009

10244

	000000000000000000000000000000000000000	cccccccccccccccccccccccccccccccccc	000000000000000000000000000000000000000	.00000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	***************************************					
Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Project Watershed Code: 400-00000-0000-0000-0000-0000-000-000-0												
Project watersr	ied Code. 400-0	00000-00000-00000-0000	0-0000-000-000	3-000-000-000								
			WATER	SHED								
Gazetted Name:			L	ocal Name: None								
Watershed Code: 000-0	000000-00000-000	000-0000-0000-000-000-0	000-000-000									
ILP Map#: 103P.009	ILP #: 10244	NID Map #: 103P.	.009 N	ID#: 60531	Reach #:	1.0	Site #: 10					
Field UTM(Zone/E	ast/North/Method	d) GIS UTM(Zon	e/East/North)	Site Lg: 100		Method: HC	Access: V4					
		9 544043	6098174	Ref. Name:								
Date: 2000/07/25	Time: 18:40	0 Agency: C172 Crew: BW/EM Fish Crd?: Incomplete: CHANNEL										
			CHAN	NEL								
	Mtd width w	vidth width width wi	idth width width	width width	width Avg		Gadient % Mtd Avg					
Channel Width (m):					0.00	Method I:	0.00					
Wetted Width (m):					0.00	Method II:						
Pool Depth (m):					0.00	No Vis Ch	✓ Intermittent:					
Wb Depth:		Avg: 0.00	Method:	Stage: L	M H	Dw:						
COVER	Total:			_								
Type: SWD	LWD I	B U DP	OV IV	CROWN CL	.OSURE							
Amount:				INSTREAM	VEG: N	A _ M _	v 🗌					
LWD:	DIS	T:										
LB SHP:				RB SHP	:							
Texture:	FGGC	BRRA		Texture	- F - C	G C E	BRA					
RIP:				RIP	:							
RIP: STG:				RIP STG								
			WAT	STG								
			Re	STG ER eq#:								
STG:		Method:	Re	STG ER		Metho	od:					
STG: EMS: Temp: pH:		Method:	Re	STG ER eq#:								
STG: EMS: Temp:			Re Co Ti	STG ER eq#: ond.: urb.:	:							
STG: EMS: Temp: pH:		Method:	Re	STG ER eq#: ond.: urb.:	:							
STG: EMS: Temp: pH:	Dominant:	Method:	Re Co Ti	STG ER eq#: ond.: urb.:	. M . L		od:					
EMS: Temp: pH: Flood Signs:	Dominant: D (cm):	Method: Method:	Re Cc Ti M:ORPH:0	STG ER eq #: ond.: urb.:	. M . L	C Metho	od:					
EMS: Temp: pH: Flood Signs:		Method: Method: Subdom:	Re Co Ti M: O R: P H: 0	STG ER eq#: ond.: urb.:	M L	B3 D1 D2	pd: 2 D3					
EMS: Temp: pH: Flood Signs: Bed Material: D95:		Method: Method: Subdom:	Re Co Ti M: O R: P H: 0	STG ER eq #: ond.: urb.:	M L	B3 D1 D2	pd: 2 D3					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern:		Method: Method: Subdom:	Re Co Ti M: O R: P H: 0	STG ER eq #: ond.: urb.:	M L	B3 D1 D2	pd: 2 D3					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement:		Method: Method: Subdom:	Re Co Ti M: O R: P H: 0	STG ER eq #: ond.: urb.:	B1 B2 C2 C3	B3 D1 D2 C4 C5 S1	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling:		Method: Method: Subdom:	Re Co Ti M: O R: P H: 0	STG ER eq #: ond.: urb.:	B1 B2 C2 C3	B3 D1 D2	pd: 2 D3					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement:		Method: Method: Subdom:	Re Co Ti M: O R: P H: 0	STG ER eq #: ond.: urb.:	B1 B2 C2 C3	B3 D1 D2 C4 C5 S1	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement:		Method: Method: Subdom:	MORPHO DISTU	STG ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE SIDE	B3 D1 D2 C4 C5 S1	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ	D (cm):	Method: Method: Subdom:	MORPHO DISTUINDI HABITAT	STG ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE SIDE	B3 D1 D2 C4 C5 S1	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ	D (cm):	Method: Method: Subdom: Morph:	MORPHO DISTURNO	STG ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE SIDE	B3 D1 D2 C4 C5 S1	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ	D (cm): No visil	Method: Method: Subdom: Morph:	MORPHO DISTORDIO HABITAT IN. No potential fish PHOT	ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE	B3 D1 D2 C4 C5 S1 DIAG MID	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ Name Other	D (cm):	Method: Method: Subdom: Morph:	MORPHO DISTURDO NO potential fish PHO Photo of an area	ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE	B3 D1 D2 C4 C5 S1 DIAG MID	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ Name Other	D (cm): No visil	Method: Method: Subdom: Morph:	MORPHO DISTORDIO HABITAT IN. No potential fish PHOT	ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE	B3 D1 D2 C4 C5 S1 DIAG MID	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ Name Other	D (cm): No visil	Method: Method: Subdom: Morph:	MORPHO DISTURDO NO potential fish PHO Photo of an area	ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE SIDE Comme	B3 D1 D2 C4 C5 S1 DIAG MID	2 D3 1 S2 S3 S4 S5					
EMS: Temp: pH: Flood Signs: Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ Name Other Photo R: 2 F: 11	D (cm): No visil	Method: Method: Subdom: Morph:	MORPHO DISTURDO NO potential fish PHO Photo of an area	ER eq #: ond.: urb.:	B1 B2 C2 C3 SIDE SIDE Comme	B3 D1 D2 C4 C5 S1 DIAG MID	2 D3 1 S2 S3 S4 S5					



Site #10, Photo of an area with no visible channel. Roll #2, Frame #11, Date: 2000/07/25

Reach # ILP Map #

ILP#

2.0 103P.009

	STREAM REFERENCING									
Gazetted Na	me:				1877	Local N	lame: None			
Watershed Co	ode: 000-000000	0-00000-00000-00	00-000-000-000	-000-000-000-0	00		ILP N	Wap #: 103P.00	9 IL	P#: 10239
				R	EACH					
Reach	#: 2.0	U.	TM(Zone/East/Ne	orth): 9.539928	.6097758	S	Sample Type:	R		
Length (k	m): .82	Gradient (%): 10	US Elev (m): 567		Order: 2		Magnitude:	2
Confineme		Coupling		Open wate		D D:	BGC Zone:		Landway E	
Islan	Islands: N Bars: ✔N SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: FR									
Site #:		CIE LITM/7-	one/East/North)		000/07/26		N====== C170		Crew: BW/E	
Site Lg (m):		9 54055			000/07/26		Agency: C172 . Name:		Crew: BVV/E	VI
				CH.	ANNEL					
No Vis.Ch.:	Intermittent:			Avg	Min Max	#	7		Avg % Min % M	ax % #
Dw:	Tribs.:		Channel Width	. ,	1 1.200	6		Gadient %:	4.75 4	6 4
			Wetted Width Wb Depth	, ,	0.5 0.800	6	P	ool Depth (m):	0.13 0.100 0	.200 6
		L	WD Depti	(111). 0.25	0.2 0.0		_			
Stage: L✓	M H	Temp (C): 11		pH: 7.2			ond.: 80	Turi	b.: T N	LVC
				MORP	HOLOGY					
Bed Material:	Dominant: C		ubdom: G			Bars:	✓ N S	SIDE DIAG	MID SI	PAN BR
	D95: 25.0 Pattern: SI		D (cm): 8.00 slands: N			01	B1 B2	B3 D1	D2 D3	
	Coupling: CO		ement: FC	D	STURBANCE					
	Morph: RP				NDICATORS	C1	C2 C3	C4 C5	S1 S2 S3	S4 S5
				e c	WER					
Total	: M	T	/	LWD B	U	DP	OV	IV		FSZ:
		Loc: P/S	V2	D T	T	N	S	T		
1.14/5	-								2	21-40%
LWD				STREAM VEG:	N A		V ∨			
RB SHP		Texture: ✓ F	GCC	B R		IP: C		G: MF G: MF		
20 0.11	- TI									
				F	ISH					
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	,	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
11	EF	1	110	278 sec	400	+	NFC	0	zengar (mm)	zongar (mmi)

Reach # ILP Map # ILP #

10239

Site 11

2.0 103P.009

402D 000

		PROJE	3.52								
Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Project Watershed Code: 400-00000-0000-0000-0000-0000-0000-000											
-											
		WATER	SHED								
Gazetted Name:		Lo	cal Name: None								
Watershed Code: 000-000000-00000	0-00000-0000-0000-000										
ILP Map#: 103P.009 ILP #: 1	0239 NID Map #: 103	P.009 NII	D#: 60522	Reach #:	2.0	Site #: 11					
Field UTM(Zone/East/North/Me	ethod) GIS UTM(Z	one/East/North)	Site Lg: 120	1	Method: HC	Access: V4					
	9 540559 6097949 Ref. Name:										
Date: 2000/07/26 Time: 09:20	Agency: C172	Crew: BW/	EM	Fish Crd?	: 🗸	Incomplete:					
Date. 2000/07/20		CHAN	NEI								
	and the last of th			width Avg	Gadient	% Mtd Avg					
Channel Width (m): MS 1.10	h width width width 1.20 1.00 1.00	width width width	width width	width Avg		1.0 AL 4.75					
Wetted Width (m): MS 0.70		0.80 0.70		0.65		5.0 AL					
Pool Depth (m): MS 0.10		0.10 0.20		0.13							
				3		ermittent:					
Wb Depth: .2 .2	.3 Avg: 0.23	Method: MS	Stage: L	✓ M H	Dw:	Tribs.:					
COVER	otal: M										
Type: SWD LWD	B U DP	OV IV	CROWN CL	OSURE							
Amount: T D	T T N	S T	2 2	1-40%							
Loc: P/S/O:			INSTREAM	VEG: N A	_ M ✓ V _						
LWD: F	DIST: E										
LB SHP: S			RB SHP	: S							
Texture: F G	CBBR	4	Texture	: F F G	CBBR	□ A					
RIP: C			RIP	:C		_					
STG: MF			STG								
		***	F.D.								
		WAT									
EMS: Temp: 11	Method: T3		q #: nd.: 80		Method: S4						
pH: 7.2	Method: P2										
Flood Signs: NONE	Method: GE	Tu	rb.: T	M L C	Method: GE						
		MORPHO	LOGY								
Bed Material: Dominant:	: C Subdom: G		01	B1 B2 B3	D1 D2 D3						
Ded Material: Dominant:			PRANCE]					
		DISTU	RBANCE C1	C2 C3 C4	C5 S1 S2	C2 C4 CE					
Pattern: SI Islands: N			ATORS C1	C2 C3 C4	C5 S1 S2	S3 S4 S5					
Coupling: CO											
Confinement: FC			5 3								
FSZ			Bars: 🗸 N	SIDE DIA	AG MID SPA	AN BR					
		HABITAT	1:7:1266								
Name			Comme	nts							
	pawning gravels are present	in limited quantities	Comme								
	perennial habitat-no pools		ер								
Rearing Habitat Lo	w value salmonid habitat lin	, ,									
	PHOTOS										
R: 2 F: 12 STD	U	Upstream photo o		dib 11-11-11-1	h habitat						
R: 2 F: 13 STD	D	Downstream phot		w discharge limits fis	n naditat						
Profile-		COMME		-1-							
Section			Comme	IIIS							

Reach # ILP Map # ILP# Site 2.0 103P.009 10239 11 Section Comments SITE CARD Fish form 30464 CHANNEL Cascades downstream limit upstream fish migration. NFC above barrier CHANNEL S6 Stream

February 12, 2001

FDIS Fish Form

Reach #

ILP Map #

ILP#

Watershed Code:

000-000000-00000-00000-0000-000-000-000-000-000-000

2.0

103P.009

								WAT	E R B	081							
Gaz	etted	Name:									Loca	al: No	ne				
Pi	roject	Code	400-0	000000-0	0000-00000	-0000-0000	-000-0	00-000-00	00-000	-0							
	WS	Code:	000-0	000000-0	00000-00000	-0000-0000	-000-0	00-000-00	00-000	-000							
Wa	aterbo	dy ID:						ILP Map	#: 10	3P.009	9		ILP#:	10239	Rea	ach #: 2	2 -
	Proje	ect ID:	3476				-			L	ake/Str	eam:	S	Lak	e From	Date:	
Fis	sh Per																
								ITE /	ME	111116) D						
Site#	NID	Мар	NID	IID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment													
11	103	2.009	6052	0522 EF 1 11 80 C													
							Α.	GEAR	SE	TTI	NGS						
Site#	MTI)/NO	H/P	Date	In Time	e In Date	Out	Time O	ut				С	omment			
11	EF	1	1	2000/0	7/26 09:	20 2000	07/26	09:45									
					C.	:: [1] (c)		E 6 i	E ;	SPE	e i E i	9/31	(ON S				
Site#	1	/ITD/N	10	H/P	Encl	Sec		Lnth	W	dth	Volt	tage	Frequenc	y. Pu	lse	Make	Model
11	EF		1	1	0	278		110.0		8.0	40	00	60		6	SMITH	12B
								ISH S	U.M	M A F	Υ						
Site#		/ITD/N	10	H/P	Species	Stage	Ag	je To	otal#	Lgth	(Min/M	lax)	FishAct		C	omment	
11	EF		1	1	NFC				0								



Site #11, Upstream photo of LWD cover Roll #2, Frame #12, Date: 2000/07/26



Site #11, Downstream photo showing how low discharge limits fish habitat Roll #2, Frame #13, Date: 2000/07/26

Reach # ILP Map #

ILP#

	STREAM REFERENCING															
Gazetted Na	ame:								Loca	I Name:	None					
Watershed C	ode: 40	0-330700	-00000	-00000-000	00-000-000-000	-000-000	0-000-00	0			ILP I	Мар#:			IL	P#:
							RE	ACH								
Reaci	h #:	4.0	***********	UT	M(Zone/East/N	orth): 9.	540748 6	098509	*********	Sample	Type:	В		***************************************	000000000	
Length (k		1.0	G	radient (%)	•		Elev (m):				Order: 1			Magnitud	de:	1
Confineme	,	0		Coupling			n water:				Zone:					
Islan	ds: N		Ва	rs: VN	SIDE D	AG	MID	SPAN	BR	Riparian	Veg.:	М		Landus	se: F	₹
							S	TE								
Site #:					ne/East/North)	. -	Date: 200	00/07/26		Agency				Crew:	BW/EI	M
Site Lg (m):	100	L	9	541093	6098235				F	Ref. Name	:		******			
_	_							NNEL					_			
No Vis.Ch.:	Inter	mittent:			Channel Width		0	Min Max 1.8 2.900				Gad	lient %:	7.50 Mir	1 % M	ax % #
Dw:		Tribs.:		-	Wetted Width	. /		700 2.200			P	ool Der		0.38 0.3		0.5 6
					Wb Depth	(m): 0	0.67	0.6 0.7	3							
Stage: L✓	M	н	Ten	np (C): 11		р	H: 7.2			Cond.: 8	0		Turb	о.: 🔲 Т	N	
						M	01:4:21	[0] (0) (0	7							
Bed Material:	Domin	ant: G		Su	bdom: B				Bai	rs: N	√ 5	SIDE [DIAG	MID	SI	PAN BR
		095: 60.00)		(cm): 20.00					O1 B1	B2	В3	D1	D2 D3		
		ern: SI ling: CO			lands: N ement: CO											
		rph: CP		COMINA	ATION, OO			TURBANC DICATORS		C1 C2	C3	C4	C5	S1 S2	S3	S4 S5
																J
							(0)(0)	18=1:								
Total	: M		Γ	Ту	pe: SWD	LWD	В	U	D	P (ov	IV	7			FSZ:
				Amou		S	D	S	١	1	Т	Т				
			L	Loc: P/S	/O:		V								ROWN 4	71-90%
LWD	: F			DIS	r: E IN	STREAM	A VEG:	N		M	V 🗌			,	4	/1-90%
RB SHP				e: 🔽 F	GCC	В	R [_ A	RIP: C			G: YF				
LB SHP	': U		i extur	e: 🔽 F	GC	В	R	A	RIP: C	,	81	G: YF				
							FEAT	URES								
	NID		Hgt	Method		Method		Photo		AirP				(Zone/East		
103P.009 7	0514	С	3.0	MS	2	MS	R: 2	F: 18	L:		#:	9	540	866 6	09842	6 GIS
Comments.																
							************	S H								
Site Number		pture ethod		nber of vents	Total Length (m)		ntal me	Volta	ge	Spec	ies		otal ish	Minimu Length (200	Maximum Length (mm)
12		EF		1	150	282	sec	400		NF	С		0			· · · · · · · · · · · · · · · · ·

Reach # ILP Map #

ID #

ILP#

Site

		PROJECT										
Stream Name (gaz.): SKEE	Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Project Watershed Code: 400-000000-00000-0000-0000-0000-000-000											
		WATERSHED										
Gazetted Name: Watershed Code: 400-330700-00000-00		Local Name:										
ILP Map#: ILP #:	NID Map #: 103P.009	NID #: 60514	Reach #:	4.0	Site #: 12							
Field UTM(Zone/East/North/Metho	d) GIS UTM(Zone/Ea 9 541093	st/North) Site Lg 6098235 Ref. Nan		Method: HC	Access: V4							
Date: 2000/07/26 Time: 10:05	Agency: C172	Crew: BW/EM	Fish Cre	d?: ✓	Incomplete:							
		CHANNEL										
Channel Width (m):	width width width width 20 2.30 2.00 2.40 1.80 1.70 2.00 1.90 0.30 0.40 0.50	2.90 2.20 0.40	vidth width Avg 2.27 1.90 0.38	Method II: 7.0	Number N							
Wb Depth: .6 .7	.7 Avg: 0.67 M	ethod: MS Stage	e: LV M H	Dw:	Tribs.:							
Amount: T S Loc: P/S/O:	B U DP D S N	T T 4	WN CLOSURE 71-90% REAM VEG: N /	A [] M 🗹 V [
LB SHP: U Texture: F G C RIP: C STG: YF	B R A	To	SHP:S exture: F G RIP:C STG:YF	6 C B] R 🗌 A							
		WATER										
EMS: Temp: 11 pH: 7.2 Flood Signs: NONE	Method: T3 Method: P2 Method: GE	Req #: Cond.: 80 Turb.:	т 🗌 м 🗍 L 📝	Method: S C Method: G								
		MORPHOLOGY										
Bed Material: Dominant: G D95: 60.0 D (cm): 20. Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ	Subdom: B 00 Morph: CP	DISTURBANCE INDICATORS Bars:	C1 C2 C3 C	C4 C5 S1 S	52 S3 S4 S5 SPAN BR							
NID Map NID Type Hgt	Method Lg Meth		AirPhoto		ast/North/Method)							
103P.009 70514 C 3.0	MS 2 MS	R: 2 F: 18	L: #:	9 540866	6098426 GIS							
Comments:	Ha	ABITAT QUALIT	Y									
Name		Co	mments									
	ntering habitat is limited to sm											
	ing habitat is limited to small q		* 11 -1									
Rearing Habitat Modera	te value rearing habitat for sal		inted by obstructed acces	is								
Photo Foc La	l Dir l	PHOTOS	Commen	rts.								

4.0 12 Foc Lg Dir Comments Upstream Photo of cascade/pool morphology R: F: 14 STD U Downstream photo of LWD cascades F: STD R: 2 15 D R: 2 F: 18 STD U Upstream photo of a 3 m cascade COMMENTS Section SITE CARD Fish form 30457 CHANNEL No fish present upstream of cascade. S3* downstream of cascade based on access. CHANNEL S6/S3* Stream

Reach #

ILP Map #

ILP#

Site

February 12, 2001 Page 157 of 223

Reach #

ILP Map#

ILP#

Watershed Code:

4.0

WATERBODY **Gazetted Name:** Local: None ILP#: Reacn ».

S Lake From Date: Waterbody ID: ILP Map #: Reach #: 4 -Project ID: 3476 Lake/Stream: S Fish Permit #: 25350K Date: 2000/07/26 To: 2000/07/26 Agency: C172 Crew: BW/EM Resample: SITE / METHOD NID Map
 NID#
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 60514
 EF
 1
 11
 80
 C
 Site# Comment 12 103P.009 A GEAR SETTINGS
 Time In
 Date Out
 Time Out

 10:05
 2000/07/26
 10:45
 MTD/NO H/P Date In Site# Comment EF 1 1 2000/07/26 C. ELECTROFISHER SPECIFICATIONS MTD/NO Encl Sec Lnth Wdth Voltage Frequency Make Site# H/P Pulse Model 0 282 150.0 2.0 400 6 SMITH 12B 12 EF 60 ROOT

						115	H S U M	i e s			
Site#	MTE	D/NO	H/P	Species	Stage	Age	Total #	Lgth (N	lin/Max)	FishAct	Comment
12	EF	1	1	NFC			0				

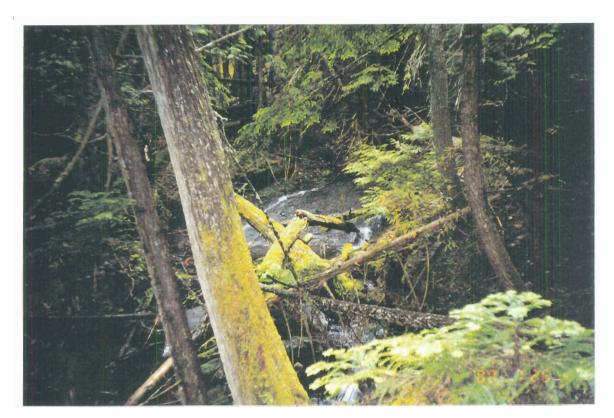
February 12, 2001



Site #12, Upstream Photo of cascade/pool morphology Roll #2, Frame #14, Date: 2000/07/26



Site #12, Downstream photo of LWD cascades Roll #2, Frame #15, Date: 2000/07/26



Site #12, Upstream photo of a 3 m cascade Roll #2, Frame #18, Date: 2000/07/26

Reach # ILP Map #

ILP#

			S	TREAMRE	FERENCI	N G			
Gazetted Na	me:				Loc	al Name: None			
Watershed Co	de: 400-330700	-00000-00000-00	00-0000-000-000	-000-000-000	0	ILP	Map #:	ILI	P#:
				RE	ACH				
Basah	#: 3.0	115	「M(Zone/East/No	orb): 0 541470 6	008038	Sample Type:	В		
Reach						Order: 2		Binamituales (,
Length (kr		Gradient (% Coupling		US Elev (m): Open water:		BGC Zone:		Magnitude:	4
=======================================	ds: N	Bars: VN		AG MID	_	Riparian Veg.:	М	Landuse: F	R
				S	TE				
Site #: 1	3	GIS UTM(Zo	ne/East/North)	Date: 20	00/07/26	Agency: C172		Crew: BW/E	M
Site Lg (m): 1	00	9 54150	1 6097923			Ref. Name:			
				CHA	NNEL				
No Vis.Ch.:	Intermittent:			- 5		#		Avg % Min % M	
Dw:	Tribs.:		Channel Width Wetted Width	, ,		6 F	Gadient %: Pool Depth (m):	7.75 6 0.28 0.100 0	10 4
		}	Wb Depth	. ,		3	ooi Deptii (iii).	0.20 0.100 0	
		L		(/-					
Stage: L	MV H	Temp (C): 11		pH: 7.1		Cond.: 80	Turi	b.: T N	LVC
				MORPH	IOLOGY				
Bed Material:	Dominant: G		ubdom: B		Ba	ers: 🗸 N 🔲 S	SIDE DIAG	MID SI	PAN BR
	D95: 60.00 Pattern: SI		0 (cm): 20.00 slands: N			O1 B1 B2	B3 D1	D2 D3	
	Coupling: CO	-	ement: CO	DIC	TURBANCE				
	Morph: CP				DICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				CO	VER				
Total:	M	Ту	/pe: SWD	LWD B	U	P OV	IV		FSZ:
		Amo		S T	D	NT	N		
		Loc: P/S	5/0:						CLOSURE
LWD:	F	DIS	T: C IN:	STREAM VEG:	N 🗸 A	M _ V _		3	41-70%
RB SHP:		Texture: 🗸 F	GC	B R [A RIP:	C ST	G: YF		
LB SHP:	U	Texture: 🗸 F	GC	BR	A RIP:	C ST	G: YF		
				E+	SH				
Site Number	Capture	Number of	Total Length	Total	Voltage	Species	Total	Minimum	Maximum
	Method	Events	(m)	Time			Fish	Length (mm)	Length (mm)

Reach # ILP Map #

ILP#

Site 13

		PROJECT		
Stream Name (gaz.)	:: Mill Area 1:20K Stream Inventory :: SKEENA RIVER :: 400-000000-00000-00000-0000-0000-		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 400-330700-00	0000-0000-0000-000-000-000	00-000-000		
ILP Map#:	#: NID Map #: 103P.0	009 NID#: 60513	Reach #: 3.0	Site #: 13
Field UTM(Zone/East/North	/Method) GIS UTM(Zone	/East/North) Site Lg: 100	Method: HC	Access: V4
	9 541501	6097923 Ref. Name:		
Date: 2000/07/26 Time: 1	2:30 Agency: C172	Crew: BW/EM	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd w	vidth width width wid		vidth Avg	Gadient % Mtd Avg
	40 1.60 1.40 1.80 2.4			6.0 10.0 AL 7.75
()	1.40 1.60 1.40 1.60 1.8			7.0 8.0 AL
	0.20 0.10 0.10 0.20 0.5	50 0.60	0.28	
			No Vis.Ch.:	Intermittent:
Wb Depth: .3	.2 .3 Avg: 0.27	Method: MS Stage: L	M ✓ H Dw:	Tribs.:
COVER	Total: M			
Type: SWD LWI		OV IV CROWN CLO		
Amount: T S	T D N		-70%	., .
Loc: P/S/O:		INSTREAM V	/EG: N 🗸 A 📗 M	V
LWD: F	DIST: C			
LB SHP: U		RB SHP:	ш	
Texture: ✓ F G	C B B R A	Texture:	₽ F □ G □ C □ B	□ R □ A
RIP: C				
STG: YF		RIP: (
		WATER		
EMS:		Req #:		
Temp: 11	Method: T3	Cond.: 80	Method	: S4
pH: 7.1	Method: P2	Turb.:	M L C Method	: GE
Flood Signs: NONE	Method: GE			
		MORPHOLOGY		
Bed Material: Domin	ant: G Subdom: B	01	B1 B2 B3 D1 D2	D3
and the second s	cm): 20.00 Morph: CP			
	,	DISTURBANCE INDICATORS C1		
Pattern: SI		INDICATORS C1	C2 C3 C4 C5 S1	S2 S3 S4 S5
Islands: N				
Coupling: CO				
Coupling: CO Confinement: CO		Bars: 🗸 N	SIDE DIAG MID	SPAN BR
Coupling: CO			SIDE DIAG MID	SPAN BR
Coupling: CO Confinement: CO		Bars: ₩ N	SIDE DIAG MID	SPAN BR
Coupling: CO Confinement: CO				SPAN BR
Coupling: CO Confinement: CO FSZ	Limited overwintering habitat	HABITAT QUALITY Comment		SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Rearing Habitat	Limited overwintering habitat Moderate rearing values limited by	Comment obstructed access		SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat	Limited overwintering habitat	Comment obstructed access Spawning gravels are present		SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Rearing Habitat	Limited overwintering habitat Moderate rearing values limited by	Comment obstructed access		SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Rearing Habitat Spawning Habitat	Limited overwintering habitat Moderate rearing values limited by	Comment obstructed access Spawning gravels are present		SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Rearing Habitat Spawning Habitat Photo Foo R: 2 F: 19 ST	Limited overwintering habitat Moderate rearing values limited by Moderate value spawning habitat.	Comment obstructed access Spawning gravels are present PHOTOS Upstream photo of undercut banks	Comments	SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Rearing Habitat Spawning Habitat Photo Foo	Limited overwintering habitat Moderate rearing values limited by Moderate value spawning habitat. Lg Dir	Comment obstructed access Spawning gravels are present PHOTOS Upstream photo of undercut banks Downstream photo of moderate fish h	Comments	SPAN BR
Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Rearing Habitat Spawning Habitat Photo Foo R: 2 F: 19 ST	Limited overwintering habitat Moderate rearing values limited by Moderate value spawning habitat.	Comment obstructed access Spawning gravels are present PHOTOS Upstream photo of undercut banks	Comments	SPAN BR

Reach # ILP N

LP Map #

ILP#

Site

	Watershed Code: 40	0-330700-00000-00000-0000-0000-000-000-0	3.0	13
1	Section		Comments	
	SITE CARD	Fish form 30451		
	CHANNEL	DV Present	39 BB 7 7	
	CHANNEL	S3 Stream		

February 12, 2001

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Reach #

ILP Map #

ILP#

Watershed Code:

3.0

WATERBODY **Gazetted Name:** Local: None ILP#: Waterbody ID: ILP Map #: Reach #: 3 -Lake/Stream: S Project ID: 3476 Lake From Date: Fish Permit #: 25350K Date: 2000/07/26 To: 2000/07/26 Agency: C172 Crew: BW/EM Resample: SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Site# NID Map NID# Comment 13 103P.009 60513 EF 1 11 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 2000/07/26 12:30 2000/07/26 13:30 C. ELECTROFISHER SPECIFICATIONS MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Site# Pulse Make Model 620 500.0 SMITH 13 EF 0 1.4 400 60 6 12B ROOT FISH SUMMARY MTD/NO Total # Lgth (Min/Max) FishAct Site# Species Stage Comment 13 EF DV 5 65 117 May be adult yet parr marks were visible INDIVIDUAL FISH DATA Site# MTD/NO H/P Species Length Weight Sex Mat Age Vch# Genetic Roll # Frame# Comment Str/Smpl#/Age Str/Smpl# 13 EF DV 87 U U 13 EF DV 65 U EF DV 92 13 U U 13 EF 1 1 DV 117 U U 13 EF 1 1 DV 100 U U (e)(o) A M E NEES Section Comments WATERBODY Shocking extended into lower reach 4



Site #13, Upstream photo of undercut banks Roll #2, Frame #19, Date: 2000/07/26



Site #13, Downstream photo of moderate fish habitat Roll #2, Frame #20, Date: 2000/07/26

Reach # ILP Map #

ILP#

			S	TREAME		REN) ((i k	Gi .			
Gazetted Na	ime:					L	ocal N	lame: None			
Watershed C	ode: 400-330700	0-00000-00000-00	00-000-000-000	-000-000-000-0	000			ILP N	Map #:	IL	P#:
				R	EAG	H					
Reach	n#: 5.0	U.	TM(Zone/East/Ne	orth): 9.539679	9.60989	69	s	Sample Type:	В		
Length (k	m): 1.26	Gradient (%		US Elev (n	n): 809			Order: 1	1	Magnitude:	1
Confineme		Coupling		Open water		🗀		BGC Zone:	1.00		_
Islan	ds: N	Bars: VN	SIDEDI	AG MID			Rip	parian Veg.:	M	Landuse: F	R
) ITE						
Site #:			one/East/North)	Date: 2	2000/07	/26		igency: C172		Crew: BW/E	М
Site Lg (m):	100	9 54066	6098653				Ref.	Name:	~~~~		
_	_				ANN	EL		_			
No Vis.Ch.:	Intermittent:	<u> </u>	O	Avg	Min	Max	#	-		Avg % Min % N	
Dw:	Tribs.:		Channel Width Wetted Width		1.700	2.6	6	-		13.75 12 0.17 0.100 0	16 4
		-	Wb Depth	, ,	0.2	0.6	3	-	oor Deptil (III).	0.17 0.100 0	7.500
								-			
Stage: L	M♥ H	Temp (C): 11	***************************************	pH: 7.2			Co	nd.: 80	Turk	o.:	LVC
				MORP		(0) (G) Y					
Bed Material:	Dominant: B		ubdom: C				Bars:	✓ N S	SIDE DIAG	MID S	PAN BR
	D95: 90.00 Pattern: SI	-	D (cm): 40.00 slands: N				01	B1 B2	B3 D1	D2 D3	
	Coupling: CO		ement: FC		ICTUD	DANOE					
	Morph: CP				ISTURE INDICA		C1	C2 C3	C4 C5	S1 S2 S3	S4 S5
										01 02 00	54 55
				e e	N'8=81	9		1 0 1 0			
Total	Т	Т	ype: SWD	LWD B	- A - B - B - B - B - B - B - B - B - B	u T	DP	T ov T	IV		FSZ:
1014		Amo	/	T D	_	T	N	T	N		F32
		Loc: P/S	5/0:							CROWN	CLOSURE
LWD:	F	DIS	T:C IN	STREAM VEG	N [A	M	1 V		3	41-70%
RB SHP	V	Texture: F	G V C	BR	ПА	RIF	P: C	STO	G: YF		
LB SHP	V	Texture: F	GC			RIF	P: C		G: YF		
				E	IS H						
Site Number	Capture	Number of	Total Length	Total		Voltage		Species	Total	Minimum	Maximum
	Method	Events	(m)	Time					Fish	Length (mm)	Length (mm)
14	EF	1	220	472 sec		400		NFC	0		

Reach # ILP Map #

ILP#

Site 14

		PROJECT		
Stream Name (gaz.): S	Mill Area 1:20K Stream Inventory SKEENA RIVER 400-000000-00000-00000-0000-0		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 400-330700-00000	0-00000-0000-0000-000-000	0-000-000-000		
ILP Map#: ILP #:	NID Map #: 103P.00	09 NID #: 60515	Reach #: 5.0	Site #: 14
Field UTM(Zone/East/North/Me	ethod) GIS UTM(Zone/ 9 540664	East/North) Site Lg: 100 6098653 Ref. Name:	Method: HC	Access: V4
Date: 2000/07/26 Time: 14:00	Agency: C172	Crew: BW/EM	Fish Crd?: 🗸	Incomplete:
		CHANNEL		
Mtd widti	h width width width widt	th width width width	width Avg	Gadient % Mtd Avg
Channel Width (m): MS 2.20	2.00 1.70 2.60 2.60		2.20 Method I:	
Wetted Width (m): MS 2.00	2.00 1.70 2.20 2.10	0 2.10	2.02 Method II:	13.0 14.0 AL
Pool Depth (m): MS 0.20	0.30 0.20 0.10 0.10	0 0.10	0.17	
			No Vis.Ch.	
Wb Depth: .3 .2	.6 Avg: 0.37	Method: MS Stage: L	M H Dw	Tribs.:
15. At 10.000	otal: T			
Type: SWD LWD	B U DP	OV IV CROWN CL		
Amount: S T	D T N	T N 3 4	1-70%	_
Loc: P/S/O:		✓ INSTREAM	VEG: N A M	V
LWD: F	DIST: C			
LB SHP: V		RB SHP	: V	
Texture: F G	CBBRA	Texture	F G C C	BRTA
RIP: C		RIP		
STG: YF		STG		
313.11		0.0		
		WATER		
EMS:		Req #:		
Temp: 11	Method: T3	Cond.: 80	Meth	od: S4
pH: 7.2	Method: P2	Turb.: T	M L C Metho	od: GE
Flood Signs: NONE	Method: GE			
		MORPHOLOGY		
Bed Material: Dominant:	: B Subdom: C	01	B1 B2 B3 D1 D	2 D3
D95: 90.0 D (cm):	: 40.00 Morph: CP	DISTURBANCE		
Pattern: SI		INDICATORS C1	C2 C3 C4 C5 S	1 S2 S3 S4 S5
Islands: N				
Coupling: CO				
Confinement: FC				
FSZ		Bars: 🗸 N	SIDE DIAG MID	SPAN BR
	1	HABITAT QUALITY		
Name		Comme	nts	
	overwintering habitat is available	le		
	w value salmonid rearing habitat			
Spawning Habitat Lo	w value salmonid spawning habi	itat limited by cobble boulder substra	ites	
		PHOTOS		
Photo Foc Lg			Comments	
R: 2 F: 16 STD	U	Upstream photo of an increasing su		
R: 2 F: 17 STD	D	Downstream photo showing the limi	ted cover within this reach	
		COMMENTS		
Section		Comme	nts	

Reach #

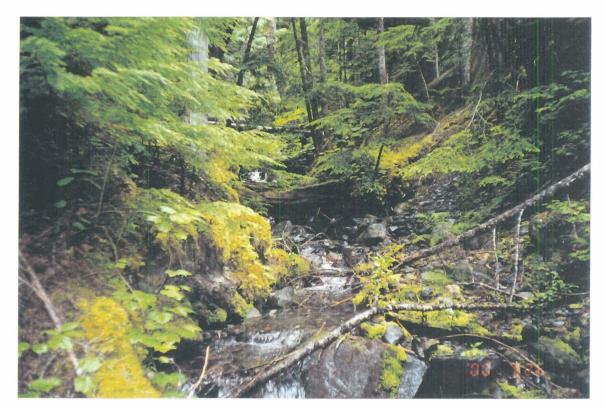
ILP Map #

ILP#

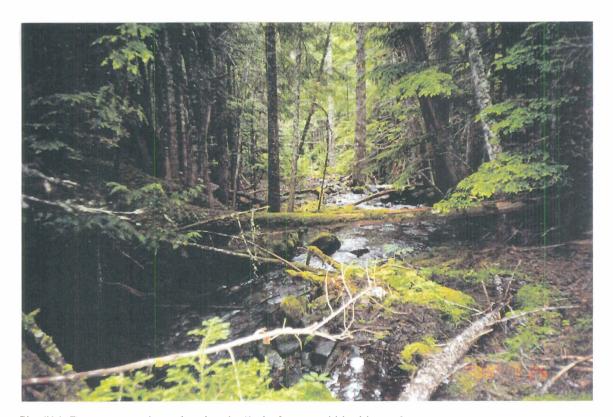
Watershed Code:

5.0

WATERBODY **Gazetted Name:** Local: None ILP#: 5 -Waterbody ID: ILP Map #: Reach #: Lake/Stream: S Project ID: 3476 Lake From Date: Fish Permit #: 25350K Date: 2000/07/26 To: 2000/07/26 Agency: C172 Resample: Crew: BW/EM SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid NID Map NID# Comment Site# 103P.009 60515 EF 1 11 80 14 A GEAR SETTINGS Time In Date Out Time Out Site# MTD/NO H/P Date In Comment 14:00 2000/07/26 14:30 2000/07/26 14 EF 1 1 C ELECTROFISHER SPECIFICATIONS Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model 14 0 472 220.0 --- 1.5 400 60 6 SMITH 12B ROOT FISH SUMMARY Site# MTD/NO H/P Stage Age Total # Lgth (Min/Max) FishAct Species Comment



Site #14, Upstream photo of an increasing substrate size Roll #2, Frame #16, Date: 2000/07/26



Site #14, Downstream photo showing the limited cover within this reach Roll #2, Frame #17, Date: 2000/07/26

ILP#

Reach # ILP Map # 103P.009 1.0

					8	TRE	N.	(Ela	REN	011	V G							
Gazetted Na	ame:									Loca	i Nan	ne: None						
Watershed C	ode: 00	0-00000	0-00000	-00000-00	00-0000-000-000	0-000-00	0-000-	-000				ILP	Map #: 1	03P.00	9	IL	P#:	10239
							R	EAG	н									
React	h #:	1.0		UT	M(Zone/East/N	orth): 9.	54067	4.6097	996		Sar	nple Type	: В					
Length (k			G	radient (%				m): 485	5			Order:			Magn	itude:	3	
Confineme	ent: Co)	D.	Coupling	Comments of the Comments of th		-	ter: A	ANI DE	R I		GC Zone: rian Veg.:			Lan	nduse: F	D	
ISIAN	us. N		De	iis. Viv		IAG		SITE		or I	Kipai	nan veg	IVI		Lar	iduse: r	K	
Site #:	15		G	S UTM(Zo	ne/East/North)			2000/0	**********		Age	ency: C17	2		Crew	: BW/EI	M	
Site Lg (m): 100 9 541199 6097880 Ref. Name:																		
							C li	ANI	IEL									
No Vis.Ch.:	Inter	mittent:		_		_	Avg	Min	Max	#	_			_	_	Min % M	lax %	#
Dw:		Tribs.:			Channel Width	•	1.60	0.9	1.9	6	_		Gadie		8.00	7	9	4
				-	Wetted Width Wb Depth	, ,	1.13	0.9	1.600	6	_		Pool Depti	n (m):[0.19	0.12	0.280	6
				L	W Depti				0.0									. –
Stage: L	M ✓	н	Ter	np (C): 11			H: 7.2				cond	1.: 80		Turt	o.:	T _ N	1	L ✔ C
				_		M	(*). (*)	:2:10	. O.G.)	**********								
Bed Material:		ant: C 095: 55.0	20		ubdom: B D (cm): 20.00					Ban	s:	N	SIDE	DIAG	M	D S	PAN	BR
		ern: SI			slands: N					(01	B1 B:	2 B3	D1	D2	D3		
		ing: CO		Confin	ement: CO			DISTUR	RBANCE									
	Moi	rph: CP						INDIC	ATORS	(C1	C2 C	3 C4	C5	S1	S2 S3	S4	S5
							C	0.V/E	R									
Total	: T		-		/pe: SWD	LWD	В	_	U	DF	_	ov	IV					FSZ:
			+	Loc: P/S	10	S			S	N		T	T			CROWN	I CL O	RURE
LWD	: F		L	DIS		STREAM			A		M					4	71-8	
RB SHP	: V		Textur	e: F		✓ B	F			RIP: C			TG: YF					
LB SHP			Textur				F			RIP: C			TG: YF					
							F E	TU F	ES									
NID Map	NID	Туре	Hgt	Method	Lg I	Method	Τ	Pho	to	T	A	AirPhoto		UTM	(Zone/l	East/Nort	h/Meth	od)
	0521	С	8.0	GE	20	GE	R:	2 F	: 23	L:		#:	9	54	1479	609776	9	GIS
Comments:																		
								FISE										
Site Number		pture ethod		mber of vents	Total Length (m)		otal ime		Voltage	9	S	Species	Tot Fis			imum th (mm)	100	ximum yth (mm)
15		EF		1	400) sec	+	400			NFC	0		Long	()	20/15	, (,,,,,,)

Reach # ILP Map #

ILP#

Site 15

1.0

103P.009

			23360	UE(e)		
Project Nam Stream Name (gaz Project Watershed Cod	.): SKEENA F			00-000-000	Project Code:	3476
			WATE	RSHED		
Gazetted Name:				Local Name: None		
Watershed Code: 000-000000-	0-00000-00000-0	000-000-000-000-	-000-000-000			
ILP Map#: 103P.009 ILF	#: 10239	NID Map #: 103F	P.009	NID #: 60521	Reach #: 1.	Site #: 15
Field UTM(Zone/East/Nor	h/Method)	GIS UTM(Zo	ne/East/North)	Site Lg: 100	Meti	nod: HC Access: V4
	1	9 541199	6097880	Ref. Name:		
Date: 2000/07/26 Time:	15:20	Agency: C172	Crew: B\	N/EM	Fish Crd?:	Incomplete:
			CHA	NNEL		
Mtd	width width	width width v	vidth width wid	th width width	width Avg	Gadient % Mtd Avg
Channel Width (m): MS	1.60 1.70	1.70 0.90	1.80 1.90	+ -	1.60 Me	ethod I: 7.0 9.0 AL 8.00
Wetted Width (m): MS	1.60 1.00	1.00 0.90	1.10 1.20		1.13 Me	thod II: 8.0 8.0 AL
Pool Depth (m): MS	0.15 0.22	0.15 0.12	0.21 0.28		0.19	
Wb Depth: .3	.4 .8	T Ave. 0.50	Method: MS	Stema I	4127	Vis.Ch.: Intermittent:
Wb Deptil5		Avg: 0.50	metrod, mo	Stage: L	M ✓ H	Dw: Tribs.:
COVER	Total: T					
Type: SWD LW	D B	U DP	OV IV	CROWN CL	LOSURE	
Amount: T S	D	S N	ТТ	4 7	1-90%	
Loc: P/\$/O:				INSTREAM	VEG: N A	M 🗹 V 🗌
LWD: F	DIST: C					
	5101.0					
LB SHP: U				RB SHP		
	G 🗌 C 🛂	BRA		Texture	:	B R A
RIP: C				RIP		
STG: YF				STG	: YF	
			WA	TER		
EMS:			F	teq #:		
Temp: 11		Method: T3		ond.: 80		Method: S4
pH: 7.2		Method: P2				
			,	Durb.: T	IM I LAC	Method: GE
Flood Signs: NONE		Method: GE		Turb.: T	M L Z C	Method: GE
Flood Signs: NONE					M	Method: GE
		Method: GE	MORPH	OLOGY		
Bed Material: Domi	nant: C	Method: GE Subdom: B				Method: GE
Bed Material: Domi D95: 55.0 D	nant: C (cm): 20.00	Method: GE	M G R P H	OLOGY O1 TURBANCE		
Bed Material: Domi D95: 55.0 D Pattern: SI		Method: GE Subdom: B	M G R P H	0L0GY 01	B1 B2 B3 [
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N		Method: GE Subdom: B	M G R P H	OLOGY OI TURBANCE	B1 B2 B3 [D1 D2 D3
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO		Method: GE Subdom: B	M G R P H	OLOGY OI TURBANCE	B1 B2 B3 [D1 D2 D3
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO		Method: GE Subdom: B	M G R P H	OLOGY OI TURBANCE DICATORS C1	B1 B2 B3 [D1 D2 D3 D5 S1 S2 S3 S4 S5
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO		Method: GE Subdom: B	M G R P H	OLOGY OI TURBANCE	B1 B2 B3 [D1 D2 D3
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO		Method: GE Subdom: B	M G R P H	OLGGY OITURBANCE DICATORS C1 Bars: V N	B1 B2 B3 [D1 D2 D3 D5 S1 S2 S3 S4 S5
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO		Subdom: B Morph: CP	MORPH DIST INC	OLGGY OITURBANCE DICATORS C1 Bars: V N	B1 B2 B3 [C2 C3 C4 C	D1 D2 D3 D5 S1 S2 S3 S4 S5 MID SPAN BR
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ	(cm): 20.00	Subdom: B Morph: CP	MORPH DIST INC	OLOGY OITURBANCE DICATORS C1 Bars: V N	B1 B2 B3 [C2 C3 C4 C	D1 D2 D3 D5 S1 S2 S3 S4 S5
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ	(cm): 20.00	Subdom: B Morph: CP	MORPH DIST	OLOGY OITURBANCE DICATORS C1 Bars: V N	B1 B2 B3 [C2 C3 C4 C	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C	(cm): 20.00	Subdom: B Morph: CP	MORPH DIST	DLOGY OI TURBANCE DICATORS C1 Bars: V N URES Photo F: 23 L:	B1 B2 B3 [C2 C3 C4 C	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C Comments:	(cm): 20.00	Subdom: B Morph: CP	MORPH DIST	OLOGY OITURBANCE DICATORS C1 Bars: N URES Photo F: 23 L: QUALITY	B1 B2 B3 [C2 C3 C4 C SIDE DIAG AirPhoto #: 9	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C	Hgt Meti 8.0 GE	Subdom: B Morph: CP	MORPH DIST IND FEAT Method F GE R: 2 HABITAT	DLOGY OI TURBANCE DICATORS C1 Bars: V N URES Photo F: 23 L:	B1 B2 B3 [C2 C3 C4 C SIDE DIAG AirPhoto #: 9	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C Comments:	Hgt Metri 8.0 GE	Subdom: B Morph: CP Tod Lg 20 Pring habitat is avail	MORPH DIST IND FEAT Method F GE R: 2 HABITAT	OLOGY OITURBANCE DICATORS C1 Bars: N URES Photo F: 23 L: QUALITY	B1 B2 B3 [C2 C3 C4 (SIDE DIAG AirPhoto #: 9	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C Comments: Name OverWinter Habitat	Hgt Metit 8.0 GE No overwinte Rearing valu	Subdom: B Morph: CP Tod Lg 20 Pring habitat is avail	MORPH DIST INT Method F GE R: 2 HABITAT	DLOGY OITURBANCE DICATORS C1 Bars: V N URES Photo F: 23 L: QUALITY Comme	B1 B2 B3 [C2 C3 C4 (SIDE DIAG AirPhoto #: 9	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C Comments: Name OverWinter Habitat Rearing Habitat	Hgt Metit 8.0 GE No overwinte Rearing valu	Subdom: B Morph: CP Tod Lg 20 Pring habitat is availes are low due to n	MORPH DIST INT Method F GE R: 2 HABITAT	DLOGY OITURBANCE DICATORS C1 Bars: ✓ N URES Photo F: 23 L: QUALITY Comments throughout site as ge substrates	B1 B2 B3 [C2 C3 C4 (SIDE DIAG AirPhoto #: 9	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)
Bed Material: Domi D95: 55.0 D Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ NID Map NID Type 103P.009 70521 C Comments: Name OverWinter Habitat Rearing Habitat Spawning Habitat	Hgt Metit 8.0 GE No overwinte Rearing valu	Subdom: B Morph: CP Tod Lg 20 Pring habitat is availes are low due to n	MORPH DIST IND FEAT Method F GE R: 2 HABITAT lable umerous obstruction labitat limited by lar	DLOGY OITURBANCE DICATORS C1 Bars: ✓ N URES Photo F: 23 L: QUALITY Comments throughout site as ge substrates	B1 B2 B3 [C2 C3 C4 (SIDE DIAG AirPhoto #: 9	D1 D2 D3 C5 S1 S2 S3 S4 S5 MID SPAN BR UTM (Zone/East/North/Method)

ILP Map # 1.0 103P.009 10239 15 **Photo** Foc Lg Dir Comments R: F: 21 STD U 2 Upstream photo showing abundant boulder substrates R: 2 F: 22 STD D Downstream photo showing the poor fish habitat within this reach R: 2 F: 23 STD U Upstream photo of an 8 m cascade. Barrier to upstream fish migration COMMENTS Section Comments SITE CARD Fish form 30454 CHANNEL No fish present upstream of the cascade. The cascade prevents upstream fish migration CHANNEL

Reach #

ILP#

Site

February 12, 2001 Page 12 of 223

Reach#

ILP Map #

ILP#

Watershed Code:

000-00000-00000-00000-0000-0000-000-000-000-000-000

1.0 103P.009

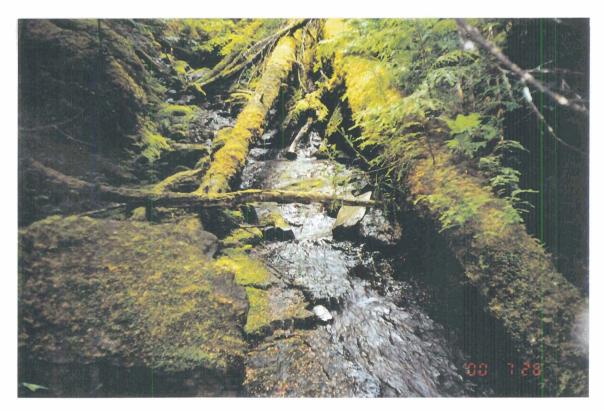
10239

							V	VATE	RB	ODY							
Gaze	etted f	lame	:								Loca	I: N	one				
Pro	oject	Code	: 400-	000000-00	0000-00000-0	0000-0000-0	00-000-	-000-000	-000-	0							
	WS	Code	: 000-0	000000-00	0000-00000-0	0000-0000-0	00-000-	-000-000	-000-	000							
Wa	terbo	dy ID	:				IL	Р Мар	#: 10	3P.009			ILP#:	1023	39 R	each #: 1	
	Proje	ct ID	: 3476							Lal	ce/Stre	eam:	S	1	Lake Fron	n Date:	
Fis	h Per	mit #:	25	350K	Date:	2000/07/26	5	To: 2	000/07	7/26	Age	ncy:	C172	Crew	: BW/EN	Resam	nple:
							SI	TE /	ΜĒ	THO)						
Site#	NID	Мар	NID	# U	TM:Zone/Ea	st/North/Mtl	hd N	MTD/NC	Те	mp C	ond	Turk	oid		Col	mment	
15	103F	.009	605	21			E	EF 1	1	1	80	С					
							4. G	EAR	SE	TTIN	GS						
Site#	MTD	/NO	H/P	Date I	n Time	In Date C	out T	ime Ou	t					Comme	ent		
15	EF	1	1	2000/07			_	16:00									
					C.	ELECT	ROF	ISHE	7	PE6	1F1(7.8	IONS				
Site#	N	ITD/N	10	H/P	Encl	Sec	Ln	ith	Wo	dth	Volt	age	Frequen	су	Pulse	Make	Model
15	EF		1	1	0	320	40	0.0		1.0	40	0	60		6	SMITH	12B
										MAR	7					1 ROOT	
Site#	I.	ITD/N	10	H/P	Species	Stage	Age	**********	al#	Lgth (*******	ax)	FishAct			Comment	
15	EF		1	1	NFC				0		1	-/-					

February 12, 2001 Page 9 of 96



Site #15, Upstream photo showing abundant boulder substrates Roll #2, Frame #21, Date: 2000/07/26



Site #15, Upstream photo of an 8 m cascade. Barrier to upstream fish migration Roll #2, Frame #23, Date: 2000/07/26



Site #15, Downstream photo showing the poor fish habitat within this reach Roll #2, Frame #22, Date: 2000/07/26

Reach # ILP Map #

ILP#

103P.009 1.0

			TREAMRE		11.0			
Gazetted Name:				Loc	al Name: None			
Watershed Code: 000-000000-000	00-00000-0000)-0000-000-000-	-000-000-000-00	0	ILP N	/lap #: 103P.009	9 IL	P#: 10242
			RE	ACH				
Reach #: 1.0	UTN	/I(Zone/East/No	orth): 9.541156.6	099303	Sample Type:	В		
Length (km): 1.49 Confinement: CO	Gradient (%): Coupling:		US Elev (m):		Order: 1 BGC Zone:		Magnitude:	1
	Bars: VN		Open water:	SPAN BR	Riparian Veg.:		Landuse: F	₹
			Sil	TE				
Site #: 16 Site Lg (m): 120	GIS UTM(Zon 541516		Date: 200		Agency: C172 Ref. Name:		Crew: BW/E	M
			СНА	NNEL				
No Vis.Ch.: Intermittent: Dw: Tribs.:		Channel Width Wetted Width Wb Depth	(m): 1.00 0. (m): 0.65 0.	800 1.200 400 0.9	# 6 6 Po		Avg % Min % M 11.00 12 0.15 0.070	13 4 0.21 6
Stage: L ✓ M H T	emp (C): 10		pH : 7.3		Cond.: 60	Turt	o.: 🗌 T 🔲 N	I □ L 🗸 C
			MORES	OLOGY				
Bed Material: Dominant: C	Cul					IDE DIAG		
		dom: G		Ba	ırs: 🗸 N 🗌 S	IDE DIAG	MID SI	PAN BR
D95: 22.00	D	(cm): 5.00		Ва				PAN BR
D95: 22.00 Pattern: SI	D	(cm): 5.00 ands: N		Г	on B1 B2	B3 D1	D2 D3	PAN BR
D95: 22.00 Pattern: SI Coupling: PC	D	(cm): 5.00 ands: N		TURBANCE	O1 B1 B2	B3 D1	D2 D3	
D95: 22.00 Pattern: SI	D	(cm): 5.00 ands: N		Г				S4 S5
D95: 22.00 Pattern: SI Coupling: PC	D	(cm): 5.00 ands: N	IN	TURBANCE	O1 B1 B2	B3 D1	D2 D3	
D95: 22.00 Pattern: SI Coupling: PC	D	(cm): 5.00 ands: N ment: FC	IN	TURBANCE DICATORS	O1 B1 B2	B3 D1	D2 D3	
D95: 22.00 Pattern: SI Coupling: PC Morph: CP	Confiner Type	(cm): 5.00 ands: N ment: FC	CO	TURBANCE DICATORS VER	O1 B1 B2 C1 C2 C3	B3 D1 C4 C5	D2 D3	S4 S5
D95: 22.00 Pattern: SI Coupling: PC Morph: CP	D Isk Confiner	e: SWD	CO B T N	TURBANCE DICATORS VER	O1 B1 B2 C1 C2 C3 DP OV	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: 22.00 Pattern: SI Coupling: PC Morph: CP	Confiner Type	(cm): 5.00 ands: N ment: FC	CO B T N	TURBANCE DICATORS VER	O1 B1 B2 C1 C2 C3 DP OV N T	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
D95: 22.00 Pattern: SI Coupling: PC Morph: CP Total: T	Confiner Type Amour Loc: P/S/C	(cm): 5.00 ands: N ment: FC	LWD B T N	TURBANCE DICATORS VER U E T I	O1 B1 B2 C1 C2 C3 DP OV N T M V	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: 22.00 Pattern: SI Coupling: PC Morph: CP Total: T LWD: F RB SHP: V Text	Type Amour Loc: P/S/C	e: SWD it: D	LWD B T N STREAM VEG:	TURBANCE DICATORS VER U C T I	O1 B1 B2 C1 C2 C3 OP OV N T M V C	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: 22.00 Pattern: SI Coupling: PC Morph: CP Total: T LWD: F RB SHP: V Text	Type Amour Loc: P/S/C DIST:	e: SWD Inti D D: SE INS	LWD B T N BTREAM VEG: B R	TURBANCE DICATORS VER U T I A RIP: (O1 B1 B2 C1 C2 C3 OP OV N T M V C	B3 D1	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: 22.00 Pattern: SI Coupling: PC Morph: CP Total: T LWD: F RB SHP: V LB SHP: V Text	Typ Amour Loc: P/S/C DIST: ure: F [ure: F [e: SWD Inti D D: SE INS	LWD B T N STREAM VEG: B R B R	TURBANCE DICATORS VER U T I A RIP: (O1 B1 B2 C1 C2 C3 OP OV N T M V C	B3 D1	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:

Reach # ILP Map #

ILP#

Site

1.0 103P.009 10242 16

			PROJI	ECT		
Project Name: Stream Name (gaz.): Project Watershed Code:	SKEENA RIV			-000-000-000	Project Code:	3476
			WATER	SHED		
Gazetted Name:			Lo	cal Name: None		
Watershed Code: 000-000000-00	000-00000-000	00-0000-000-000-000-				
7		NID Map #: 103P.009		D#: 60528	Reach #: 1.0	Site #: 16
				Site Lg: 120	Method: HC	Access: V4
Field UTM(Zone/East/North	Method)	GIS UTM(Zone/Ea	6098214	Ref. Name:	method. no	Access. V4
Date: 2000/07/26 Time: 16	6:40	Agency: C172	Crew: BW/	EM	Fish Crd?: 🗸	Incomplete:
			CHAN	NEL		
Mtd w	dth width v	width width width	width width	width width	width Avg	Gadient % Mtd Avg
Channel Width (m): MS 0.9		1.20 1.00 0.80	1.00			13.0 12.0 AL 11.00
	.40 0.90	0.90 0.60 0.50	0.60		0.65 Method II:	9.0 10.0 AL
		0.16 0.19 0.07	0.09		0.15	
r cor copan (any) and po					No Vis.Ch.:	Intermittent:
Wb Depth: .3	.2 .1	Avg: 0.20 N	lethod: MS	Stage: L	M H Dw:	Tribs.:
COVER	Total: T					
Type: SWD LWD	В	U DP	OV IV	CROWN CL	OSURE	
Amount: D T	N	TN	TN	3 41	I- 70 %	
Loc: P/S/O:				INSTREAM	VEG: N A M	v 🗆
				<u> </u>		
LWD: F	DIST: E					
LB SHP: V				RB SHP:		
Texture: 🔽 F 🗌 G	_ C _ B	3 R A		Texture:	✓ F G G C B	RA
RIP: C				RIP:	С	
STG: YF				STG:	YF	
						•
			WAT	ER		
EMS:			Red	q #:		
Temp: 10	N	Method: T3	Cor	nd.: 60	Metho	d: S4
pH: 7.3	N	Method: P2	Tu	rb.: 🗆 T 🗀	M L C Metho	d: GE
Flood Signs: NONE	N	Nethod: GE				G. GE
			MORPHO	LOGY		
			***************************************	O1	B1 B2 B3 D1 D2	D3
Bed Material: Domina	ant: C	Subdom: G		01	B1 B2 B3 D1 D2	D3
D95: 22.0 D (c	m): 5.00	Morph: CP	DISTU	RBANCE		
Pattern: SI				ATORS C1	C2 C3 C4 C5 S1	S2 S3 S4 S5
Islands: N						
Coupling: PC						
Confinement: FC						
FSZ				Bars: V	SIDE DIAG MID	SPAN BR
		Н	ABITAT C	UALITY		
Name				Commen	nts	
Rearing Habitat	Rearing habita	t is limited				
OverWinter Habitat	No overwinteri					
Spawning Habitat	No spawning h					
			PHOT	o s		
Photo For	la la	Dir			Commerts	
Photo Foc		Dir	netroom -b-t-	(an arrante best	Comments	
R: 2 F: 24 ST					r, an obstruction to fish	
R: 2 F: 25 ST		D D	NAME OF TAXABLE PARTY OF TAXABLE PARTY.	THE RESERVE AND ADDRESS OF THE PARTY OF THE	nber spanning stream	
			COMME	N 1 5		
Section				Commen	nts	

			Reach #	ILP Map #	ILP#	Site
	Watershed Code: 0	000-000000-00000-00000-0000-0000-000-000-000-000-000	1.0	103P.009	10242	16
i	Section	1	Comments			
	CHANNEL	No permanent barriers to upstream fish migration were in	entified			
	SITE CARD	Fish form 30469				
	CHANNEL	Numerous organic barriers (ranging from 0.5 m to 1.3 m)	were located througout	this reach. No fish w	ere captured	
	CHANNEL	S4* Stream				

February 12, 2001 Page 14 of 223

Reach #

ILP Map #

ILP#

Watershed Code:

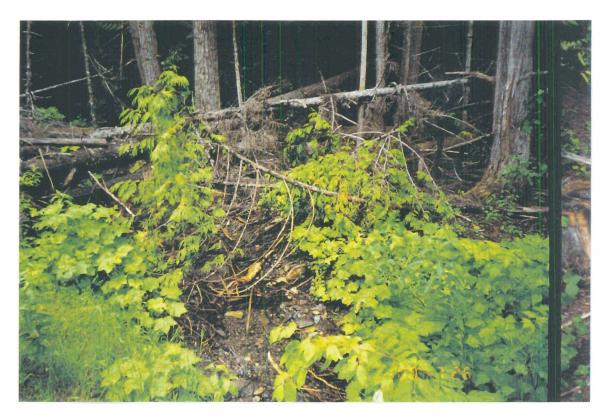
1.0

103P.009

10242

								WAT	E R B	OD Y						
Gaze	etted	Name:									Loca	I: N	one			
Pr	oject	Code:	400-0	000000-00	0000-0000	-0000-0000-	000-00	0-000-00	00-000-	0						
	WS	Code:	000-0	000000-00	0000-00000	-0000-0000-	000-00	0-000-00	00-000-	000						
Wa	iterbo	dy ID:						ILP Map	#: 10	3P.009			ILP#:	10242 F	leach #:	
	Proje	ect ID:	3476							La	ke/Str	eam:	S	Lake Fro	m Date:	
Fis	sh Per	mit #:	253	350K	Date	: 2000/07/2	26	To:	2000/0	7/26	Age	ncy:	C172 C	rew: BW/EN	// Resan	nple:
							S	ITE /	ME	THO	D					
Site#	NID	Мар	NID	# U	TM:Zone/E	ast/North/N	lthd	MTD/N	O Te	mp (ond	Turk	oid	Co	mment	
16	103	2.009	6052	28				EF		10	60	С				
							A. (GEAR	SE	TTIA	GS					
Site#	MTI	O/NO	H/P	Date I	n Time	In Date	Out	Time O	ut				Co	mment		
16	EF	1	1	2000/07				16:58								
					C.	ELEC	RO	FISH	ER S	PEC	IFI	***	IONS			
Site#	I	MTD/N	0	H/P	Encl	Sec	I	Lnth	W	dth	Volt	age	Frequency	Pulse	Make	Model
16	EF		1	1	.0	234	1	120.0		8.0	40	0	60	-6	SMITH .	12B
							F	ISH S	U M	MAR	Y					
Site#	ı	MTD/N	0	H/P	Species	Stage	Age	e To	tal #	Lgth (Min/M	ax)	FishAct		Comment	
16	EF		1	1	NFC				0							

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Site #16, Downstream photo of windthrown timber spanning stream Roll #2, Frame #25, Date: 2000/07/26



Site #16, Upstream photo of an organic barrier, an obstruction to fish Roll #2, Frame #24, Date: 2000/07/26

Reach # ILP Map #

ILP#

1.0

			S	TREA	MRE	EREN	CINC	ì			
Gazetted Na	me:					1	Local N	ame: None			
Watershed Co	ode: 400-362300	-33000-00000-00	00-000-000-000	-000-000-	-000-000			ILP I	Map #:	IL	P#:
					REA	CH					
Reach	1#: 1.0	Uī	「M(Zone/East/No	orth): 9.5	56473.61	12257	s	ample Type:	В		
Length (kr	m): 1.39	Gradient (%			lev (m): 4			Order:		Magnitude:	6
Confineme	ent: FC	Coupling			water:			BGC Zone:	ICH		
Island	ds: N	Bars: ✓N	_SIDE _DI	AGN		PAN B	R Rip	parian Veg.:	М	Landuse: F	R
					SIT	•••••					
Site #: 1		GIS UTM(Zo 9 55684	ne/East/North) 3: 6111762		ate: 2000	/07/27		gency: C172 Name:		Crew: BW/EM	/K
Site Lg (m): 1	100	9 : 55004	3: 0111/02		F. 977 W		Kei.	Name.			
No Vio Ob	Intermittent:				CHAN	•••••	#	1		Ave 0/ lasin 0/ la	0/ 4
No Vis.Ch.:	_		Channel Width	_		-	6	-	Gadient %:	Avg % Min % N	3 4
Dw:	Tribs.:		Wetted Width	, ,	20 0.80		6	P	Pool Depth (m):		0.310 6
			Wb Depth	(m): 0.4	43 0.3	0.6	3				
Stage: L✓	M H	Temp (C): 9		рН	1: 7.2		Co	nd.: 70	Tur	b.:	ı □ L ✔ C
				MC	RPH	LOGY					
Bed Material:											
	Dominant: G	Sı	ubdom: F				Bars:	□ N 🗸	SIDE DIAG	MID S	PAN BR
	D95: 4.00) I	D (cm): 4.00								PAN BR
	D95: 4.00 Pattern: SI] C	D (cm): 4.00 slands: O				Bars:	□ N 😺 S	B3 D1	□ MID □ S	PAN BR
	D95: 4.00 Pattern: SI Coupling: PC] C	D (cm): 4.00			JRBANCE CATORS	01	B1 B2	B3 D1	D2 D3	
	D95: 4.00 Pattern: SI] C	D (cm): 4.00 slands: O			JRBANCE CATORS			B3 D1		
	D95: 4.00 Pattern: SI Coupling: PC] C	D (cm): 4.00 slands: O		IND	CATORS	01	B1 B2	B3 D1	D2 D3	
	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confin	D (cm): 4.00 slands: O ement: FC		COV	CATORS	01 C1	B1 B2 C2 C3	B3 D1 C4 C5	D2 D3	S4 S5
Total:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confin	D (cm): 4.00 slands: O ement: FC	LWD	COV	CATORS ER U	01 C1	B1 B2 C2 C3 OV	B3 D1 C4 C5	D2 D3	
Total:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confin	D (cm): 4.00 slands: O ement: FC	S	C O V	E R U D	01 C1	B1 B2 C2 C3 OV T	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
Total:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confine Ty Amore	D (cm): 4.00 slands: O ement: FC	s	COV B T	E R U D	O1 C1 DP N	B1 B2 C2 C3 OV T	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
LWD:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confin	D (cm): 4.00 slands: O ement: FC	S STREAM	COV B T VEG: N	ER U D A	01	B1 B2 C2 C3 OV T	B3 D1 C4 C5	D2 D3 S1 S2 S3	FSZ:
	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confine Ty Amore	D (cm): 4.00 slands: O ement: FC //pe: SWD unt: T S/O: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	S STREAM	COV B T	ER U D D A A	O1 C1 DP N	B1 B2 C2 C3 OV T T V ST	B3 D1 C4 C5	D2 D3 S1 S2 S3	FSZ:
LWD:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confin	D (cm): 4.00 slands: O ement: FC //pe: SWD unt: T S/O: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	S STREAM	COV B T VEG: N R	ER U D A A R	O1 C1 DP N WIP: C	B1 B2 C2 C3 OV T T V ST	B3 D1 C4 C5 IV N	D2 D3 S1 S2 S3	FSZ:
LWD: RB SHP: LB SHP:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confine Ty Amore Loc: P/S DIS Texture: F Texture: F	D (cm): 4.00 slands: O ement: FC //pe: SWD unt: T S/O: M N IT: E IN:	S STREAM B B	COV B T VEG: N R R FIS	ER U D A A A A A A B A B B B B B B B B B B B	O1 C1 DP N IIP: C	B1 B2 C2 C3 OV T V ST ST	B3 D1 C4 C5 IV N G: MF G: MF	D2 D3 S1 S2 S3 CROWI	FSZ:
LWD:	D95: 4.00 Pattern: SI Coupling: PC Morph: RP	Confin	D (cm): 4.00 slands: O ement: FC //pe: SWD unt: T S/O: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	S STREAM	COV B T VEG: N R R Fis	ER U D A A R	O1 C1 DP N IIP: C	B1 B2 C2 C3 OV T T V ST	B3 D1 C4 C5 IV N	D2 D3 S1 S2 S3	FSZ:

Reach # ILP Map #

ILP#

Site

1.0

		PROJECT		
Project Name: Mill Area 1:20 Stream Name (gaz.): SKEENA RIV Project Watershed Code: 400-000000-	/ER		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 400-362300-33000-00000-000	00-000-000-000-000	0-000-000-000		
ILP Map#: ILP #:	NID Map #: 103P.02	NID #: 61409	Reach #: 1.0	Site #: 17
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/	East/North) Site Lg: 100	Method: HC	Access: V2
	9 556843	6111762 Ref. Name:		
Date: 2000/07/27 Time: 09:50	Agency: C172	Crew: BW/EM/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd width width v	width width widt	th width width width width	width Avg Ga	adient % Mtd Avg
Channel Width (m): MS 1.60 1.80	2.10 1.90 2.20	0 1.70	1.88 Method I: 3.	0 2.0 C 2.50
Wetted Width (m): MS 1.40 0.80	1.60 1.10 1.30	0 1.00	1.20 Method II: 3.	0 2.0 C
Pool Depth (m): MS 0.12 0.31	0.17 0.10 0.09	9 0.08	0.15] I=4!#44-
Wb Depth: .4 .3 .6	Avg: 0.43	Method: MS Stage: L⊌	No Vis.Ch.: _	Intermittent: Tribs.:
COVER Total: M				
Type: SWD LWD B	U DP	OV IV CROWN CLO	OSURE	
Amount: T S T	D N	T N 3 41	-70%	
Loc: P/S/O:		INSTREAM	VEG: N 🗸 A 🗌 M 🗍 V	
LWD: F DIST: E				
LB SHP: U		RB SHP:	s	
Texture: ✓ F G C E	BRA	Texture:	FGGCB	RA
RIP: C		RIP:		
STG: MF		STG:		
		WATER		
EMS:		Req #:		
A 10000 Protect	Method: T3	Cond.: 70	Method:	S4
	Method: P2 Method: GE	Turb.: T	M L C Method:	GE
		MORPHOLOGY		
Bed Material: Dominant: G	Subdom: F	01	B1 B2 B3 D1 D2	D3
D95: 4.00 D (cm): 4.00	Morph: RP	DIOTI IDDANIOS		
Pattern: SI		DISTURBANCE INDICATORS C1	62 63 64 65 64	60 60 64 65
Islands: O		CI	C2 C3 C4 C5 S1	S2 S3 S4 S5
Coupling: PC				
Confinement: FC				
FSZ		Bars: N	SIDE DIAG MID	SPAN BR
		HABITAT QUALITY		
Name		Commen	ts	
	ng habitat. Moderate			
	habitat is limited by f			
Spawning Habitat Moderate value	spawning nabitat, f	air gravels size for DV PHOTOS		
Photo Foc Lg	Dir	1110103	Comments	
R: 3 F: 1 STD		Downstream photo of moderate cove	Comments	
R: 3 F: 2 STD		Upstream photo of gravel substrates		
	-	COMMENTS		
Section		Commen	ts	

CHANNEL

S3 Stream

Reach # ILP Map #

ILP#

Site

	Watershed Code:	400-3623	300-33000-00000-0000-0000-000-000-000-0	1.0	17
ı	Section			Comments	
Ì	SITE CARD		Fish form 30462		
ľ	CHANNEL		DV Present		

Reach #

ILP Map #

ILP#

Watershed Code:

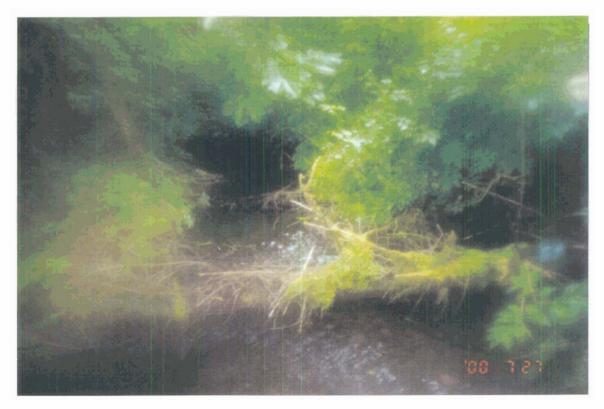
1.0

WATERBODY Local: None Gazetted Name: Reach #: ILP#: ILP Map #: Waterbody ID: Lake/Stream: S Lake From Date: Project ID: 3476 To: 2000/07/27 Crew: BW/EM/KT Resample: Date: 2000/07/27 Agency: C172 Fish Permit #: 25350K SITE / METHOD UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid Comment Site# NID Map NID# EF 1 9 70 103P.020 61409 A GEAR SETTINGS Time In Date Out Time Out MTD/NO H/P Date In Comment Site# EF 1 1 2000/07/27 09:50 2000/07/27 10:20 C. ELECTROFISHER SPECIFICATIONS MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model Site# 100.0 6 SMITH 12B 17 EF ROOT FISH SUMMARY Total # Lgth (Min/Max) | FishAct Site# MTD/NO Species Stage Comment 17 DV INDIVIDUAL FISH DATA Site# MTD/NO Species Length Weight Sex Mat Age Vch# Genetic Roll # Frame# Comment Str/Smpl# Str/Smpl#/Age 17 EF 1 DV 61 U U

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Site #17, Upstream photo of gravel substrates Roll #3, Frame #2, Date: 2000/07/27



Site #17, Downstream photo of moderate cover Roll #3, Frame #1, Date: 2000/07/27

Reach # ILP Map #

ILP#

1.0 103P.020

		STRI	A M	? €=131	REN	CINC	3				
Gazetted Name:					1	Local N	ame: None				
Watershed Code: 000-00000	0-00000-00000-0	000-0000-000-000-000-	000-000	0-000			ILP Map #:	103P.020		ILP#:	11061
				(EA)	i						
Reach #: 1.0	u	TM(Zone/East/North):	9.5581	40.61102	204	S	ample Type: B				
Length (km): 2.28	Gradient (9	6): 12.68 U	S Elev ((m): 668			Order: 1	М	agnitude:	1	
Confinement: OC	Couplin	•	-	iter: A			BGC Zone: ICH				
Islands: N	Bars: ✔N	SIDE DIAG		SPA		R Rip	parian Veg.: M	***************************************	Landuse:	FR	
			***********	SITE							
Site #: 18	7	one/East/North)	Date:	2000/07	7/27		gency: C172	С	rew: BW/	EM/K	
Site Lg (m): 100	9 5576	32: 6111439			····	Ref.	Name:				
				PASS IS			1				
No Vis.Ch.: V Intermittent:		Channel Width (m):	Avg 0.00	Min	Max 0	#	Gas	Avg		Max %	# 0
Dw: Tribs.:		Wetted Width (m):	0.00	0	0	0	Pool Des			0	0
		Wb Depth (m):	0.00	0	0	0		, , ,			
Stage: L M H	Temp (C):		pH:			Co	nd.:	Turb.:	Т	М 🗌	L 🗌 C
			MOR	F2 (10)	(0) (C) Y						
Bed Material: Dominant:	S	Subdom:				Bars:	N SIDE	DIAG	MID	SPAN	BR
D95:		D (cm):				01	B1 B2 B3	D1 D2	D3		
Pattern: Coupling:		Islands: nement:									
Morph:	Com	Horrion.		DISTUR		C1	C2 C3 C4	C5 S1	S2	S3 S	4 S5
							C2 C3 C4	C5 51	52	53 5	35
				(0)/8=	2						
Total:	7	ype: SWD LWD		***************************************	u T	DP	OV IV	7			FSZ:
		ount:						1			1 GE
	Loc: P/	's/o:]	CRO	WN CLO	SURE
LWD:	Dis	ST: INSTRE	AM VE	G: N	A	N	V	_			
RB SHP:	Texture: F	GGCE	B 🔲 I	R 🗌 A	R	IP:	STG:				
LB SHP:	Texture: F	GCCE	3 🔲 1	R 🗌 A	A R	IP:	STG:				

Reach # ILP Map #

ILP#

Site

1.0

103P.020

11061

***************************************		PROJECT		
Stream Name (gaz.)	: Mill Area 1:20K Stream Inventor : SKEENA RIVER : 400-000000-00000-00000-0000		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 000-000000-00	0000-00000-0000-0000-000-000-0	00-000-000-000		
ILP Map#: 103P.020 ILP	#: 11061 NID Map #: 103P.	020 NID#: 61416	Reach #: 1.0	Site #: 18
Field UTM(Zone/East/North	/Method) GIS UTM(Zone	e/East/North) Site Lg: 100	Method: HC	Access: V2
	9 557632	6111439 Ref. Name:		
Date: 2000/07/27 Time: 1	0:50 Agency : C172	Crew: BW/EM/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd w	ridth width width width wi	dth width width width width	width Avg	Gadient % Mtd Avg
Channel Width (m):			0.00 Method I:	0.00
Wetted Width (m):		+	0.00 Method II:	
Pool Depth (m):				✓ Intermittent:
Wb Depth:	Avg: 0.00	Method: Stage: L	M H Dw:	Tribs.:
COVER	Total:			
Type: SWD LWI	B U DP	OV IV CROWN CLO	OSURE	
Amount:		INSTREAM	/EG: N A M	v 🗆
200.17070.		INSTREAM	VEG. II A III	• 🗀
LWD:	DIST:			
LB SHP:		RB SHP:		
Texture: F G	C B R A	Texture:	FGGCB	□ R □ A
RIP:		RIP:		
STG:		STG:		
		WATER		
EMS:	Malland	Req #:	Made	i.
Temp: pH:	Method:	Cond.:	Metho	
Flood Signs:	Method:	Turb.: T	M L C Method	d:
		HODDING! GOV		
		MORPHOLOGY	D. D. D. D. D.	P.0
Bed Material: Domin		01	B1 B2 B3 D1 D2	D3
D95: D (d	m): Morph:	DISTURBANCE		
D93. D (C				
Pattern:		INDICATORS C1	C2 C3 C4 C5 S1	S2 S3 S4 S5
Pattern: Islands:		INDICATORS	C2 C3 C4 C5 S1	S2 S3 S4 S5
Pattern: Islands: Coupling:		INDICATORS	C2 C3 C4 C5 S1	S2 S3 S4 S5
Pattern: Islands: Coupling: Confinement:		INDICATORS	C2 C3 C4 C5 S1	S2 S3 S4 S5
Pattern: Islands: Coupling:		INDICATORS C1 Bars: N		
Pattern: Islands: Coupling: Confinement:		INDICATORS C1		
Pattern: Islands: Coupling: Confinement: FSZ		Bars: N HABITAT QUALITY Commen	SIDE DIAG MID	
Pattern: Islands: Coupling: Confinement: FSZ	No visible channel. Not a stream	Bars: N HABITAT QUALITY Commen	SIDE DIAG MID	
Pattern: Islands: Coupling: Confinement: FSZ Name Other		Bars: N HABITAT QUALITY Commen	SIDE DIAG MID	
Pattern: Islands: Coupling: Confinement: FSZ Name Other Photo Foo	: Lg Dir	INDICATORS C1 Bars: N HABITAT QUALITY Commen No potential fish habitat PHOTOS	SIDE DIAG MID	
Pattern: Islands: Coupling: Confinement: FSZ Name Other	: Lg Dir	Bars: N HABITAT QUALITY Commen No potential fish habitat PHOTOS Upslope photo of an NVC	SIDE DIAG MID	
Pattern: Islands: Coupling: Confinement: FSZ Name Other Photo For R: 3 F: 3 S	: Lg Dir	INDICATORS C1 Bars: N HABITAT QUALITY Commen No potential fish habitat PHOTOS Upslope photo of an NVC COMMENTS	SIDE DIAG MID	
Pattern: Islands: Coupling: Confinement: FSZ Name Other Photo Foo	: Lg Dir	Bars: N HABITAT QUALITY Commen No potential fish habitat PHOTOS Upslope photo of an NVC	SIDE DIAG MID	



Site #18, Upslope photo of an NVC Roll #3, Frame #3, Date: 2000/07/27

Reach # ILP Map #

ILP#

1.0 103P.020

			8	TREAMRE	FERENCI	NG			
Gazetted Na	me:			3	Loca	al Name: None			
Watershed Co	ode: 000-000000	-00000-00000-00	00-000-000-000	-000-000-000-00	0	ILP I	Map #: 103P.02	0 IL	P#: 11063
				R E	ACH				
Reach	n#: 1.0	117	ΓM(Zone/East/No	orth): 9 559388 6	112215	Sample Type:	R		
Length (ki						Order:		Magnituda	.
Confineme		Gradient (% Coupling	•	US Elev (m): Open water:		BGC Zone:		Magnitude:	1
Island	ds: N	Bars: VN		AG MID		Riparian Veg.:	M	Landuse: F	R
				SI	TE				
Site #: 1	19	GIS UTM(Zo	ne/East/North)	Date: 200	00/07/27	Agency: C172		Crew: BW/EM/	′K
Site Lg (m): 1	140	9 55910	3 6112625		F	Ref. Name:			
				CHA	NNEL				
No Vis.Ch.:	Intermittent:				lin Max #			Avg % Min % M	lax % #
Dw:	Tribs.:		Channel Width	, ,	0.9 1.700 6 0.9 1.4 6		Gadient %:	4.25 4	5 4
		-	Wetted Width Wb Depth		1.4 0.5 3		ool Depth (m):	0.11 0.06	0.21 6
Stage: L	M H	Temp (C): 9		pH: 7.2		Cond.: 90	Tur	b.: T N	LVC
				MORPH	(0) R(0) G Y				
Bed Material:	Dominant: G D95: 12.00		ubdom: F D (cm): 3.00		Ba	rs: VN S	SIDE DIAG	MID SI	PAN BR
	Pattern: SI		slands: N			O1 B1 B2	B3 D1	D2 D3	
	Coupling: PC	Confin	ement: OC	DIS	TURBANCE				
	Morph: RP			IN	DICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				9(0)	Ø∃:				
Total:	М		1	LWD B	U D	P OV	IV		FSZ:
		Loc: P/S		D N	S N		N		
	_							CROWN 3	41-70%
LWD:				STREAM VEG:	N 🗸 A 🗌	M V		0	41-70%
RB SHP:		Texture: F	GCC	BR	A RIP: C		G: MF		
LD SHP.	0	Texture: 🗸 F	GC	BR	A RIP: C	51	G: MF		
				FI	SH				
Cita Niverbar	04	A4	Total Length	Total	Voltage	Species	Total	Minimum	Maximum
Site Number	Capture	Number of			Voltage	Species		Minimum	Maximum
19	Method EF	Events	(m) 500	Time 130 sec	400	NFC	Fish 0	Length (mm)	Length (mm)

Reach #

ILP Map #

ILP#

Site 19

1.0

103P.020

11063

PROJECT Project Name: Mill Area 1:20K Stream Inventory Project Project Code: 3476 Stream Name (gaz.): SKEENA RIVER Watershied **Gazetted Name:** Local Name: None Site #: 19 NID #: 61404 1.0 ILP Map#: 103P.020 ILP#: 11063 NID Map #: 103P.020 Reach # Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Method: HC Access: V2 Site Lg: 140 559103 6112625 Ref. Name: 9 Agency: C172 Crew: BW/EM/KT Fish Crd?: 🗸 Incomplete: Date: 2000/07/27 Time: 12:40 CHANNEL Mtd width width width | width | width | width | width | width | width Avg **Gadient %** Mtd Avg MS 0.90 1.20 1.10 1.70 1.40 1.00 1.22 Method I: 4.0 5.0 C 4.25 Channel Width (m): 1.40 1.20 1.00 1.13 Method II: 4.0 4.0 C Wetted Width (m): MS 0.90 1.20 1.10 Pool Depth (m): MS 0.21 0.06 0.07 0.09 0.12 0.10 0.11 No Vis.Ch.: Intermittent: Wb Depth: .5 Method: MS Stage: L M H Tribs.: .4 .4 Avg: 0.43 Dw: COVER Total: M **CROWN CLOSURE** Type: SWD LWD В U DP OV IV 41-70% D N S N N Amount: Loc: P/S/O: INSTREAM VEG: N ✓ A M V DIST: F LWD: F LB SHP: U RB SHP: V Texture: F G C B R A Texture: F G C B R A RIP: C RIP: C STG: MF STG: MF WATER EMS: Req #: Temp: 9 Method: T3 Cond.: 90 Method: S4 pH: 7.2 Method: P2 Turb.: T M L C Method: GE Flood Signs: NONE Method: GE MORPHOLOGY 01 R1 R2 **B3** D₁ D2 D3 Bed Material: Dominant: G Subdom: F D95: 12.0 D (cm): 3.00 Morph: RP DISTURBANCE Pattern: SI **INDICATORS** C1 C2 C3 C4 C5 S1 S2 S3 **S4 S5** Islands: N Coupling: PC Confinement: OC Bars: ✓ N SIDE DIAG MID SPAN **FSZ** HACITATI QUALITY Name Comments OverWinter Habitat No overwintering habitat is present Spawning Habitat Moderate spawning habitat-fair amounts of spawning gravel Rearing Habitat Moderate salmonid rearing-moderate amount of cover PHONOS Photo Foc Lg Dir Comments 3 4 STD U Upstream photo of undercut banks R: 3 F: 5 STD D Downstream photo showing where the stream flows into a swamp OOMNENTS Section Comments

Reach # ILP Map # ILP# Site 1.0 103P.020 11063 19 Section Comments SITE CARD Fish form 30477 CHANNEL No barriers to upstream fish migration were observed. Connectivity to a downstream pond exists CHANNEL S4* Stream

Reach #

ILP Map#

ILP#

Watershed Code:

000-00000-00000-00000-0000-0000-000-000-000-000-000

1.0 103P.020

11063

G276	thed I	Name:									Loca	: No	one			
				v00000.00	000-00000-	0000.0000	000-00	n_nnn_nr	n_non_				,,,,			
FI					000-00000-											
141-				00000-00	JUU-00000-	1000-0000-							ILP#:	11063 R	teach #: 1	
wa		dy ID: ect ID:	3476					ILP Map	1#: 10		e/Stre	am:		Lake From		
Fis	sh Per	mit #:	253	350K	Date:	2000/07/2	27	To:	2000/0	7/27	Agei	ncy:	C172	Crew: BW/EN	NKT Resam	ple:
							S	ITE /	ME	THOR)					
Site#	NID	Мар	NID	# UT	M:Zone/Ea	st/North/M	thd	MTD/N	O Te	mp Co	ond	Turb	id	Co	mment	
19	103F	2.020	6140	04				EF 1		9 9	90	С				
							A. (e E A R	SE	TTIN	GS					
Site#	МТ	D/NO	H/P	Date In	Time	In Date	Out	Time O	ut				C	omment		******************
19	EF	1	1	2000/07/	27 12:40	2000/0	7/27	13:20								
					C.	ELEC	RO	FISH	ER I	PEG	11:11(AT	IONS			
Site#	1	MTD/N	0	H/P	Encl	Sec	I	Lnth	W	dth	Volta	age	Frequenc	y Pulse	Make	Mode
19	EF		1	1	0	130		500.0		1.0	40	0	60	6	SMITH ROOT	12B
							F	SH	3.44	M A FEY						
Site#	1	MTD/N	0	H/P	Species	Stage	Age	e To	otal#	Lgth (N	/lin/Ma	ax)	FishAct		Comment	
19	EF		1	1	NFC				0							

February 12, 2001 Page 19 of 96



Site #19, Downstream photo showing where the stream flows into a swamp Roll #3, Frame #5, Date: 2000/07/27



Site #19, Upstream photo of undercut banks Roll #3, Frame #4, Date: 2000/07/27

Reach # ILP Map #

ILP#

1.0 103P.020

		STRI	A M	3≅Z	e President	CINC	3						
Gazetted Name:						Local N	ame: Non	e					
Watershed Code: 000-000000	0-00000-00000-00	00-000-000-000-000-	000-000	-000			1	LP Map #:	103P.02	20		ILP#:	11123
			F	EAC	Ħ								
Reach #: 1.0	U	TM(Zone/East/North):	9.55889	91.6115	755	S	ample Ty	pe: R			•		
Length (km): .77	Gradient (%		S Elev (Orde			Mag	nitude:	1	
Confinement: FC	Couplin	Coupling: PC Open water: A BGC Zone: ICH											
Islands: N	Bars: ☑N SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: F								FR				
				SITE									
Site #: 20	GIS UTM(Zone/East/North) Date: 2000/07/27 Agency: C172 Crew: BW/EM								EM/K				
Site Lg (m): 100	9 : 558404: 6115292 Ref. Name:												
			C l	ANA	(E)L								
No Vis.Ch.: ✓ Intermittent:			Avg	Min	Max	#] _				_	Max %	#
Dw: Tribs.:		Channel Width (m): Wetted Width (m):	0.00	0	0	0	┨ ├─	Pool Dep	lient %:		0	0	0
		Wb Depth (m):	0.00	0	0	0	1 -	1 001 50	Jen (111).	0.00		0	U
Stage: L M H	Temp (C):		pH:			Co	nd.:		Tur	rb.:	Т	м	L C
olage: = III II	76			28468	(0) C 8							,	
Bed Material: Dominant:	s	ubdom:		<i>.</i>		Bars:	□ N □	SIDE	DIAG	N	IID 🗆	SPAN	BR
D95:		D (cm):											
Pattern:		Islands:				01	B1	B2 B3	D1	D2	D3		
Coupling:	Confir	nement:			RBANCE								
Morph:				INDIC	ATORS	C1	C2	C3 C4	C5	S1	S2	S3 S	4 S5
			C	O.V/E	R								
Total:	Amo	ype: SWD LWD	Е	3	U	DP	ov	IV					FSZ:
	Loc: P/s										CRO	WN CLO	SURF
LWD:	DIS	T: INSTRE	AM VE	G: N	A		1 V		1				30112
RB SHP:	Texture: F					RIP:		STG:					
LB SHP:	Texture: F					RIP:		STG:					

Reach # ILP Map #

ILP#

Site 20

1.0

103P.020

			23;3(0)	JECT						
Project Name Stream Name (gaz.) Project Watershed Code		,	00-000-000-00		Project (Code:	3476			
			WATE	RSHED						
Gazetted Name:				Local Name: None						
Watershed Code: 000-000000-00			000-000-000							
ILP Map#: 103P.020 ILP	#: 11123 NID M	ap #: 103P.020		NID #: 61336	Reach #:	1.0	Site #: 20			
Field UTM(Zone/East/North	/Method) GIS	S UTM(Zone/Ea	st/North)	Site Lg: 100		Method: HC	Access: V2			
	9	558404	6115292	Ref. Name:						
Date: 2000/07/27 Time: 1	5:10 Agend	y: C172	Crew: BW/		Fish (Crd?:	Incomplete:			
			CHA	NNEL						
Mtd w	vidth width width	width width	width wid	th width width	width Avg		adient % Mtd Avg			
Channel Width (m):					0.00	Method I:	0.00			
Wetted Width (m):					0.00	Method II:				
Pool Depth (m):					0.00	No Vis.Ch.:	✓ Intermittent:			
Wb Depth:	Avg	: 0.00 M	ethod:	Stage: L	M H	Dw:	Tribs.:			
COVER	Total:									
Type: SWD LWD B U DP OV IV CROWN CLOSURE										
Amount:										
LWD:	DIST:									
LB SHP:				RB SHP	:					
Texture: F G	СПВП	R A		Texture	:	G C B	RA			
RIP:				RIP	:					
STG:				STG	:					
			WA	TER						
EMS:			F	leq #:						
Temp:	Method	:	C	ond.:		Method:				
pH:	Method	:		Turb.:	ML	C Method:				
Flood Signs:	Method									
			MERPH	OLOGY						
Bed Material: Domin	ant: Su	bdom:		01	B1 B2	B3 D1 D2	D3			
D95: D (d	:m):	Norph:	רפות	URBANCE						
Pattern:				DICATORS C1	C2 C3	C4 C5 S1	S2 S3 S4 S5			
Islands:										
Coupling:										
Confinement:				Bore:	CIDE	DIAG TAND	CDAN DD			
FSZ				Bars: N	SIDE	DIAG MID	SPAN BR			
		H	35117.31	GUALITY						
Name	No visible shares!	let a etreem N	notontial f-1	Comme	nts					
Other	No visible channel. N	ot a stream. No	COMM							
Section	T			Comme	nte					
SITE CARD	No photos taken			Comme	iira					
	No photos taken									
CHANNEL	NVC									

Reach # ILP Map #

ILP#

21-40%

30 STREAM REFERENCING Gazetted Name: MILL CREEK Local Name: Mill Creek ILP#: ILP Map #: : a = 1 (o a) UTM(Zone/East/North): 9.558412.6115131 Sample Type: B Reach #: 3.0 Order: 4 US Elev (m): 485 Magnitude: 108 Length (km): 2.77 Gradient (%): 2.31 Confinement: OC Coupling: PC Open water: A BGC Zone: ICH Bars: N SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: FR Islands: N 9 11 2 Date: 2000/07/27 Site #: 21 GIS UTM(Zone/East/North) Agency: C172 Crew: BW/EM/K 558295 Ref. Name: Site Lg (m): 100 6113158 CHANNEL No Vis.Ch.: Intermittent: Min Max # Avg % Min % Max % Avg Channel Width (m): 16.67 12 21 6 **Gadient %: 3.75** 3 4 Dw: Tribs.: Wetted Width (m): 15.50 12 18 6 Pool Depth (m): 0.71 0.600 0.800 6 Wb Depth (m): 0.93 0.9 3 Stage: L M ✓ H Temp (C): 9 pH: 7.6 Cond.: 40 Turb.: ☐ T ☐ M ✔ L ☐ C MORPHOLOGY Bed Material: Dominant: C Subdom: B ✓ SIDE DIAG MID SPAN D95: 40.00 D (cm): 40.00 01 Pattern: SI Islands: N Coupling: PC Confinement: FC DISTURBANCE Morph: RP INDICATORS C1 C2 C4 C5 S2 00//=1 Total: M LWD IV Type: FSZ: Amount: S S D N Loc: P/S/O: **CROWN CLOSURE V**

	FISH											
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)			
21	EF	1	200	350 sec	400	DV	2	65	112			

RIP: M

RIP: M

STG: YF

STG: YF

INSTREAM VEG:

LWD: F

RB SHP: V

LB SHP: V

DIST: C

Texture: F G C B R A

Texture: F G C B R A

Reach # IL

ILP Map #

ILP#

Site 21

3.0

.P#

***************************************			((0)			
Project Name: Stream Name (gaz.): Project Watershed Code:			000-000-000-000		Project Code:	3476
		Y. A				
Gazetted Name: MILL CREEK			Local Nam	e: Mill Creek		
Watershed Code: 400-362300-0000	00-0000-0000-0000-000	0-000-000-000	-000			
ILP Map#: ILP #:	NID Map #	: 103P.020	NID #: 613	32 Re	ach #: 3.0	Site #: 21
Field UTM(Zone/East/North/M	ethod) GIS UT	M(Zone/East/Nort	h) Site	Lg: 100	Method:	HC Access: V2
	and the second second	58295 6113	158 Ref. N	lame:		
Date: 2000/07/27 Time: 16:0	Agency: C	172 Crew	: BW/EM/KT		Fish Crd?:	Incomplete:
		C	HAKKEEL			
Mtd wid	th width width wid	th width width	width width	width width	Avg	Gadient % Mtd Avg
Channel Width (m): GE 21.00					16.67 Method	
Wetted Width (m): GE 17.0	00 18.00 14.00 14.0	00 12.00 18.00			15.50 Method	III: 5.0 4.0 C
Pool Depth (m): MS 0.86	0 0.73 0.80 0.6	0 0.64 0.67			0.71	
Mile Dente I do I o	1 0 1 4 0	00 Makhadi	MC CA	I 🗆 M	No Vis.	= = = = = = = = = = = = = = = = = = = =
Wb Depth: 1.0 .9	.9 Avg: 0.	93 Method:	IVIS SE	age: L M ✓	П	Dw: Tribs.:
COVER	Total: M					
Type: SWD LWD	B U	DP OV	IV CR	ROWN CLOSURE		
Amount: T S	S T	D T	N 2	21-40%		
Loc: P/S/O:			IN:	STREAM VEG:	N 🕢 A 🗌 M	_ v _
LWD: F	DIST: C					
	DIST. C					
LB SHP: V				RB SHP: V		
Texture: F G	CBBR	Α		Texture:	F G C	BRA
RIP: M				RIP: M		
STG: YF				STG: YF		
			WATER			
			>00000000000000000000000000000000000000			
EMS:			Reg #:			
EMS: Temp: 9	Method: T3		Req #: Cond.: 40		N	lethod: S4
-SAME A	Method: T3 Method: P2		Cond.: 40			
Temp: 9] T □ M 🕟		lethod: S4 lethod: GE
Temp: 9 pH: 7.6	Method: P2		Cond.: 40			
Temp: 9 pH: 7.6 Flood Signs: NONE	Method: P2 Method: GE	M:Q3A	Cond.: 40			
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant	Method: P2 Method: GE	M Q 6	Cond.: 40 Turb.:	O1 B1	el C M	lethod: GE
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm)	Method: P2 Method: GE	M Q 6	Cond.: 40 Turb.:	O1 B1	B2 B3 D1	D2 D3
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI	Method: P2 Method: GE	M Q 6	Cond.: 40 Turb.:	O1 B1	el C M	lethod: GE
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N	Method: P2 Method: GE	M Q 6	Cond.: 40 Turb.:	O1 B1	B2 B3 D1	D2 D3
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC	Method: P2 Method: GE	M Q 6	Cond.: 40 Turb.:	O1 B1	B2 B3 D1	D2 D3
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC	Method: P2 Method: GE	M Q 6	Cond.: 40 Turb.:	O1 B1 C1 C2	B2 B3 D1 C3 C4 C5	D2 D3
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC	Method: P2 Method: GE	M:Q:F n: B n: RP	Cond.: 40 Turb.: [PHOLOG DISTURBANCE INDICATORS	O1 B1 C1 C2 N SI	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC	Method: P2 Method: GE	M:Q:F n: B n: RP	Cond.: 40 Turb.: [PHOLOG DISTURBANCE INDICATORS	O1 B1 C1 C2 N SI	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC	Method: P2 Method: GE	M:Q:F n: B n: RP	Cond.: 40 Turb.: [PHOLOG DISTURBANCE INDICATORS	O1 B1 C1 C2 N SI	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat Hi	Method: P2 Method: GE t: C Subdon): 40.00 Morpl	M Q F n: B n: RP H A B I T with moderate am	Cond.: 40 Turb.: IPHOLOG DISTURBANCE INDICATORS Bars	O1 B1 C1 C2 □ □ □ : □ N ✓ SI TY Comments	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat OverWinter Habitat Hi	Method: P2 Method: GE t: C Subdon): 40.00 Morpl igh value rearing habitat igh value overwintering h	MOF n: B n: RP HABIT with moderate amonabitat exists in nur	Cond.: 40 Turb.: IPHOLOG DISTURBANCE INDICATORS Bars AT CUAL DURING OF COVER	O1 B1 C1 C2 □ □ □ : □ N ✓ SI TY Comments	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat OverWinter Habitat Hi	Method: P2 Method: GE t: C Subdon): 40.00 Morpl	MOF THABIT with moderate amonabitat exists in nurul tontained in pool	Cond.: 40 Turb.: IPHOLOG DISTURBANCE INDICATORS Bars AT QUAL Dunts of cover merous deep poorets of suitable grounds.	O1 B1 C1 C2 □ □ □ : □ N ✓ SI TY Comments	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat OverWinter Habitat Hi	Method: P2 Method: GE t: C Subdon): 40.00 Morpl igh value rearing habitat igh value overwintering h	MOF THABIT with moderate amonabitat exists in nurul tontained in pool	Cond.: 40 Turb.: IPHOLOG DISTURBANCE INDICATORS Bars AT CUAL DURING OF COVER	O1 B1 C1 C2 □ □ □ : □ N ✓ SI TY Comments	B2 B3 D1 C3 C4 C5	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat H OverWinter Habitat H Spawning Habitat M Photo Foc Le	Method: P2 Method: GE t: C Subdon): 40.00 Morpl igh value rearing habitat igh value overwintering hoderate spawning habita	M Q F n: B n: RP with moderate amenabitat exists in nur at contained in pool	Cond.: 40 Turb.: RPHOLOG DISTURBANCE INDICATORS Bars AT QUAL Dunts of cover merous deep poorets of suitable green and the cover of suitable green and th	O1 B1 C1 C2 N SI TY Comments	B2 B3 D1 C3 C4 C5 DE DIAG N	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat Hi OverWinter Habitat Hi Spawning Habitat M Photo Foc Li R: 3 F: 7 STD	Method: P2 Method: GE t: C Subdon): 40.00 Morpl igh value rearing habitat igh value overwintering hoderate spawning habitat g Dir U	M Q F The Brack of the Brack o	Cond.: 40 Turb.: RPHOLOG DISTURBANCE INDICATORS Bars AT CUAL counts of cover merous deep poorets of suitable greaters of suitable	O1 B1 C1 C2 N SI TY Comments Is ravel	B2 B3 D1 C3 C4 C5 DE DIAG N	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat H OverWinter Habitat H Spawning Habitat M Photo Foc Le	Method: P2 Method: GE t: C Subdon): 40.00 Morpl igh value rearing habitat igh value overwintering hoderate spawning habita	MABIT with moderate amenabitat exists in nural contained in poole Upstream Downstre	Cond.: 40 Turb.: RPHOLOG DISTURBANCE INDICATORS Bars AT QUAL punts of cover merous deep poorets of suitable greater to su	O1 B1 C1 C2 N SI TY Comments Is ravel	B2 B3 D1 C3 C4 C5 DE DIAG N	D2 D3 S1 S2 S3 S4 S5
Temp: 9 pH: 7.6 Flood Signs: NONE Bed Material: Dominant D95: 40.0 D (cm) Pattern: SI Islands: N Coupling: PC Confinement: FC FSZ Name Rearing Habitat Hi OverWinter Habitat Hi Spawning Habitat M Photo Foc Li R: 3 F: 7 STD	Method: P2 Method: GE t: C Subdon): 40.00 Morpl igh value rearing habitat igh value overwintering hoderate spawning habitat g Dir U	MABIT with moderate amenabitat exists in nural contained in poole Upstream Downstre	Cond.: 40 Turb.: RPHOLOG DISTURBANCE INDICATORS Bars AT CUAL counts of cover merous deep poorets of suitable greaters of suitable	O1 B1 C1 C2 N SI TY Comments Is ravel	B2 B3 D1 C3 C4 C5 DE DIAG N	D2 D3 S1 S2 S3 S4 S5

Reach #

ILP Map #

ILP#

Watershed Code:

21 EF

21 EF

1

DV

1 DV

112

65

UU

U

U

3.0

Gazetted Name: MILL CREEK										al: Mill	Creek			
Wa										ILP#:	Lake Fro		3 -	
Fish Permit #: 25350K Date: 2000/07/27 To: 2000/07/27 Agency:									ncy: C	172 C	rew: BW/EN	NKT Resan	nple:	
						5	ITE /	METH	0 D					
Site#	NID N	lap	NID	# UTM	Zone/East/	North/Mthd	MTD/NO	Temp	Cond	Turbi	4	Co	mment	
21	103P.	020	6133	32			EF 1	9	40	L				
						Α.	GEAR	9 2000	NGS					
Site#	MTD/	NO	H/P	Date In	Time In	Date Out	Time Out				Cor	nment		
	EF	1	1	2000/07/27	16:05	2000/07/27	16:50							
21		*****			0 2	B = 0-18180	(2) (3) (B		(0)	97.97	(e)))(s)			
21								101-101-	Vol	age	Frequency	Pulse	Make	Model
21 Site#	M.	TD/N	0	H/P	Encl	Sec	Lnth	Wdth	VOI	age	riequency	I disc	IVIANC	



Site #21, Upstream photo of a wide portion of the reach Roll #3, Frame #7, Date: 2000/07/27



Site #21, Downstream photo of LWD which is creating habitat complexity Roll #3, Frame #8, Date: 2000/07/27

Reach # ILP Map #

ILP#

1.0 103P.020

STREAM REFERENCING															
Gazetted Name:							Local N	ame: N	None						
Watershed Code: 000-000000	0-00000-00000-00	000-0000-000-0	00-000-00	00-000-	-000				ILP	Map #:	103P.0	20		ILP#:	11062
				R	EAG	H									
Reach #: 1.0	U	TM(Zone/East	/North): 9	.55895	5.6112	627	s	ample	Type:	R					
Length (km): .16	Gradient (%	6): 0	US	Elev (r	m): 439			0	rder: '	1		Mag	nitude:	1	
Confinement: OC Islands: N		Coupling: DC								NO					
Islands. N	Bars: VN _SIDE _DIAG _MID _SPAN _BR Riparian Veg.: MLanduse: NO														
Site #: 22	GIS LITM(7)	ne/Fast/North	,	***********	***********	•••••	Δ	gency	· C172			Crow	r B\A//5	ENA/L/	
Site Lg (m): 100	GIS UTM(Zone/East/North) Date: 2000/07/27 Agency: C172 Crew: BW/EM 9 558844 6112577 Ref. Name:								TIANK						
				СН	ANN	EL									
No Vis.Ch.: ✓ Intermittent:				Avg	Min	Max	#					Avg %	Min %	Max %	#
Dw: Tribs.:		Channel Wid	, ,	0.00	0	0	0] [lient %:		0	0	0
		Wetted Wid	, ,	0.00	0	0	0	ļ l	Р	ool Dep	oth (m):	0.00	0	0	0
		AAD Del)(II (III).]	0.00	0	0	0	J							
Stage: L M H	Temp (C):			pH:				nd.:			Tui	rb.:	T	M	L C
			M	ORI	28(0)	(O)(G)	•								
Bed Material: Dominant:		ubdom:					Bars:	N		SIDE	DIAG	_ N	IID	SPAN	BR
Pattern:		D (cm): Islands:					01	B1	B2	ВЗ	D1	D2	D3		
Coupling:		nement:		-	NETI ID	BANCE									
Morph:					INDICA		C1	C2	C3	C4	C5	S1	S2	S3 S	4 S5
				6	0)//E	R									
Total:		ype: SWD	LWD	В		U	DP	0	V	IV					FSZ:
	Loc; P/S										-		CBO	WN CLC	CUBE
LWD:	DIS	T:	INSTREA	M VEG	: N	A	M		V				CRO	AAIA CEC	SURE
	Texture: F	G	17.00	√LG			RIP:		ST	G.					
	Texture: F	G G		R			RIP:		ST						

Reach # ILP Map #

ILP#

Site

103P.020 22 11062 1.0

	PROJECT								
Stream Name (gaz.):	: Mill Area 1:20K Stream Inventory Project : SKEENA RIVER								
	WATERSHED								
Gazetted Name:	Local Name: None								
	0000-00000-0000-0000-000-000-000-000-000-000								
ILP Map#: 103P.020 ILP #	#: 11062 NID Map #: 103P.020 NID #: 61406 Reach #: 1.0 Site #: 22								
Field UTM(Zone/East/North	/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: V2								
	9 558844 6112577 Ref. Name :								
Date: 2000/07/27 Time: 13	Agency: C172 Crew: BW/EM/KT Fish Crd?: Incomplete:								
	CHANNEL								
Mtd w	ridth width width width width width width width width width Avg Gadient % Mtd Avg								
Channel Width (m):	0.00 Method I: 0.00								
Wetted Width (m):	0.00 Method II:	_							
Pool Depth (m):	0.00								
	No Vis.Ch.: ✓ Intermittent:								
Wb Depth:	Avg: 0.00 Method: Stage: L M H Dw: Tribs.:								
COVER Total:									
Type: SWD LWD	D B U DP OV IV CROWN CLOSURE								
Amount:									
Loc: P/S/O: N A M V									
LWD: DIST:									
LB SHP:	RB SHP:								
Texture: F G									
RIP:	RIP:								
STG:	STG:								
	WATER								
EMS:	Req #:								
Temp:	Method: Cond.: Method:								
pH:	Method: Turb.: T M L C Method:								
Flood Signs:	Method:								
	MORPHOLOGY								
Bed Material: Domina	ant: Subdom: O1 B1 B2 B3 D1 D2 D3								
D95: D (c	Marsh:								
,	DISTORBANCE	_							
Pattern: Islands:	INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5	5							
Coupling:									
Confinement:									
FSZ	Bars: N SIDE DIAG MID SPAN BR								
	HABITAT QUALITY								
Name	Comments								
OverWinter Habitat	Overwintering habitat is abundant								
Rearing Habitat	Rearing habitat is abundant in this waterbody								
Spawning Habitat	No spawning habitat is available								
	PHOTOS								
	CLg Dir Comments								
R: 3 F: 6 ST	SE SES SESSIONES DE SESSIONES D								
	COMMENTS								
Section Comments									

Reach # ILP Map #

ILP#

Site

1.0

103P.020

11062

	COMMENTS
Section	Comments
CHANNEL	This portion of the reach is a part of the downstream swamp. It contains no channel characteristics and does not meet the definition of a stream. Fish may be present and fish habitat is present. No electrofishing was conducted
CHANNEL	NVC



Site #22, Photo of the waterbody associated with this reach Roll #3, Frame #6, Date: 2000/07/27

Reach # ILP Map #

ILP#

3.0

1031.089

STREAM REFERENCING															
Gazetted Name:								L	ocal I	Name: None					
Watershed Code: 0	00-000000	-00000-	-00000-000	00-000-000-000	0-000-000	0-000-00	0			ILP	Map #:	1031.089	IL	P#:	10772
						RE	A C I	1							
Reach #:	3.0		UT	M(Zone/East/N	orth): 9.	537902.6	08128	38		Sample Type	: R			and a contract of the contract	
Length (km): 1.2	26	Gr	adient (%): 15.71	US E	Elev (m):	350			Order:	2		Magnitude:	3	
Confinement: O	_		Coupling		-	n water:	_	. —		BGC Zone:				_	
Islands: N	N.	Ва	rs: VN	_SIDED	IAG _		SPA	V BI	R R	iparian Veg.:	М		Landuse: N	0	
							9115								
Site #: 122		GI :	S UTM(Zo 53863	ne/East/North) 9: 6081037		Date: 20	00/08/	01		Agency: C172 f. Name:	2		Crew: BW/K	Т	
Site Lg (m): 120 9 538639 6081037 Ref. Name:															
No Vis.Ch.: Inte	rmittent:					**************	/lin	Max	#				Avg % Min % N	lav %	#
			Г	Channel Widtl		-		1.200	6	-	Ga		22.75 12	53	4
DW:	Dw: Tribs.:			Wetted Widtl	h (m):	0.78 0.	600	0.9	6		Pool De	epth (m):	0.07 0.050	0.100	7
				Wb Depti	h (m): C	0.17	0.1	0.2	3						
Stage: L M✓	' H_	Ten	np (C): 7		р	H: 7.4			C	ond.: 40		Turb).: _ T _ N	A 🔲	L 🗸 C
MORPHOLOGY															
Bed Material: Domin															
	D95: 30.0	0		O (cm): 3.00					0	1 B1 B2	2 B3	D1	D2 D3		
	tem: SI oling: DC			slands: N ement: FC					Г						
,	orph: CP		Commi	omont. i o			DICAT	BANCE TORS	C	1 C2 C:	3 C4	C5	S1 S2 S3	3 S4	S5
														7 54	33
						(%(6)	VE:			- 1 = 1 =					
Total: M		Γ	Ту	/pe: SWD	LWD	В		U	DP	OV	IV	7		F	SZ:
			Amo		S	N		D	N	Т	N				
			Loc: P/S	8/0:										V CLOS	
LWD: F			DIS	T: C IN	ISTREAM	/ VEG:	N V	/ A		M U V			3	41-70	0%
RB SHP: U		Textur	e: 📝 F	☐ G ☐ C	□В	R [_ A	R	IP: M	S	TG: YF				
LB SHP: U		Textur	e: 📝 F	GC	В	☐ R [_ A	R	IP: M	8	TG: YF				
						E E A T	UR	E S							
NID Map NID	Туре	Hgt	Method	-5	Method		Photo			AirPhoto			(Zone/East/Nort		od)
103I.089 71513 Comments:	С	60.0	GE	120	GE	R: 3	F:	18	L:	#:		9 538	8861 608084	16	GIS
Comments:															
						7-8	SH								
	umber Capture Number of Total Length Total Method Events (m) Time					1	/oltage		Species		Total Fish	Minimum Length (mm)	1,100,000	imum th (mm)	
122	EF	1.7) sec		400		NFC 0						

Reach # ILP Map #

ILP#

Site

3.0

1031.089

10772

	~~~		***********************	**********************	***************************************	******************************	***************************************
Project Name: 1	Mill Area 1:20K Stre	eam Inventory Pi	roject				
Stream Name (gaz.):		,	,		Project Code	: 347	76
Project Watershed Code:		-00000-0000-00	00-000-000-000	-000-000-000	0 0 0 000		
Troject Watershed Joue.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
			WATER	SHED			
Gazetted Name:				cal Name: None			
Watershed Code: 000-000000-0000	0 00000 0000 0000	0 000 000 000 0		cal Name. None			
The state of the s				D#: 61513	Reach #:	3.0 Si	ite #: 122
ILP Map#: 103I.089 ILP #: 1		lap #: 103I.089					
Field UTM(Zone/East/North/M	7	S UTM(Zone/Ea	10.000.00.00.00.000.00	Site Lg: 120	N	Method: HC	Access: H
	9	538639	6081037	Ref. Name:			
Date: 2000/08/01 Time: 08:2	Agend	cy: C172	Crew: BW/	KT	Fish Crd?:	✓ ir	ncomplete:
Date: 2000/08/01 Time: 08:2	0			~~~			
			CHAN	***************************************			
Mtd widt	h width width	width width	width width	width width	width Avg	Gadient %	
Channel Width (m): MS 1.20	0.80 0.90	1.00 0.90	0.70		0.92	Method I: 53.0 12.0	0 C 22.75
Wetted Width (m): MS 0.60	0.80 0.90	0.80 0.90	0.70		0.78	Method II: 12.0 14.0	0 C
Pool Depth (m): MS 0.06	0.07 0.10	0.05 0.05	0.07 0.06		0.07		
Wb Depth: .1 .2	.2 Ava	. 0.47	lethod: MS	Steme: I	MV H		nittent: Tribs.:
Wb Deptil1 .2	.Z AVg	: 0.17 N	iethod. Wo	Stage. L	M V II	Dw:	ITIDS
COVER	Γotal: M						
Type: SWD LWD	BU	DP	OV IV	CROWN CI	LOSURE		
Amount: N S	N D	N	T N	3 4	1-70%		
Loc: P/S/O:				INSTREAM	VEG: N 🗸 A	MOV	
LWD: F	DIST: C						
LB SHP: U				RB SHP	): U		
Texture: 🗸 F 🗍 G	СПВП	R A		Texture	: F G	CBBR	Α
				RIP			
RIP: M STG: YF				STG			
310.11							
				0.0			
			WAT				
EMS:							
EMS: Temp: 7	Method	l: T3	Re	ER		Method: S4	
	Method Method		Re Co	E R q #: nd.: 40			
Temp: 7		: P2	Re Co	E R q #:		Method: S4 Method: GE	
Temp: 7 pH: 7.4	Method	: P2	Re Co Tu	E R q #: nd.: 40 rb.:			
Temp: 7 pH: 7.4 Flood Signs: NONE	Method Method	l: P2 : GE	Re Co	ER q#: nd.: 40 rb.:	м □ г № с	Method: GE	
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant	Method Method	: P2 : GE	Re Co Tu	E R q #: nd.: 40 rb.:			
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant	Method Method	l: P2 : GE	Re Co Tu M.O.R.P.H.C	ER q#: nd.: 40 rb.:	м □ г № с	Method: GE	
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant	Method Method	: P2 : GE	Re Co Tu M O R P H C DISTU	#: nd.: 40 rb.:	м □ г № с	Method: GE	\$3 \$4 \$5
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm)	Method Method	: P2 : GE	Re Co Tu M O R P H C DISTU	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3	\$3 \$4 \$5
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI	Method Method	: P2 : GE	Re Co Tu M O R P H C DISTU	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3	\$3 \$4 \$5
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N	Method Method	: P2 : GE	Re Co Tu M O R P H C DISTU	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2	
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC	Method Method	: P2 : GE	Re Co Tu M O R P H C DISTU	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2	
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC	Method Method	: P2 : GE	Re Co Tu M.O.R.P.H.C DISTU	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2	
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ	Method Method	l: P2 l: GE	Re Co Tu M C R P H C DISTU INDIC	g#: nd.: 40  rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	I BR
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg	Method Method  :: G Su :: 3.00 M	i: P2 i: GE ibdom: C Morph: CP	Re Co Tu M C R P H C DISTU INDIC	#: nd.: 40 rb.:	M L C  B1 B2 B3  C2 C3 C4  SIDE DIAG	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.6	Method Method  :: G Su :: 3.00 M	l: P2 l: GE	Re Co Tu M C R P H C DISTU INDIC	g#: nd.: 40  rb.:	M L C  B1 B2 B3  C2 C3 C4  SIDE DIAG	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	I BR
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg	Method Method  :: G Su :: 3.00 M	E: P2 E: GE  Shoom: C  Morph: CP  Lg Meth 120 GE	Re Co Tu M G R P H G DISTU INDIC INDIC INDIC	# A CATORS C1  Bars: ✓ N  RES  Oto F: 18 L:	M L C  B1 B2 B3  C2 C3 C4  SIDE DIAG	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.6	Method Method  :: G Su :: 3.00 M	E: P2 E: GE  Shoom: C  Morph: CP  Lg Meth 120 GE	Re Co Tu M C R P H C DISTU INDIC	# A CATORS C1  Bars: ✓ N  RES  Oto F: 18 L:	M L C  B1 B2 B3  C2 C3 C4  SIDE DIAG	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.6	Method Method  :: G Su :: 3.00 M	E: P2 E: GE  Shoom: C  Morph: CP  Lg Meth 120 GE	Re Co Tu M G R P H G DISTU INDIC INDIC INDIC	# A CATORS C1  Bars: ✓ N  RES  Oto F: 18 L:	M	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.0 Comments:  Name OverWinter Habitat N	Method Method  T: G Su  T: 3.00 M  T Method  To GE	Lg Meth 120 GE	Re Co Tu MORPHO DISTUINDIC	# ind.: 40  rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.0 Comments:  Name OverWinter Habitat N Rearing Habitat Property None	Method Method  T: G Su  T: 3.00 M  T Method  To GE  To overwintering habour to moderate rea	Lg Meth 120 GE	Re Co Tu MORPHO DISTUINDIC	# ind.: 40  rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.1 Comments:  Name OverWinter Habitat N Rearing Habitat Processors	Method Method  T: G Su  T: 3.00 M  T Method  To GE	Lg Meth 120 GE	Re Co Tu MORPHO DISTUINDIC  FEATURE  TO R: 3  ABITAT (	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)
Temp: 7 pH: 7.4 Flood Signs: NONE  Bed Material: Dominant D95: 30.0 D (cm) Pattern: SI Islands: N Coupling: DC Confinement: FC FSZ  NID Map NID Type Hg 1031.089 71513 C 60.0 Comments:  Name OverWinter Habitat N Rearing Habitat Property None	Method Method  T: G Su  T: 3.00 M  T Method  To GE  To overwintering habour to moderate rea	Lg Meth 120 GE	Re Co Tu MORPHO DISTUINDIC	g#: nd.: 40 rb.:	M	Method: GE  D1 D2 D3  C5 S1 S2  G MID SPAN	BR Brooth/Method)

 Reach #
 ILP Map #
 ILP #
 Site

 3.0
 103I.089
 10772
 122

Watershed Code:	000-000000-00000-00000-0000-0000-000-000-000-000-000	3.0	1031.089	1077

	P	hoto	)		Foc Lg	J Dir									
R:	3	1		17	STD	U	Upstream photo towards the 60 m cascade								
R:	3	1		18	STD	D	Downstream photo of riffle/pool habitat								
	COMMENTS														
		S	ect	tion			Comments								
		SIT	EC	CARD	Fis	h form 16482									
		Ch	IAN	INEL	120	m Cascades at lower end	of reach prevent upstream fish migration								
	CHANNEL S6 Stream														

### **FDIS Fish Form**

Reach #

ILP Map #

ILP#

Watershed Code:

000-000000-00000-00000-0000-000-000-000-000-000-000

3.0

1031.089

								WAT	E R E	0.0	1							
Gaze	etted	Name	:	Local: None														
Pr	oject	Code	400-00000-00000-0000-0000-0000-000-000-															
	WS	Code	000-	000-00000-00000-00000-0000-0000-000-000-000-000-000														
Wa		dy ID:														3 -		
	Proj	ect ID:	3476	3476 Lake/Stream: S Lake From Date:														
Fis	Fish Permit #:			25350K Date:			08/01	To: 2000/08		08/01	O1 Agency:		C172	Crew:	ew: BW/KT R		mple:	
SITE / METHOD																		
Site#	NID	NID Map		# U	TM:Zone/East/North/Mthd			MTD/N	NO T	emp	Cond	Turb	oid	Comment				
122	1031.089		615	61513				EF	1	7	40	С						
A. GEAR SETTINGS																		
Site#	МТ	ITD/NO H/P		Date	n Tim	e In Date Out		Time C	Out	Comment								
122	EF	1	1	2000/08			00/08/01	09:00	_									
			C. ELECTROFISHER SPECIFICATIONS															
Site#	MTD/N		10	H/P		:I Sec		Lnth	. W	dth	Voltage		Frequenc	у Р	ulse	Make	Model	
122	EF		1	1	0	29	0	50.0		0.8	400		60		6	SMITH	12B	
							F	ISH	SUM	MAF	łΥ					ROOT		
Site#	MTD/N		10	H/P	Species	Stage	Ag	je T	Total #	Lgth	h (Min/Max)		FishAct		Comment			
122	EF		1	1	NFC				0									



Site #122, Upstream photo towards the 60 m cascade Roll #3, Frame #17, Date: 2000/08/01



Site #122, Downstream photo of riffle/pool habitat Roll #3, Frame #18, Date: 2000/08/01

Reach # ILP Map #

ILP#

			8	REAMR	EFERE	NCI	N G			
Gazetted Na	me: LORNE CRI	EEK				Loca	I Name: Lorne C	reek		
Watershed Co	ode: 400-301700	-00000-00000-00	00-0000-000-000	-000-000-000-0	00		IL	P#:		
Reach	#: 2.0	יט	M(Zone/East/No	orth): 9.536177	.6082196		Sample Type:	В		
Length (kr	n): 3.08	Gradient (%	): 3.93	US Elev (m	): 320		Order: 4	4	Magnitude: 1	39
Confineme		Coupling		Open wate			BGC Zone:		7	_
Island	ds: N	Bars: N	SIDE DI	AG MID		BR	Riparian Veg.:	М	Landuse: N	0
				_	ITE					_
Site #: 1 Site Lg (m): 1		GIS UTM(Zo 9 53625	ne/East/North) 1: 6082391	Date: 2	000/08/01		Agency: C172 lef. Name:		Crew: BW/K	T
Site Eg (iii).	20	5 ; 55025	1, 0002331		ANNEL		CI. Name.			
No Vis.Ch.:	Intermittent:			Avg	Min Max	#	$\neg$		Avg % Min % N	lax % #
Dw:	Tribs.:	_ [	Channel Width		20 32	6		Gadient %:	4.25 4	5 4
DW:	IIIDS.:		Wetted Width	(m): 12.67	10 14	6	P	ool Depth (m):	0.73 0.5	1 6
		[	Wb Depth	(m): 4.67	4 5	3				
Stage: L	M✔ H	Temp (C): 8		pH: 7.6			Cond.: 60	Tur	b.: _ T _ N	LC
				MORE	# (0 H (0 G	Y				
Bed Material:			ubdom: C			Bar	rs: N 🗸 S	SIDE DIAG	MID SI	PAN BR
	D95: 120.0	-	O (cm): 80.00			(	O1 B1 B2	B3 D1	D2 D3	
	Pattern: IR Coupling: CO		slands: N ement: FC							
	Morph: CP	Comm	ement. FC		STURBANC NDICATORS	-				
				,	15.0711 5111	, (	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				C C	VER					
Total:	Δ	Т	/pe: SWD	LWD B	Τυ	Τр	P OV T	IV		FSZ:
r otal.		Amo		N D	N	S		N		1 32.
		Loc: P/S	6/0:			<b>V</b>			CROW	CLOSURE
LWD:	F	DIS	T: E INS	STREAM VEG:	N V	A 🗌	M U V		1	1-20%
RB SHP:	S	Texture: F	GC	✓ B R	A	RIP: N	st st	G: MF		
LB SHP:	S	Texture: F		<b>✓</b> B	_ A	RIP: N	1 ST	G: MF		
				F	ISH					
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Volta	ge	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
			17							

	Method	Events	(m)	Time			Fish	Length (mm)	Length (mm)
123	EF	1	60 218 sec		300	DV	1	110	110

Gazetted Name: LORNE CREEK

Field UTM(Zone/East/North/Method)

ILP Map#:

Date: 2000/08/01

Channel Width (m):

COVER

Amount

Loc: P/S/O:

Type:

LWD: F

LB SHP: S

RIP: M

STG: MF

EMS:

Temp: 8

Flood Signs: NONE

Bed Material:

pH: 7.6

Wetted Width (m):

Pool Depth (m):

Wb Depth:

SWD

Reach #

Project Name: Mill Area 1:20K Stream Inventory Project

32 00

14.00

0.70

5.0

В

D

DIST: E

Total: A

**V** 

Texture: ☐ F ☐ G ☐ C ✓ B ☐ R ☐ A

Dominant: B

D95: 120.0 D (cm): 80.00

NID Map #: 1031.088

9 536251

Agency: C172

10.00 14.00

Avg: 4.67

1.00

0.70

U

Method: T3

Method: P2

Method: GE

Subdom: C

Morph: CP

GIS UTM(Zone/East/North)

30 00 31 00 20 00 25 00

DP

S

12.00

0.50

width | width | width | width | width | width | width | width | width |

14.00

0.70

Method: GE

OV

N

6082391

Crew: BW/KT

CHANNEL

IV

N

Water Far

MORPHOLOGY

Reg #:

Cond.: 60

DISTURBANCE **INDICATORS** 

Stream Name (gaz.): SKEENA RIVER

ILP#:

Time: 10:12

25.00

12.00

0.80

5.0

LWD

Mtd

GF

GE

GE

4.0

2.0

PROJECT

Water Resident

Local Name: Lorne Creek

Site La: 120

**CROWN CLOSURE** 

RB SHP: S

RIP: M

STG: MF

Turb.: ☐ T ☐ M 🗸 L ☐ C

B1

B2

**B3** 

D1

01

1-20%

Ref. Name:

NID #: 61458

ILP# ILP Map # Site 123 **Project Code:** 3476 2.0 Site #: 123 Reach #: Method: HC Access: H Fish Crd?: 🗸 Incomplete: Avg Gadient % Mtd Avg 27.17 4.0 5.0 C Method I: 4 25 12.67 Method II: 4.0 4.0 С 0.73 No Vis.Ch.: Intermittent: Stage: L M ✓ H Tribs.: Dw: INSTREAM VEG: N 🗸 A 🗌 M 🗍 V 🗍 Texture: ☐ F ☐ G ☐ C ✓ B ☐ R ☐ A

Method: S4

Method: GE

D2

D3

Pattern: IR		INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5											
Islands: N													
Coupling: CO													
Confinement: FC													
FSZ		Bars: ☐ N 📝 SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ BR											
	1	HABITAT QUALITY											
Name		Commonts											
Name	Comments												
Other	Marginal rearing and overwintering	habitat exists due to the high water velocity and the lack of channel complexity											
Spawning Habitat	No spawning habitat exists due to t	the large substrate size											
		PHOTOS											
Photo Foc	Lg Dir	Comments											
R: 3 F: 19 ST	D U	Upstream photo showing the steep walls of the valley											
R: 3 F: 20 ST	D D	Downstream photo showing the boulder substrates											
		COMMENTS											
Section		Comments											

### **FDIS Site Card**

Reach #

ILP Map #

ILP#

Site

2.0

123

COMMENTS											
Section	Comments										
SITE CARD	Fish form 9221										
CHANNEL	No barriers between this site and the Skeena River. DV captured										
CHANNEL	S1 Stream										

February 12, 2001

Reach #

2.0

ILP Map #

ILP#

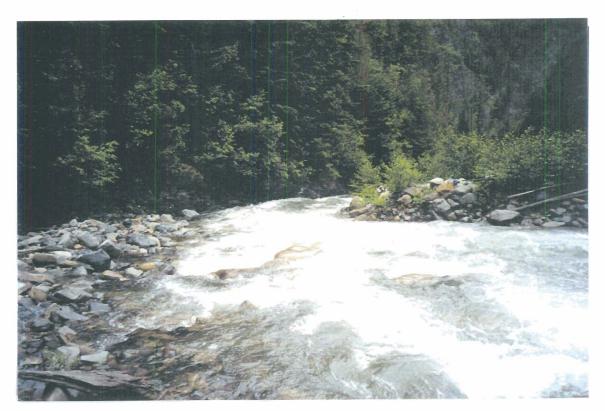
Watershed Code:

WATERBODY Gazetted Name: LORNE CREEK Local: Lorne Creek ILP #: Reach #: 2 -Waterbody ID: ILP Map #: Lake From Date: Lake/Stream: S Project ID: 3476 Resample: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT SITE / METHOD 
 NID#
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 61458
 EF
 1
 8
 60
 L
 Comment NID Map Site# 61458 123 1031.088 A GEAR SETTINGS 
 Date In
 Time In
 Date Out
 Time Out

 2000/08/01
 10:12
 2000/08/01
 10:36
 Comment MTD/NO H/P Site# 1 G. ELECTROFISHER SPECIFICATIONS Pulse Model Sec Lnth Wdth Voltage Frequency MTD/NO H/P Encl Site# 123 EF 0 218 60.0 2.0 300 60 6 **SMITH** 12B 1 ROOT FISH SUMMARY Age Total # Lgth (Min/Max) FishAct Site# MTD/NO Species Stage Comment 1 110 110 123 EF DV INDIVIDUAL FISH DATA Sex Mat Vch# Genetic Roll # Frame# Comment Site# MTD/NO H/P Species Length Weight Age Str/Smpl#/Age Str/Smpl# DV 110 123 EF 1

February 12, 2001 Page 32 of 96



Site #123, Downstream photo showing the boulder substrates Roll #3, Frame #20, Date: 2000/08/01



Site #123, Upstream photo showing the steep walls of the valley Roll #3, Frame #19, Date: 2000/08/01

Reach # IL

ILP Map #

ILP#

					\$	TRE	A M	(8##	REA	(0)11)	G				
Gazetted Na	me: LC	RNE CRI	EEK							Local	Name: Lorne C	Creek			
Watershed Co	ode: 40	0-301700	-00000	-00000-000	00-0000-000-00	0-000-0	00-000-	-000			ILP	Map #:		IL	P#:
							F	E A 6	Ħ						
Reach	ı #:	4.0		UT	M(Zone/East/N	North): 9	9.53119	2.6082	973		Sample Type:	: В			
Length (ki	m): 3.9	Í	Gr	adient (%)	: 6.73	US	Elev (	m): 650	)		Order:	4		Magnitude: 6	30
	Confinement: EN Coupling: CO Open water: A BGC Zone: CWH Islands: N Bars: N SIDE DIAG MID SPAN BR Riparian Veg.: M														_
Island	ds: N		Ba	rs: LN	✓SIDE	DIAG N				IR I	tiparian Veg.:	M		Landuse: N	0
		Г						SITE						- Buy	-
Site #: 1			<b>GI</b>	533299	ne/East/North) 608233		Date:	2000/0	8/01	R	Agency: C172 ef. Name:	2		Crew: BW/K	1
Site Eg (iii).		L		. 00020			(64)	IANA	i E i						
No Vis.Ch.:	Inter	mittent:				Γ	Avg	Min	Max	#	$\neg$		Г	Avg %   Min %   N	lax % #
Dw:		Tribs.:		- [	Channel Widt	th (m):	23.33	20	30	6		Gad		4.75 5	5 4
DW		11103			Wetted Widt		7.17	6	8	6		Pool Dep	oth (m):	0.88 0.800	1 6
				L	Wb Dept	th (m):	1.13	1	1.2	3					
Stage: L	M	H	Ten	np (C): 8			<b>pH</b> : 7.6	6		(	ond.: 60		Turb	).: _ T _ N	/ ✓ L □ C
						ľ	OH.	280	(0)(c)						
Bed Material:	Domin		_		bdom: C					Bars	s: N 🗸	SIDE	DIAG	MID S	PAN BR
		095: 120.0 ern: SI	10		0 (cm): 80.00 slands: N						01 B1 B2	2 B3	D1	D2 D3	
		ing: CO			ement: CO		,	DISTUE	RBANCE						
	Mo	rph: CP							ATORS		1 C2 C3	3 C4	C5	S1 S2 S3	S S4 S5
							0	0.WE	2						
Total	: A				pe: SWD	LWD	В		U	DF		IV			FSZ:
			-	Loc: P/S		N			N	S	N	N		CDOW	N CLOSURE
LWD:	· E		L	DIS		NSTREA	M VEG	3: N	✓ A		MOV			1	1-20%
RB SHP:			Textur		G □ C		T F			RIP: M		TG: MF			
LB SHP			Textur		✓ G C					RIP: M		TG: MF			
							F E		KES.						
NID Map	NID	Туре	Hgt	Method	Lg	Method		Pho		T	AirPhoto		UTM	(Zone/East/Nort	h/Method)
	1471	F	7.0	AE	0	AE	R:	F	:	L:	#:	9	533	608229	5 GIS
Comments:															
								FISH							
Site Number		pture		nber of	Total Length		Total Voltage					otal	Minimum	Maximum Length (mm)	
124				70 sec 400			-	NFC		Fish Length (mm)		Lengar (mm)			

Reach # ILP Map #

ILP#

Site

						121600	= (80)					
	Name (ga	az.): SKI	EENA RIVEI		, ,		)-000-000-	000	Project Co	ode:	3476	
						//and≡i	SHED					
Gazetted Name: L	ORNE CF	REEK				L	ocal Name	: Lorne Cre	ek			
Watershed Code: 4	00-301700	0-00000-0	0000-0000-	0000-000-00	0-000-000-	-000-000						
ILP Map#:	I	LP #:	NI	D Map #: 10	31.088	N	ID#: 6147	71	Reach #:	4.0	Site #: 12	24
Field UTM(Zon	e/East/No	orth/Meth	od)	GIS UTM(Z	one/East/f	North)	Site	_g: 100		Method: HC	Acces	s: H
			7	5332		082332	Ref. Na	ime:				
Date: 2000/08/01	Time	e: 10:50	Ag	gency: C172	С	rew: BW	/KT		Fish Cro	d?: ✓	Incomple	ete:
						e HAN	NEL					
Amount: Loc: P/S/O:  LWD: F  LB SHP: S  Texture:  RIP: M  STG: MF	); GE i); GE h; 1.0	7.00 1.00 1.2 Tota	B D ST: C B	00 30.00 00 6.00 80 0.90 Avg: 1.13	20.00 25 7.00 8 0.90 0 Meth	N N	Sta  CRC 1 INS	DWN CLOSU	23.33 7.17 0.88 M H H	Method II:  Method II:  No Vis.Ch.:  Dw:	Tribs.:	4.75
Temp: pH:				hod: T3			nd.: 60			Method		
Flood Signs:				hod: GE		Ti	ırb.:	Т М	✓ L	C Method	: GE	
					, e. s	8 R P H 6	1 W 2 Y 2 X V					
						~***	a	O1 B	1 B2 B	33 D1 D2	D3	
Bed Material:		minant: B	2.00	Subdom: C						5 51 52		
D95:		) (cm): 80	3.00	Morph: C	-		IRBANCE					
Pattern:						INDI	CATORS	C1 C	2 C3 C	24 C5 S1	S2 S3 S	S4 S5
Islands: Coupling:												
Confinement:												
FSZ							Bars:	N	SIDE D	DIAG MID	SPAN E	BR
						DEFAULU	RES					
NID Map NID	Туре	Hgt	Method	Lg	Method	Ph	oto	Air	Photo	UTM (Zon	e/East/North/Me	thod)
1031.088 71471	F	7.0	AE	0	AE	R:	F:	L:	#:	9 533521	6082295	GIS
Comments:												
		******************************										
Name					j 4 B	ITAT		T Y				
		Overv	vintering and	d rearing hab			C	Comments				
Name	bitat	-		d rearing hab	oitat is limite	ed due to th	e high wate	Comments				
Name Other	bitat	-			oitat is limite	ed due to th	e high wate	Comments				

Reach #

ILP Map #

ILP#

Site 124

								PHOTOS						
	P	hoto			Foo	: Lg	Dir	Comments						
R:	3	F	:	21	ST	D	U Upstream photo showing secondary channels cut during high water							
R:	: 3 F: 22 STD Downstream photo showing the cascade/pool morphology													
	COMMENTS													
		S	ect	ion				Comments						
		SIT	EC	ARD		Fish form 1	6004							
	CHANNEL 7 m falls blocks upstream fish migration. No fish were captured upstream of the falls													
		СН	AN	NEL		S5 Stream								

Reach # ILP M

4.0

ILP Map #

ILP#

Watershed Code:

124

EF

NFC

WATERBODY Gazetted Name: LORNE CREEK Local: Lorne Creek ILP#: Waterbody ID: ILP Map #: Reach #: 4 -Project ID: 3476 Lake/Stream: S Lake From Date: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT Resample: SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid NID Map Site# NID# Comment 1031.088 61471 EF 1 8 60 A. GEAR SETTINGS EF 1 8 60 Time In Date Out Time Out Site# MTD/NO H/P Date In Comment 2000/08/01 10:50 2000/08/01 11:20 124 C. ELECTROFISHER SPECIFICATIONS MTD/NO H/P Sec Lnth Wdth Voltage Site# Encl Frequency Pulse Make Model 110.0 SMITH 124 EF 0 470 2.0 400 60 6 12B ROOT FISH SUMMARY MTD/NO Species Stage Age | Total # | Lgth (Min/Max) | FishAct Comment Site#

0

February 12, 2001 Page 33 of 96



Site #124, Downstream photo showing the cascade/pool morphology Roll #3, Frame #22, Date: 2000/08/01



Site #124, Upstream photo showing secondary channels cut during high water Roll #3, Frame #21, Date: 2000/08/01

Reach # ILP Map #

ILP#

					\$	an RE	A (5)	3.44	i ki si N	OH	G					
Gazetted Na	me: LC	RNE CF	REEK							Local	Name: Lo	orne Cr	reek			
Watershed Co	ode: 40	0-30170	0-0000	0-00000-00	00-0000-000-00	0-000-0	00-000	-000				ILP N	Map #:		IL	.P #:
								8 = 7.\ (e	1							
Reach	n #:	5.0		U1	M(Zone/East/I	North): 9	9.52921	9.6083	104		Sample '	Type:	В			
Length (k	Length (km): 2.31 Gradient (%): 6.41 US Elev (m): 798 Order: 4												Magnitude:	44		
Confineme		I	D.	Coupling ars: N		Op DIAG		ter: A	N De	R F	BGC Z				Landinas A	10
Islan	ds: N		Ba	ırs:N	A PIDE T	JIAG N		SITE		or r	Riparian V	eg	IVI		Landuse: N	10
Site #:	125			IS LITM/70	ne/East/North)		**********	2000/0	*************		Agency:	C172			Crew: BW/K	т
Site Lg (m):			9	53087		* E	Date.	2000/00	3/01	Re	of. Name:	0172			Clew. Broke	
							(6)	ANK	EL							
No Vis.Ch.:	Inter	mittent:		_			Avg	Min	Max	#					Avg % Min % N	
Dw:		Tribs.:			Channel Widt	` '	25.83	21	29	6	_			dient %:	7.00 6	9 4
1				-	Wetted Widt	` '	9.45	7	12.30	6		P	001 D6	epth (m):	0.32 0.150	0.400 6
				L	****				1.0							
Stage: L	MV	н	Ter	np (C): 8	000000000000000000000000000000000000000		pH: 7.8		000000000000000000000000000000000000000		ond.: 60		000000000	Turk	o.:	N N L C
						i.			(0,C)							
Bed Material:	Domina	ant: C 95: 58.0	20		ibdom: B 0 (cm): 24.00					Bars	:: N	s	SIDE	✓ DIAG	MID S	PAN BR
	,	95. 56.0 ern: Sl	00		slands: N					C	1 B1	B2	ВЗ	D1	D2 D3	
		ng: CO			ement: CO			DISTUR	BANCE							
	Mor	ph: CP							TORS	C	1 C2	C3	C4	C5	S1 S2 S3	3 S4 S5
							0	(), '#3 								
Total	: T				rpe: SWD	LWD	В		U	DP			IV			FSZ:
			-	Loc: P/S	10	Т	D		N	S	T		N	_		
			L			<b>V</b>				<u> </u>					CROWI	N CLOSURE 1-20%
LWD				DIS	T:C II	NSTREA	M VEG	3: N	✓ A		M \				,	1-20%
RB SHP			Textu		☐ G ✓ C		_ F		-	IP: M			G: MF			
LB SHP	5		Textu	re: F	☐ G 🗸 C	В		R A	N R	IP: M		SIC	G: MF			
							P E/	VIII (	ES							
	-	Туре	Hgt	Method		Method		Phot			AirPho	oto		UTM	(Zone/East/Nort	h/Method)
	1483	С	10.0	AE	2	AE	R:	F	:	L:	#	t:		9 530	0690 608328	35 GIS
Comments:																
								alsii								
Site Number					Voltage			Species Total Fish		Minimum	Maximum					
125		EF	+-	1	(m) 120		10 sec	+	400	+	NFC			0	Length (mm)	Length (mm)
	<u> </u>													_	L	

Reach # IL

ILP Map #

ILP#

**Site** 125

5.0

9# :

		PROJECT		
Project Name: Mill Area Stream Name (gaz.): SKEENA Project Watershed Code: 400-0000	RIVER		Project Code:	3476
a walk and one one of		WATERSHED	Cl	
Gazetted Name: LORNE CREEK Watershed Code: 400-301700-00000-00000-	0000-0000-000-000-000-0	Local Name: Lorr	пе Стеек	
ILP Map#: ILP #:	NID Map #: 1031.088	NID#: 61483	Reach #: 5.0	Site #: 125
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/Eas	st/North) Site Lg: 100	Method: HC	Access: H
	9 530875	6083216 Ref. Name:	a a	
Date: 2000/08/01 Time: 11:45	Agency: C172	Crew: BW/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd width width		width width width		Gadient % Mtd Avg
Channel Width (m): T 25.00 28.00	21.00 24.00 28.00	29.00	25.83 Method I:	6.0 9.0 C 7.00
Wetted Width (m):         T         7.00         7.40           Pool Depth (m):         MS         0.40         0.30	11.20   11.10   12.30   0.32   0.34   0.40	7.70 0.15	9.45 Method II:	7.0 6.0 C
Tool Depth (my.) tile   5.15   6.65		5.15	No Vis.Ch.	: Intermittent:
Wb Depth: 1.3 1.8 1.0	Avg: 1.37 Me	ethod: MS Stage: L	. M✓ H Dw	: Tribs.:
COVER Total: T				
Type: SWD LWD B	U DP	OV IV CROWN C		
Amount: N T D	N S	T N 1	1-20%	
Loc: P/S/O:		INSTREAM	M VEG: N 🗸 A 📗 M	V
LWD: F DIST: C				
LB SHP: S		RB SH	<b>P</b> : S	
Texture: ☐ F ☐ G ✔ C	BRA	Textur	e: F G G C	B R A
RIP: M		RI	P: M	
STG: MF		STO	G: MF	
		WATER		
EMS:		Req #:		
Temp: 8	Method: T3	Cond.: 60	Meth	od: S4
pH: 7.8	Method: P2	Turb.: T	M L C Meth	od: GE
Flood Signs: NONE	Method: GE			
		MORPHOLOGY		
Bed Material: Dominant: C	Subdom: B	0.	1 B1 B2 B3 D1 D	2 D3
D95: 58.0 D (cm): 24.00	Morph: CP	DISTURBANCE		
Pattern: SI		INDICATORS	1 C2 C3 C4 C5 S	1 S2 S3 S4 S5
Islands: N				
Coupling: CO Confinement: CO				
FSZ		Bars: N	SIDE V DIAG MID	SPAN BR
		FEATURES		
NID Map   NID   Type   Hgt   Me     103I.088   71483   C   10.0   A	thod Lg Method	R: F: L:	AirPhoto UTM (Z	one/East/North/Method) 90 6083285 GIS
Comments:	- 2 75	Lead In the	[#-]   9   3300	0000200   010
	H.A	BITAT QUALITY		
Name		Comm	ents	
	ning habitat due to large su			
OverWinter Habitat Overwinter	ng habitat exists in limited	amounte		
	g habitat limited by trace a	mounts of cover		

### **FDIS Site Card**

Reach # ILP Map # ILP#

Site

	١	Vater	shed	Code:	le: 400-301700-00000-00000-0000-0000-000-000-000-									
1		Ph	oto	1	Foc Lg	Dir	Comments							
	R:	3	F:	23	STD	U	Upstream photo of exposed bank							
Γ	R:	3	F:	24	STD	D	Downstream photo showing the LWD jam this reach							
							COMMENTS							

:	3	F:	23	SI	TD	U Upstream photo of exposed bank							
:	3	F:	24	ST	D	D	Downstream photo showing the LWD jam this reach						
COMMENTS													
Section							Comments						
	5	SITE	CARD		Fish form 1	16003							
		CHA	NNEL		No fish cap	tured above the falls in	Reach 4						
CHANNEL S5 Stream													
		\$	Sec SITE	Section SITE CARD CHANNEL	Section SITE CARD CHANNEL	3   F: 24   STD	Section  SITE CARD  CHANNEL  No fish captured above the falls in						

February 12, 2001

Reach #

ILP Map #

ILP#

Watershed Code:

5.0

WATERBODY Gazetted Name: LORNE CREEK Local: Lorne Creek Waterbody ID: ILP Map #: ILP#: Reach #: 5 -Project ID: 3476 Lake/Stream: S Lake From Date: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT Resample: SINE METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid NID Map NID# Comment Site# EF 1 8 60 A. GEAR SETTINGS 125 1031.088 61483 Time In Date Out Time Out MTD/NO H/P Date In Site# Comment 2000/08/01 11:45 2000/08/01 12:20 125 EF 1 1 C. ELECTROFISHER SPECIFICATIONS Wdth Voltage Frequency Site# MTD/NO H/P Encl Sec Lnth Pulse Make Model 120.0 SMITH 125 EF 1 1 0 610 4.0 400 60 6 12B ROOT

	FISH SUMMARY													
Site#	MTE	D/NO	H/P	Species	Stage	Age	Total #	Lgth (M	lin/Max)	FishAct	Comment			
125	EF	1	1	NFC			0							



Site #125, Downstream photo showing the LWD jam this reach Roll #3, Frame #24, Date: 2000/08/01



Site #125, Upstream photo of exposed bank Roll #3, Frame #23, Date: 2000/08/01

Reach # ILP Map #

ILP#

			Si	receivant c	FERENC	NG			
Gazetted Na	me:				Loc	al Name: None			
Watershed Co	de: 400-301700	-54800-00000-000	00-0000-000-000-	-000-000-000-00	00	ILP I	<b>Иар #</b> :	ILI	P #:
				F. F.	ACH				
Reach	#: 3.0	UT	M(Zone/East/No	orth): 9.525706.	6080043	Sample Type:	R		940
Length (kr		Gradient (%)		US Elev (m)		Order: 2		Magnitude:	5
Confineme		Coupling Bars: ✔N		Open water	: A ☑SPAN ☑BR	BGC Zone: Riparian Veg.:	MH	Landuse: N	_
isiano	ds: N	Bars: VN				Riparian veg	IVI	Landuse. N	0
	-				ITE				
Site #: 1			ne/East/North)	Date: 20	000/08/01	Agency: C172		Crew: BW/K	г
Site Lg (m): 1	00 L	9 52691	6080173			Ref. Name:			
		_		CHA	NNEL				
No Vis.Ch.:	Intermittent:			3	Min Max	#		Avg % Min % M	
Dw:	Tribs.:		Channel Width Wetted Width	, ,	.200 6.800	6 P	Gadient %: ool Depth (m):	4.00 4 0.19 0.150 0	4 4
		-	Wb Depth	()	0.3 0.4	3	ooi Deptii (iii).	0.19   0.150   0	.200   6
				(,					
Stage: L	MV H	Temp (C): 5		pH: 6.9		Cond.: 40	Turi	b.:	LAC
				MORP	HOLOGY				
NAME AND ADDRESS OF TAXABLE PARTY.					***************************************				
Bed Material:			ıbdom: B			ars: 🔽 N 🗌 S	SIDE DIAG	MID S	PAN BR
Bed Material:	D95: 50.00	0 0	(cm): 15.00			ars: <b>☑</b> N	SIDE DIAG	MID SF	PAN BR
Bed Material:	D95: 50.00 Pattern: SI	D [	0 (cm): 15.00 slands: N		В				PAN BR
Bed Material:	D95: 50.00 Pattern: SI Coupling: PC	D [	(cm): 15.00	DI	B STURBANCE	O1 B1 B2	B3 D1	D2 D3	
Bed Material:	D95: 50.00 Pattern: SI	D [	0 (cm): 15.00 slands: N	DI	В				
Bed Material:	D95: 50.00 Pattern: SI Coupling: PC	D [	0 (cm): 15.00 slands: N	DI: 11	B STURBANCE IDICATORS	O1 B1 B2	B3 D1	D2 D3	
	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	D E	0 (cm): 15.00 slands: N ement: FC	DI: If € €	BTURBANCE INDICATORS	O1 B1 B2 C1 C2 C3	B3 D1 C4 C5	D2 D3	S4 S5
Bed Material:	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Confine	O (cm): 15.00 slands: N ement: FC	DI: II C O	BTURBANCE INDICATORS	O1 B1 B2 C1 C2 C3 DP OV	B3 D1 C4 C5	D2 D3	
	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	D E	O (cm): 15.00 slands: N ement: FC	DI: IP CO LWD B N D	BTURBANCE INDICATORS	O1 B1 B2 C1 C2 C3 DP OV N T	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
Total:	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Confine  Ty  Amore  Loc: P/S	O (cm): 15.00 slands: N ement: FC  ppe: SWD unt: N	DIS	STURBANCE INDICATORS  VER  U N	O1 B1 B2 C1 C2 C3 DP OV N T	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
Total:	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Ty Amor	o (cm): 15.00 slands: N ement: FC	DISTREAM VEG:	STURBANCE INDICATORS  VER  U  N  N  A	O1 B1 B2 C1 C2 C3 DP OV N T M V	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total: LWD: RB SHP;	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Ty Amor Loc: P/S DIS Texture: F	O (cm): 15.00 slands: N ement: FC  SWD unt: N FC: NA  INS	DISTREAM VEG:	STURBANCE INDICATORS  VER  U  N  N  A  RIP:	O1 B1 B2  C1 C2 C3  DP OV N T  M V G ST	B3 D1	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total:	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Ty Amor	o (cm): 15.00 slands: N ement: FC	DISTREAM VEG:	STURBANCE INDICATORS  VER  U  N  N  A	O1 B1 B2  C1 C2 C3  DP OV N T  M V G ST	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total: LWD: RB SHP;	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Ty Amor Loc: P/S DIS Texture: F	O (cm): 15.00 slands: N ement: FC  SWD unt: N FC: NA  INS	LWD B N D STREAM VEG: B R B R	STURBANCE IDICATORS  VER  U  N  A  RIP:	O1 B1 B2  C1 C2 C3  DP OV N T  M V G ST	B3 D1	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total: LWD: RB SHP;	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Ty Amor Loc: P/S DIS Texture: F	O (cm): 15.00 slands: N ement: FC  SWD unt: N FC: NA  INS	LWD B N D STREAM VEG: B R B R	STURBANCE INDICATORS  VER  U  N  N  A  RIP:	O1 B1 B2  C1 C2 C3  DP OV N T  M V G ST	B3 D1	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total: LWD: RB SHP: LB SHP:	D95: 50.00 Pattern: SI Coupling: PC Morph: CP	Ty Amou Loc: P/S  Texture:   F  Texture:   F	o (cm): 15.00 slands: N ement: FC  spe: SWD cunt: N cyo: N T: NA INS	DISTREAM VEG:  B R B R	VER U N A RIP:	O1 B1 B2  C1 C2 C3  DP OV N T  M V G ST  G ST	B3 D1 C4 C5 IV N G: NA G: NA	D2 D3 S1 S2 S3 CROWN 0	S4 S5 FSZ:  I CLOSURE 0%

#### **FDIS Site Card**

Reach # ILP Map #

ILP#

Site

3.0

PROBE OF Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Water track Ed. Gazetted Name: Local Name: None ILP Map#: NID Map #: 1031.088 NID#: 61498 Reach #: 3.0 Site #: 126 Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: H 9 526917 6080173 Ref. Name: Crew: BW/KT Fish Crd?: 🗸 Agency: C172 Incomplete: Date: 2000/08/01 Time: 12:50 GREAT AND SEED Gadient % Mtd width width width width width width width width width Avg Mtd Avg Channel Width (m): 6.50 4.90 6.70 6.80 3.20 3.70 5.30 Method I: 4.0 4.0 C 4.00 Method II: 4.0 Wetted Width (m): 6.50 4.90 6.70 6.80 3.20 5.30 4.0 C 3.70 Pool Depth (m): 0.15 0.20 0.18 0.19 0.20 0.20 0.19 MS No Vis.Ch.: Intermittent: Wb Depth: .4 3 .4 Avg: 0.37 Method: MS Stage: L M ✓ H Dw: Tribs.: COVER Total: T **CROWN CLOSURE** SWD LWD В U DP OV IV Type: 0% Amount: N N D N N N Loc: P/S/O: INSTREAM VEG: N 🗸 A 🗌 M 🗍 V 📗 **V** LWD: N DIST: NA LB SHP: S RB SHP: S Texture: F G C B R A Texture: F G G C B R A RIP: G RIP: G STG: NA STG: NA V 0: 10 = 1: EMS: Req #: Temp: 5 Method: T3 Cond.: 40 Method: S4 pH: 6.9 Method: P2 □ T □ M □ L ✓ C Turb.: Method: GE Flood Signs: NONE Method: GE MORPHOLOGY 01 B1 **B**2 **B3** D1 D2 D3 Bed Material: Dominant: C Subdom: B D95: 50.0 D (cm): 15.00 Morph: CP DISTURBANCE **INDICATORS** Pattern: SI C1 C2 C3 C4 C5 51 S2 **S3 S5 S4** Islands: N Coupling: PC Confinement: FC Bars: ✓ N SIDE DIAG MID SPAN **FSZ** HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat is not present Spawning Habitat Spawning values are poor due to the high water velocity Rearing Habitat Rearing values are poor due to limited cover within this reach 011011015 Foc Lg Dir Comments 3 F 25 STD U Upstream photo of stream flowing through an alpine meadow 6 F: STD D Downstream photo of high velocity habitat COMMENTS Section Comments

#### **FDIS Site Card**

Reach # ILP Map # ILP # Site
Watershed Code: 400-301700-54800-00000-0000-000-000-0000-000 3.0 126

1	Section	Comments
	SITE CARD	Fish form 16031
	CHANNEL	No fish present. Barriers located downstream
	CHANNEL	S5 Stream

Reach #

ILP Map #

ILP#

Watershed Code:

Gaz	etted N	lame:								Loca	ıl: No	ne			
Pi	oject (	Code:	400-0	000000-00	000-00000-0	000-0000-00	0-000-00	0-000-00	0-0						
	WS	Code:	400-3	301700-54	800-00000-0	000-0000-00	0-000-00	0-000-00	0-000						
Wa	terbo	dy ID:					ILP	Map #:				ILP#:	R	each #:	3 -
	Proje	ct ID:	3476						La	ke/Stre	eam:	S	Lake From	n Date:	
Fis	sh Peri	nit #:	25	350K	Date:	2000/08/01	Т	o: 2000/	08/01	Age	ncy: (	0172	Crew: BW/KT	Resar	nple:
							SITE	/ M	ETHO	D					
Site#	NID	Мар	NID	# U1	M:Zone/Eas	st/North/Mth	d MT	D/NO 1	emp (	Cond	Turb	id	Co	mment	***************************************
126	1031	.088	6149	98			EF	1	5	40	С				
						A	. GE	AR SI	ETTIA	GS					
Site#	MTD	/NO	H/P	Date Ir	Time I	n Date O	ut Tim	e Out				Co	mment		
126	EF	1	1	2000/08/	01 12:50	2000/08/	/01 13	3:20							
					C.	ELECT	(0)F118	HER	8 P.E.(	HF I	e A T	IONS			
Site#	N	ITD/N	0	H/P	Encl	Sec	Lnth	V	Vdth	Volt	age	Frequency	Pulse	Make	Mode
126	EF		1	1	0	420	150.0		4.0	40	00	60	6	SMITH ROOT	12B
							FISH	SUN	MAR	Y					
Site#	N	TD/N	0	H/P	Species	Stage	Age	Total #	Lgth	(Min/M	ax)	FishAct		Comment	
126	EF		1	1	NFC			0							



Site #126, Upstream photo of stream flowing through an alpine meadow Roll #3, Frame #25, Date: 2000/08/01



Site #126, Downstream photo of high velocity habitat Roll #6, Frame #1, Date: 2000/08/01

Reach # ILP Map #

ILP#

			S.	TREAMR	EFEREN	CIN	G			
Gazetted Na	me: LORNE CRE	EEK				Local N	Name: Lorne Ci	reek		
Watershed Co	ode: 400-301700-	-00000-00000-00	00-0000-000-000	-000-000-000-00	00		ILP I	Vlap #:	ILI	P#:
				RE	23 (e ) ;					
								_		
Reach	#: 8.0	רט	M(Zone/East/No	orth): 9.526725.	6084076		Sample Type:			
Length (ki	*	Gradient (%	range of the second	US Elev (m)			Order: 4		Magnitude: 2	0
Confineme	nt: UN ds: N	Coupling Bars: N		Open water		R Ri	BGC Zone: parian Veg.:		Landuse: N	_
	JS. IV	DaisIV	SIDE DI			IK KI	parian veg	3	Landuse. 14	
	F			_	ITE					
Site #: 1	a-tati	GIS UTM(Zo 9 52718	ne/East/North) 7: 6084314	Date: 20	000/08/01		Agency: C172 . Name:		Crew: BW/K	r
Site Lg (m): 1		9 : 52/16	7: 6064314			Rei	. Name.			
	-	_			INNEL					
No Vis.Ch.:	Intermittent:		61 1 W.CW.L.		Min Max	#			Avg % Min % M	
Dw:	Tribs.:		Channel Width Wetted Width		5.1 8.300 4.1 5.6	6	-	Gadient %:	2.00 2 0.60 0.300	2 4 0.9 6
		-	Wb Depth	` '	0.6 0.7	3	1 -	oor Deptii (iii).	0.00   0.000	0.5
							_			
Stage: L	MV H	Temp (C): 9		pH: 7.4			ond.: 70	Turi	o.:	LVC
				MORE	HOLOGY	1				
Bed Material:	Dominant: G		ıbdom: F			Bars:	✓ N S	SIDE DIAG	MID SF	PAN BR
	D95: 15.00		0 (cm): 6.00 slands: N			01	B1 B2	B3 D1	D2 D3	
	Pattern: IM Coupling: DC		ement: UN							1
	Morph: RP	Comm	ement. Orv		STURBANCE IDICATORS		C2 C3	C4 C5	S1 S2 S3	S4 S5
	30 000 000 000 000 000 000 000 000 000				12107110110	C1	C2 C3	C4 C5	S1 S2 S3	S4 S5
					VER					
Total:	М	Amo		T N	U S	DP T	OV	IV N		FSZ:
		Loc: P/S				V			CROWN	CLOSURE
LWD:	F	DIS		STREAM VEG:	N V A		MOVO		0	0%
RB SHP:						RIP: G		G: NA		
LB SHP:		Texture: F	GCC	B R		RIP: G		G: NA G: NA		1
LD JIII .							31	-,,,,,,		
					SH					
						000000000000000000000000000000000000000	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			***************************************
Site Number	Capture	Number of	Total Length	Total	Voltage	е	Species	Total	Minimum	Maximum
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	В	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)

Reach # ILP Map #

ILP#

Site 127

PROJECT
Project Name:         Mill Area 1:20K Stream Inventory Project           Stream Name (gaz.):         SKEENA RIVER         Project Code:         3476           Project Watershed Code:         400-00000-0000-0000-0000-0000-0000-000
WATERSHED
Gazetted Name: LORNE CREEK Local Name: Lorne Creek
Watershed Code: 400-301700-00000-0000-0000-000-000-000-000-00
ILP Map#: ILP #: NID Map #: 1031.098 NID #: 61231 Reach #: 8.0 Site #: 127
Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: H
9 527187 6084314 Ref. Name:
Date: 2000/08/01 Time: 14:00 Agency: C172 Crew: BW/KT Fish Crd?: V Incomplete:
CHANNEL
Mtd   width   Avg   Gadient %   Mtd   Avg
Channel Width (m): T 8.30 5.10 7.80 7.30 8.00 5.60 Method I: 2.0 2.0 C 2.00
Wetted Width (m): T 5.40 5.10 5.60 4.40 4.10 5.60 5.03 Method II: 2.0 2.0 C
Pool Depth (m): MS   0.70   0.60   0.70   0.90   0.40   0.30
Wb Depth:         .6         .7         .6         Avg:         0.63         Method:         MS         Stage:         L
COVER Total: M
Type: SWD LWD B U DP OV IV CROWN CLOSURE
Amount: T T N S T D N 0 0%  Loc: P/S/O:
Loc: P/S/O: A M V
LWD: F DIST: E
LB SHP: U RB SHP: S
Texture: F G C B R A Texture: F G C B R A
RIP: G
STG: NA STG: NA
WATER
EMS: Reg #:
Temp: 9 Method: T3 Cond.: 70 Method: S4
pH: 7.4 Method: P2 Turb.: ☐ T ☐ M ☐ L ☑ C Method: GE
Flood Signs: NONE Method: GE
MORPHOLOGY
Bed Material: Dominant; G Subdom; F O1 B1 B2 B3 D1 D2 D3
D95: 15.0 D (cm): 6.00 Moreh: PP
Pattern: IM DISTURBANCE INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
Islands: N
Coupling: DC
Confinement: UN
FSZ Bars: N SIDE DIAG MID SPAN BR
HABITAT QUALITY
Name Comments
Other Spawning, rearing, and overwintering values are excellent for salmonids within this reach. Gravels suitable for medium sized trout or char are abundant
PHOTOS
Photo Foc Lg Dir Comments
R: 6 F: 2 STD D Downstream photo showing overstream vegetation
R: 6 F: 3 STD U Upstream photo showing good spawning gravels for salmonids
COMMENTS
Section Comments

Reach # ILP Map#

ILP#

Site 127

8.0

COMMENTS Section Comments SITE CARD Fish form 30505 CHANNEL No fish are present above the downstream barriers CHANNEL S5 Stream

February 12, 2001 Page 85 of 223

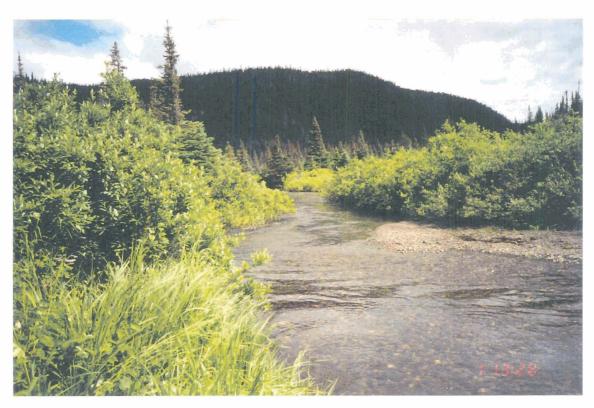
Reach # ILP Map # ILP #

WATERBODY Gazetted Name: LORNE CREEK Local: Lorne Creek ILP Map #: ILP#: Reach #: 8 -Project ID: 3476 Lake/Stream: S Lake From Date: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT Resample: Fish Permit #: SITE / METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid Comment EF 1 9 1031.098 61231 70 127 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 127 EF 1 2000/08/01 14:00 2000/08/01 14:32 C. ELECTROFISHER SPECIFICATIONS MTD/NO H/P Wdth Site# Encl Sec Lnth Voltage Frequency Pulse Make Model 127 0 110.0 300 6 SMITH 12B ROOT FISH SUMMARY Total # Lgth (Min/Max) FishAct Site# MTD/NO H/P Species Stage Comment NFC 127 0

February 12, 2001 Page 35 of 96



Site #127, Upstream photo showing good spawning gravels for salmonids Roll #6, Frame #3, Date: 2000/08/01



Site #127, Downstream photo showing overstream vegetation Roll #6, Frame #2, Date: 2000/08/01

Reach # ILP Map #

ILP#

Watershed Code: 400-313700-71700-36000-0000-0000-000-000-000-000-000

			S	REAMRI	FERENCI	NG			
Gazetted Na	me:				Loc	al Name: None			
Watershed Co	ode: 400-313700	-71700-36000-00	00-0000-000-000	-000-000-000-00	00	ILP	Map #:	IL	P#:
				RE	ACH				
Reach	#: 3.0	וט	ΓM(Zone/East/No	orth): 9.527751.6	5 <b>0869</b> 18	Sample Type:	R		
Length (ki	n): .76	Gradient (%		US Elev (m)		Order:		Magnitude:	5
Confineme	•	Coupling	g: PC	Open water	: P _	BGC Zone:	AT	-	
Islan	ds: N	Bars: ✔N	SIDE DI	AG MID	SPAN BR	Riparian Veg.:	S	Landuse: N	0
				S	ITE				
Site #:			ne/East/North)	Date: 20		Agency: C172		Crew: BW/K	Т
Site Lg (m): 1	00 [	9 52752	6 6086743			Ref. Name:			
	7				NNEL				
No Vis.Ch.:	Intermittent:		Channel Width			6	Gadient %:	Avg % Min % M 5.75 4	7 4
Dw:	Tribs.:		Wetted Width		11.13.5		Pool Depth (m):		.200 6
		ŀ	Wb Depth	` '		3			
	Maria II	T (0): 45		-11. 7.0		Cond.: 50	T	э.: П Т П <b>м</b>	
Stage: L	M <b>✓</b> H	Temp (C): 15		pH: 7.8		Cond.: 50	Turi	J., I N	I □ L 🗸 C
Bad Maradali	D		ubdom: F	W808585	HOLOGY		DIDE DIAG		DAN DE
Bed Material:	Dominant: C D95: 35.00		) (cm): 0.10		Da	ırs: 🗸 N 🗌 🤅	SIDE DIAG	MID SI	PAN BR
	Pattern: IR		siands: N			O1 B1 B2	B3 D1	D2 D3	
	Coupling: DC	Confin	ement: UN	DIS	TURBANCE				
	Morph: RP				IDICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				0.0	VER				
Total:	Т	Ty	/pe: SWD	LWD B	U	P OV	IV		FSZ:
		Amo		N S	D	N	S		
		Loc: P/S	8/0:						CLOSURE
LWD:	N	DIS	T: NA INS	STREAM VEG:	N _ A _	M 🗌 V 🗸		0	0%
RB SHP:	U	Texture: 🗸 F	GC	B R [	A RIP:	G ST	G: NA		
LB SHP:	V	Texture: 🗸 F	GC	B R [	A RIP:	G ST	G: NA		
au n					SH			I are t	
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
128	EF	1	40	81 sec	400	NFC	0		

Reach #

ILP Map #

ILP#

**Site** 128

3.0

#

		PROJECT		
Project Name Stream Name (gaz.) Project Watershed Code		/ Project	Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 400-313700-71	1700-36000-0000-0000-000-000-00	00-000-000-000		
ILP Map#: ILP	#: NID Map #: 1031.09	NID#: 61219	Reach #: 3.0	Site #: 128
Field UTM(Zone/East/North	/Method) GIS UTM(Zone 9 527526	/East/North) Site Lg: 100 6086743 Ref. Name:	Method: HC	Access: H
Date: 2000/08/01 Time: 1	4:50 Agency: C172	Crew: BW/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Channel Width (m): MS 1. Wetted Width (m): MS 1	vidth         width         width         width         width           10         0.60         0.50         0.90         0.8           1.10         0.60         0.50         0.90         0.8           0.10         0.10         0.20         0.20         0.1	0 0.60	width Avg 0.75 Method I: 0.13 No Vis.Ch.:	Gadient %         Mtd         Avg           4.0         7.0         C         5.75           7.0         5.0         C
Wb Depth: .3	.4 .3 Avg: 0.33	Method: MS Stage: L[	M H □ Dw:	Tribs.:
COVER	Total: T			
Type: SWD	B U DP S D N	OV IV CROWN CL N S 0 INSTREAM	0%	v 🕢
LWD: N	DIST: NA			
LB SHP: V		RB SHP	: U	
Texture: F G	CBBRA	Texture	FGGCE	BRTA
RIP: G		RIP	: G	
STG: NA		STG	: NA	
		WATER		
EMS:		Req #:		
Temp: 15	Method: T3	Cond.: 50	Metho	nd: S4
pH: 7.8 Flood Signs: NONE	Method: P2 Method: GE	Turb.: T	M L C Metho	od: GE
Flood Signs, NONE	Welliou, GE			
		MORPHOLOGY	B4 B0 B1 B1 B1	
Bed Material: Domin		01	B1 B2 B3 D1 D2	2 D3
D95: 35.0 D (d	cm): 0.10 Morph: RP	DISTURBANCE		
Pattern: IR		INDICATORS C1	C2 C3 C4 C5 S1	S2 S3 S4 S5
Islands: N				
Coupling: DC Confinement: UN				
FSZ		Bars: 🗸 N	SIDE DIAG MID	SPAN BR
		HABITAT QUALITY		
Name		Comme		
Rearing Habitat Other	Rearing values are limited due to No spawning or overwintering hab	the poor access throughout the reach	1	
Cilibi	135 Sperring of Overwintering Hab	PHOTOS		
Photo Foo	Lg Dir		Comments	
R: 6 F: 4 ST		Upstream photo showing alpine sur		
R: 6 F: 5 ST	rD D	Downstream photo showing instream	m vegetation between pools	
		COMMENTS		
Section		Comme	nts	

Watershed Code: 400-313700-71700-36000-0000-000-000-000-000-000-000

Reach # ILP Map #

ILP# Site 3.0 128

(e) (a) A) A) E A) E A) Section Comments SITE CARD Fish form 30504 CHANNEL No fish present. Barriers downstream prevent upstream fish migration CHANNEL S6 Stream

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Reach # ILP

3.0

ILP Map # ILP #

Watershed Code:

400-313700-71700-36000-0000-0000-000-000-000-000-000

WATERBODY Local: None **Gazetted Name:** WS Code: 400-313700-71700-36000-0000-0000-000-000-000-000-000 ILP#: Lake From Date: Reach #: 3 -Waterbody ID: Lake/Stream: S Project ID: 3476 Resample: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT SITE METHOD Site# Comment 1031.098 61219 128 A. GEAR SETTINGS Site# 128 C. ELECTROFISHER SPECIFICATIONS Lnth Site# MTD/NO H/P Encl Sec Wdth Voltage Frequency Pulse Make Model EF 1 1.0 128 0 81 40.0 400 60 6 SMITH 12B ROOT FISH SUMMARY MTD/NO Age Total # Lgth (Min/Max) FishAct H/P Species Stage Site# Comment 128 NFC

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Site #128, Downstream photo showing instream vegetation between pools Roll #6, Frame #5, Date: 2000/08/01



Site #128, Upstream photo showing alpine surroundings Roll #6, Frame #4, Date: 2000/08/01

Reach # ILP Map #

ILP#

1.0

1031.098

10879

			R	АМ	REFE	REN	CING	1						
Gazetted Name:							Local Na	ame: None	е					
Watershed Code: 000-000000	0-00000-00000-0	000-0000-000-00	0-000-00	000-000	-000			11	_P Map #:	1031.098	8		ILP#:	10879
				ı	IEA6	H								
Reach #: 1.0	U	TM(Zone/East/I	North):	9.5289	79.60876	559	S	ample Ty	pe: R					¥
Length (km): .73	Gradient (%	<b>%):</b> 20.27	U	S Elev	m): 145	0		Orde	r: 1		Mag	nitude:	1	
Confinement: CO	Couplin Bars: VN	-	O DIAG	pen wa	ter: A	AN TE		BGC Zone: AT Riparian Veg.: S			Landuse: NO			
ISIANUS. IN	Dais, WIN		DIAG	SITE				aliali veg	j., 3	Landuse. NO				
Site #: 129	CIS LITM/7	one/East/North	<del></del>		2000/08		Α.	gency: C1	172		Cran	v: BW	WT	
Site #: 129 Site Lg (m): 100	9 5286			Date.	2000/00	3/01		Name:	172		Crew	v. Dvv	/K1	
				C.I	ANN	(=)								
No Vis.Ch.: ✓ Intermittent:				Avg	Min	Max	#	1			Avg %	Min %	Max %	#
Dw: Tribs.:		Channel Wid	th (m):	0.00	0	0	0		Gadi	ent %:	4.00	4	4	1
DW		Wetted Widt	, ,	0.00	0	0	0		Pool Dept	h (m):	0.00	0	0	0
		Wb Dept	th (m):	0.00	0	0	0							
Stage: L M H	Temp (C):			pH:			Cor	nd.:		Tur	b.:	т 🗌	M _	L 🗌 C
				o k	23:00	(0) C (1)								
Bed Material: Dominant:	5	Subdom:					Bars:	N	SIDE	DIAG	M	IID	SPAN	BR
D95:		D (cm):					01	B1	B2 B3	D1	D2	D3		
Pattern: Coupling:		Islands: nement:						T						
Morph:	Collin	Herrent.			DISTUR				00 04		0.4			
					1110107	1,0110	C1	C2	C3 C4	C5	S1	S2	S3 S	4 S5
				6	0 V/E	F								
Total:	Т	ype: SWD	LWD	TE		u T	DP	Ιον	IV		**********	***********		FSZ:
, 500.		ount:						-						. 02.
	Loc: P/	S/O:										CRO	WN CLO	SURE
LWD:	DI	ST: II	NSTRE	AM VE	3: N	A	M	_ V [						
RB SHP:	Texture: F			B R A RIP:				STG:						
LB SHP:	Texture: F	GC	B		R 🗌 🗛	\ R	tiP:		STG:					
				-										

Reach # ILP Map #

ILP# Site 1031.098 10879 1.0 129

						P	803	E 8 T							
Project	Name: M	ill Area 1:	20K Stre	am Inve	ntory Pr	roject									
Stream Name	(gaz.): S	KEENA R	IVER							Proje	ct Coc	de:	3476		
Project Watershed	Code: 40	00-00000	0-00000-	00000-0	000-00	00-000-0	000-000	-000-000	-000						
						WA	TER	SHED							
Gazetted Name:							Lo	ocal Nam	e: None	e					
Watershed Code: 000-000	0000-00000	-00000-00	000-000	0-000-00	0-000-0	000-000-	-000								
ILP Map#: 103I.098	ILP #: 10	0879	NID M	ap#: 10	31.098		NI	D#: 612	229	Reach #	<b>#</b> :	1.0	Site	e #: 129	
Field UTM(Zone/East	/North/Met	thod)				st/North			Lg: 100	)		Method: GE		Access:	Н
		1	9	5286		60872		Ref. N	lame:						
Date: 2000/08/01 T	ime: 15:00		Agend	y: C172	2	Crew:				Fis	sh Crd	?: [	Inc	omplete	:: <u> </u>
						8	HAN	NEL							
M	td width	width	width	width	width	width	width	width	width	width Ave	g		Gadient %	Mtd	Avg
Channel Width (m):										0.0		Method I:	4.0	GE	4.00
Wetted Width (m):	_	-						-		0.00		Method II:			
Pool Depth (m):										0.00	0	No Vis.Ch.:	✓ Intermi	ttent:	7
Wb Depth:			Avg:	0.00	М	lethod:		St	age: L	M H		Dw:		ribs.:	j
COVER	To	otal:						_							
Type: SWD	LWD	В	U	DI	P	OV	IV	CR	OWN C	LOSURE					
Amount: Loc: P/S/O:								INS	STREAM	AVEG: N	_ A	м	v 🗀		
LWD:	ارسسب	DIST:						_1		-					
LB SHP:									RB SHF	a.					
Texture: F	G	СП	B 🗆	R 🖂	Δ				Texture		G	СПВ	□ R □	A	
RIP:				" Ш	,										
STG:									RIF						
									010						
							(I A T	FR							
EMS:							Red								
Temp:			Method:				Cor	nd.:				Metho	d:		
pH: Flood Signs:			Method: Method:				Tu	rb.:	_ T [	M L	_ C	Metho	d:		
						878686	858886	LOG	7						
	_					aliacan	0.081821	2-52-A'-X	01	B1 B2	В3	B D1 D2	D3		
	Dominant:			odom.						01 02					
D95:	D (cm):		IV	lorph				RBANCE							
Pattern.							INDIC	ATORS	C1	C2 C3	C4	C5 S1	S2 S	3 S4	S5
Islands:															
Coupling: Confinement:															
FSZ								Bars	: N	SIDE	DI/	AG MID	SPAN	BR	
														_	*****
								E A E							
Name									Comme	ents					
Other	No	visible cha	annel. N	ot a stre	am. No						0000000000			************	000000000000000000000000000000000000000
						0.0	M M E	N 17.5							
Section									Comme	ents					
SITE CARD	No	photos tak	cen												
CHANNEL	NVC	0													

February 12, 2001 Page 21 of 223

ILP Map # Reach #

ILP#

7.0 STREAM REFERENCING Gazetted Name: QUILL CREEK Local Name: Quill Creek ILP Map #: ILP# REAGH UTM(Zone/East/North): 9.525941.6088669 Sample Type: Reach #: Length (km): 2.96 Gradient (%): 4.76 US Elev (m): 843 Order: 4 Magnitude: 24 Confinement: CO Coupling: CO Open water: A BGC Zone: CWH Islands: N Bars: N ✓SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: NO 9 11 2 Site #: 130 GIS UTM(Zone/East/North) Date: 2000/08/01 Agency: C172 Crew: BW/KT Site Lg (m): 100 526266 6089188 Ref. Name: CHANNEL No Vis.Ch.: Intermittent: Min Max # Avg % Min % Max % # Channel Width (m): 17.10 12.4 22.3 6 Gadient %: 4.25 4 5 4 Dw: Tribs.: Wetted Width (m): 10.33 5.800 15.2 6 Pool Depth (m): 0.41 0.35 0.550 6 Wb Depth (m): 0.80 0.7 0.9 3 Cond.: 45 Stage: L M ✓ H pH: 7.4 Turb.: T M L C Temp (C): 8 MORESHOLLONG Bars: N SIDE V DIAG MID SPAN Bed Material: Dominant: B Subdom: C D95: 110.00 D (cm): 50.00 01 **B**1 **B2 B3** D1 D2 D3 Pattern: IR Islands: N Coupling: PC Confinement: FC DISTURBANCE Morph: CP **INDICATORS** C1 C2 C4 C5 S1 S2 **S3 S5** 0 0 V E R Total: T Type SWD LWD В IV FSZ: N D Ν N Amount: Loc: P/S/O: **CROWN CLOSURE** 1-20% LWD: F DIST: E INSTREAM VEG: N RB SHP: S RIP: M Texture: ☐ F ✓ G ☐ C В STG: YF Texture: ☐ F ✓ G ☐ C В □ R □ A LB SHP: S RIP: M STG: YF Photo UTM (Zone/East/North/Method) **NID Map** NID Hgt Method Method **AirPhoto** 526367 6089405 1031.098 71072 F 3.0 NS 6 F: 8 #: 0 NS R: L: 9 Comments:

Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
130	EF	1	80	363 sec	300	NFC	0		

Reach # ILP Map #

ILP#

Site 130

							880			0000000000000	*********************	
Project Nam Stream Name (gaz Project Watershed Cod		RIVER				00-000-0	000-000-	000	ı	Project (	Code:	3476
					: 8.3	DE NS	G E D					
Gazetted Name: QUILL CREE Watershed Code: 400-313700-0		000-0000	-000-00	0-000-0	00-000-		al Nam	e: Quill	Creek			
ILP Map#: ILF			ap #: 10		000		#: 610	72	Re	ach #:	7.0	Site #: 130
					A (B.) A I-						Method:	HC Access: H
Field UTM(Zone/East/Nort	n/Metnod)	1	100	one/Eas	60891	12.7	Ref. Na	Lg: 100			method:	Access. I
	45.00	9 Agenc	5262 y: C172		Crew:			ame.		Fish C	Crd?: ✓	Incomplete:
Date: 2000/08/01 Time:	15:20					~~~~	·					
						HANN	00000000000					
The state of the s	width width	width	width	width	width	width	width	width	width	Avg		Gadient % Mtd Avg
	8.40 22.30	17.10	12.40	14.30	18.10					17.10	Method	
	15.20 13.10	14.40	7.30	5.80	6.20					10.33	Method	II: 4.0 4.0 C
Pool Depth (m): MS	0.42 0.35	0.55	0.40	0.40	0.35					0.41	No Vis.C	Ch.: Intermittent:
Wb Depth: .8	.7 .9	Avg:	0.80	M	ethod:	MS	Sta	ige: L	M	H		Dw: Tribs.:
COVER	Total: T											
Type: SWD LW	D B	U	DI	p	ov	IV	CR	OWN C	OSURE	Ē		
Amount: N T	D	N	T		N	N	1		1-20%			
Loc: P/S/O:							INS	TREAM	VEG:	N 🗸	A _ M	v
							1					
LWD: F	DIST: E											
LB SHP: S								RB SHP	: S			
Texture: F	G C	В	R	A				Texture	:	F 🗸	GCC	BRA
RIP: M								RIF	: M			
STG: YF									: YF			
										*********	*****	
						VATE	F.					
EMS:						Req	#:					
Temp: 8		Method	T3			Con	d.: 45				Me	ethod: S4
pH: 7.4		Method	P2			Turi	b.:	Т	M	LV	C Me	ethod: GE
Flood Signs: NONE		Method:	GE									
						**********	0000000000000					
					BLIREAN)	8.8.8.8	88.6					
					edroak	eranica:	#0(G)		B1	B2	B3 D1	D2 D3
	nant: B		odom: C		urran	822.12.1	L0.63	01	B1	B2	B3 D1	D2 D3
	nant: B (cm): 50.00		odom: C Morph: C		enacas	DISTUR	RBANCE	01	B1	B2	B3 D1	D2 D3
					eurces	DISTUR		01	B1	B2 C3	B3 D1 C4 C5	D2 D3 S1 S2 S3 S4 S5
D95: 110.0 D					11.8°8.	DISTUR	RBANCE	01				
D95: 110.0 D					1U808A	DISTUR	RBANCE	01				
D95: 110.0 D  Pattern: IR  Islands: N  Coupling: PC  Confinement: FC					8.08.88.8	DISTUR	RBANCE	01 C1	C2	C3	C4 C5	S1 S2 S3 S4 S5
D95: 110.0 D  Pattern: IR  Islands: N  Coupling: PC						DISTUR	RBANCE	01 C1	C2	C3	C4 C5	
D95: 110.0 D  Pattern: IR  Islands: N  Coupling: PC  Confinement: FC						DISTUR	RBANCE ATORS Bars	01 C1	C2	C3	C4 C5	S1 S2 S3 S4 S5
D95: 110.0 D  Pattern: IR  Islands: N  Coupling: PC  Confinement: FC	(cm): 50.00				FE	DISTUR INDIC/	RBANCE ATORS Bars	01 C1	C2	C3	C4 C5	S1 S2 S3 S4 S5
D95: 110.0 D  Pattern: IR  Islands: N  Coupling: PC  Confinement: FC  FSZ	(cm): 50.00	hod	Morph: C	P	FE	DISTURINDICA INDICA	RBANCE ATORS Bars	01 C1	C2	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5
D95: 110.0 D  Pattern: IR  Islands: N  Coupling: PC  Confinement: FC  FSZ   NID Map   NID   Type	(cm): 50.00	hod	Morph: C	P Metho	FE	DISTURINDICA INDICA	RBANCE ATORS Bars RES	01 C1	C2	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 1031.098 71072 F	(cm): 50.00	hod	Morph: C	Meth	F.E.	DISTURINDICAL Photo 6 F	Bars  RES  Bars	01 C1	C2	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 1031.098 71072 F Comments:	(cm): 50.00	hod	Morph: C	Meth	F.E.	DISTURINDICA INDICA	Bars  RES  Bars	01 C1 N	C2 SI	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 1031.098 71072 F Comments:	Hgt   Met   3.0   NS	hod	Lg 0	Metho	FE od R:	DISTURINDICA  ATUF  Phot 6 F	Bars  RES  Bars	01 C1	C2 SI	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 1031.098 71072 F Comments:  Name OverWinter Habitat	Hgt Met 3.0 NS	hod	Lg 0	Methol NS	FE R:	DISTURINDICA  ATUF  Phot 6 F	Bars  E S  to  B  B  B  B  B  B  B  B  B  B  B  B  B	O1 C1 C1 L: N	C2 SI	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 103I.098 71072 F Comments:  Name OverWinter Habitat Rearing Habitat	Hgt Met 3.0 Ns  Overwinteri Rearing hat	hod sign habitat	Lg 0	Methol NS	R:	DISTURINDICA  ATUR  Photo 6 F  AT Q  antities and limit	Bars  E S  to  B  B  B  B  B  B  B  B  B  B  B  B  B	O1 C1 C1 L: N	C2 SI	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 1031.098 71072 F Comments:  Name OverWinter Habitat	Hgt Met 3.0 NS	hod sign habitat	Lg 0	Methol NS	R:	DISTURINDICAL PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF T	Bars  *ES  to  E  8	O1 C1 C1 L: N	C2 SI	C3  DE   oto	C4 C5 DIAG M	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)
Pattern: IR Islands: N Coupling: PC Confinement: FC FSZ  NID Map NID Type 1031.098 71072 F Comments:  Name OverWinter Habitat Rearing Habitat Spawning Habitat	Hgt Met 3.0 Ns  Overwinteri Rearing hat	hod 5	Lg 0	Methol NS	R:	DISTURINDICA  ATUR  Photo 6 F  AT Q  antities and limit	Bars  *ES  to  E  8	O1 C1 C1 L: N	C2 SI	C3  DE   oto	C4 C5  DIAG M  UTM  9 52	S1 S2 S3 S4 S5  IID SPAN BR  (Zone/East/North/Method)

### **FDIS Site Card**

Reach # ILP Map #

ILP#

Site

7.0

130

1	Ph	oto		Foo	: Lg	Dir	Comments					
R:	6	F:	6	ST	D	D	Downstream photo showing an increasing confinement as the stream enters a short canyon					
R:	6	F:	7	ST	D	U	Upstream photo showing the high velocity characteristic of this reach					
R:	6	F:	8	ST	D	U	Upstream photo of a 3 m falls					
							COMMENTS					
		Se	ction				Comments					
		SITE	CARD		30506							
		CHA	NNEL		No fish pre	sent upstream of down	stream barriers					
		CHA	NNEL		S5 Stream	Stream						

Reach #

ILP Map #

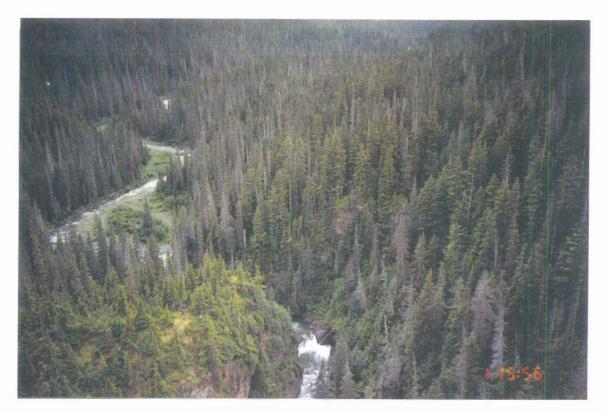
ILP#

Watershed Code:

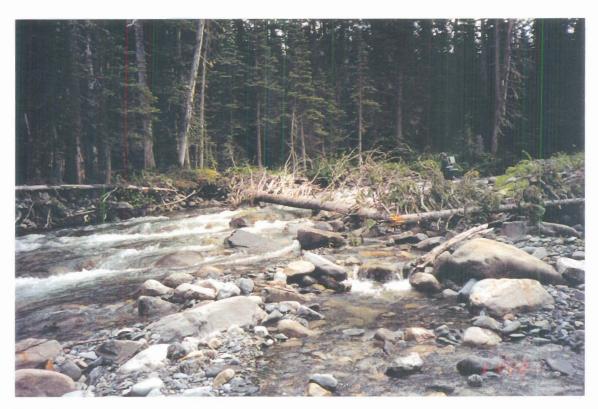
WATERBODY Local: Quill Creek Gazetted Name: QUILL CREEK Waterbody ID: ILP#: Reach #: 7 -Lake From Date: Lake/Stream: S Project ID: 3476 Resample: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid NID Map NID# Comment EF 1 8 45 130 1031.098 61072 A. GEAR SETTINGS 
 Time In
 Date Out
 Time Out

 15:20
 2000/08/01
 15:40
 Site# MTD/NO H/P Date In Comment 130 EF 1 1 2000/08/01 C. ELECTROFISHER SPECIFICATIONS. Voltage Frequency MTD/NO Sec Lnth Wdth Pulse Encl Make Model Site# H/P 130 0 363 80.0 3.0 300 60 SMITH 12B EF ROOT EISH SUMMARY Site# MTD/NO H/P Species Stage Age Total # Lgth (Min/Max) FishAct Comment NFC 130 EF 0

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Site #130, Upstream photo of a 3 m falls Roll #6, Frame #8, Date: 2000/08/01



Site #130, Upstream photo showing the high velocity characteristics of this reach Roll #6, Frame #7, Date: 2000/08/01



Site #130, Downstream photo showing an increasing confinement as the stream enters a short canyon Roll #6, Frame #6, Date: 2000/08/01

Reach # ILP Map #

ILP#

3.0

					S	TREA	MRE	FERE	NCI	N G				
Gazetted Na	ame: Q	UILL CRE	EK						Loca	al Name: Quill C	reek			
Watershed C	ode: 40	00-313700	-00000	-00000-000	0-000-000-000	-000-000	0-000-00	0		ILP	Map #	t:	IL	P#:
							RE	ACH						
Reac	h #:	3.0		UT	M(Zone/East/N	orth): 9.	534207.6	089389	************	Sample Type	В			
Length (k	m): 3.6	7	G	radient (%)	: 4.63	USE	Elev (m):	464		Order:	5		Magnitude: 7	7
Confineme				Coupling			n water	_		BGC Zone:	CWH	4	-	
Islan	nds: N	l	Ва	ırs: N	✓SIDE D	AG 🗸	MID	SPAN	BR	Riparian Veg.:	M		Landuse: N	0
							S	TE						
Site #:				The same and the same and	ne/East/North)		ate: 20	00/08/01		Agency: C172			Crew: BW/K	Т
Site Lg (m):	200	L	9	534519	6089189				F	Ref. Name:				
_								NNEL						
No Vis.Ch.:	Inter	rmittent:		_		_	_	fin Max					Avg % Min % M	
Dw:		Tribs.:		-	Channel Width Wetted Width	. /		20 30 8 15	6			adient %:	6.50 6 1.02 0.800	7 4
				-	Wb Depth	, ,		1 1.5	3		-001 D	epth (m):	1.02 0.800	1.5 6
Stage: L	Mag		Tor	mp (C): 8			H: 7.4			Cond.: 45		Turk	o.:	
Stage. L			161	iip (0). 0				7.88.00		CO11a 45	**********	Turk	··· 🗀 ' 🗀 "	LC
Red Meterials	MORPHOLOGY  Sed Material: Dominant: B Subdom: C Bars: N SIDE ✓ DIAG MID SPAN BR													
Bed Material:		1ant: B 095: 120.0	10		(cm): 35.00				Ва	rs: N	SIDE	✓ DIAG	MID SI	PAN BR
		tern: IR			lands: N					O1 B1 B2	В:	3 D1	D2 D3	
		ling: CO			ement: CO		DIS	TURBANC	_					
	Mo	rph: CP						DICATOR	-	C1 C2 C3	C	4 C5	S1 S2 S3	S4 S5
							0.0	WER.						
Total	I: M			Ту	oe: SWD	LWD	В	U	D	P OV	IV			FSZ:
				Amou		Т	D	N		Т	N			
			L	Loc: P/S	O:		<b>V</b>		<b>V</b>					CLOSURE
LWD	: F			DIST	C IN	STREAM	VEG:	N _	A	M V			2	21-40%
RB SHP			Textur			<b>✓</b> B	R	Α	RIP: C		G: MF			
LB SHP	: S		Textur	e: F	G C	<b>✓</b> B	R	Α	RIP: C	S S1	G: MF			
							EAT	URES						
NID Map	NID	Туре	Hgt	Method	Lg N	lethod		Photo		AirPhoto		UTM	(Zone/East/Nort	n/Method)
	1068	F	8.0	GE	0	GE	R:	F:	L:	#:		9 534	395 608923	8 GIS
Comments:														
							Fil	SH						
Site Number		pture		nber of	Total Length		tal	Volta	ge	Species		Total	Minimum	Maximum
404		ethod	E	vents	(m)		me			1150	_	Fish	Length (mm)	Length (mm)
131		EF		1	60	385	sec	300		NFC		0		

Reach # ILP Map #

ILP#

Site

3.0 131

		PROJECT		
Stream Name (gaz	ne: Mill Area 1:20K Stream Inventor L.): SKEENA RIVER de: 400-000000-00000-00000-0000		Project Code:	3476
		WATERSHED		
	00000-00000-0000-0000-000-000-0 P #: NID Map #: 103i.0	98 NID#: 61068	Creek  Reach #: 3.0  Method: HC	Site #: 131 Access: H
	, 9 534519 Agency: C172	6089189 Ref. Name:	Fish Crd?: 🎻	Incomplete:
Date: 2000/08/01 Time:	16:10 Agency: 01/2		rian oldr.	ilicomplete.
		CHANNEL		
Channel Width (m): GE 2	width         width         width         width         width           25.00         20.00         25.00         30.00         27           12.00         10.00         8.00         15.00         10           1.00         1.50         1.00         0.80         1.	00 12.00	25.33   Method I:   Method II:   1.02   No Vis.Ch.:	Gadient % Mtd Avg 7.0 6.0 C 6.50 7.0 6.0 C  Intermittent:  Tribs.:
		metion of stage. L		
Type: SWD LW Amount: N T Loc: P/S/O:		OV IV CROWN CI	1-40%	v 🗆
LWD: F	DIST: C			
LB SHP: S Texture: F	G C B B R A	RB SHP Texture		□ R □ A
RIP: C STG: MF		RIP STG		
		WATER		
EMS:		Req #:		
Temp: 8	Method: T3	Cond.: 45	Method	d: \$4
pH; 7.4	Method: P2	Turb.:	M L C Method	d: GF
Flood Signs: NONE	Method: GE		III V L O INCLIOR	OL
		MORPHOLOGY		
	inant: B Subdom: C (cm): 35.00 Morph: CP	DISTURBANCE INDICATORS C1	B1 B2 B3 D1 D2  C2 C3 C4 C5 S1	D3  S2 S3 S4 S5
FSZ		Bars: N	SIDE DIAG MID	SPAN BR
		FEATURES		
NID Map NID Type		ethod Photo		ne/East/North/Method)
103I.098 71068 F	8.0 GE 0	GE R: F: L:	#: 9 534395	6089238 GIS
Comments:				
Nama	1	HABITAT QUALITY	-4-	
Name OverWinter Habitat	Overwintering habitat is abundant	Comme	11125	
Spawning Habitat	Poor spawning habitat due to larg			
Rearing Habitat	Moderate rearing habitat. Modera	ite cover		
		PHOTOS		
Photo Fo	oc La Dir	I	Comments	

Reach # ILP Map # ILP # Site

	Pho	oto		Foc	: Lg	Dìr	Comments							
R:	6	F:	10	ST	'D	U	Upstream photo of a cascade section of stream							
R:	6	F:	11	ST	D	D	Downstream photo showing confinement							
	COMMENTS													
	Section Comments													
		SITE	CARD		Fish form 3	30503								
		CHA	NNEL		No fish pre	sent above barriers lo	cated downstream							
	CHANNEL S5 Stream													

February 12, 2001 Page 101 of 223

Reach #

3.0

ILP Map #

ILP#

Watershed Code:

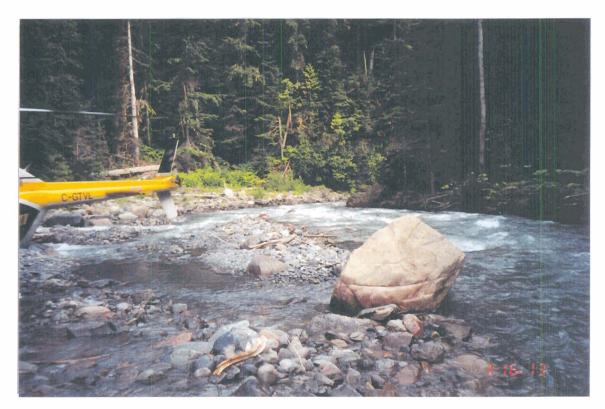
WATERBODY Local: Quill Creek Gazetted Name: QUILL CREEK ILP#: Waterbody ID: Reach #: 3 -Lake From Date: Lake/Stream: S Project ID: 3476 Resample: Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: BW/KT Fish Permit #: 25350K SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment Site# NID Map NID# EF 1 8 45 131 1031.098 61068 A GEAR SETTINGS Date In MTD/NO H/P Time In Date Out Time Out Comment Site# 16:10 2000/08/01 16:36 EF 1 1 2000/08/01 C. ELECTROFISHER SPECIFICATIONS Wdth Voltage Pulse Make Lnth Frequency Site# MTD/NO H/P Encl Sec 131 0 385 60.0 4.0 300 60 6 SMITH 12B EF ROOT

						FIS	H SUM	M A REY			
Site#	MT	D/NO	H/P	Species	Stage	Age	Total #	Lgth (M	lin/Max)	FishAct	Comment
131	EF	1	1	NFC			0				

February 12, 2001 Page 42 of 96



Site #131, Upstream photo of a cascade section of stream Roll #6, Frame #10, Date: 2000/08/01



Site #131, Downstream photo showing confinement Roll #6, Frame #11, Date: 2000/08/01

Reach # ILP I

ILP Map #

ILP#

1.0

	STREAM REFERENCING															
Gazetted Na	me:		4							Local	Name	: None				-
Watershed Co	ode: 400	-313700	-58800	-00000-000	0-000-000-00	0-000-0	00-000-	-000				ILP N	/lap #	:	IL	P#:
							R	EAC	Н							
Reach	#-	1.0		UT	M(Zone/East/	North): 9	52552	1.6091	660		Samo	le Type:	R			
Length (ki		1.0	Gr	radient (%)	1		Elev (					Order: 4			Magnitude: 2	24
Confineme	*		0.	Coupling			en wat				BGC	Zone:				
Island	ds: N		Ba	rs: N	✓SIDE	DIAG	MID	SP	AN E	R I	Riparia	n Veg.:	M		Landuse: N	0
								SITE								
Site #:					ne/East/North		Date:	2000/0	8/02	_	77	cy: C172			Crew: BW/K	Т
Site Lg (m): 1	Site Lg (m): 100 9 526780 6091161 Ref. Name:															
	CHANNEL    O Vis.Ch.: Intermittent: Avg Min Max # Avg Min Max % #															
_	Channel Width (m): 13 15												G	adient %:	4.50 3	6 4
Dw:		Tribs.:		-	Wetted Wid	, ,	6.15	7.300 5.400	19.20 7.300	6	_	P		epth (m):		0.400 6
					Wb Dep	th (m):	0.93	0.7	1.1	3						
Stage: L	M	Н	Ten	np (C): 5			pH: 6.6	6		(	Cond.:	40		Turk	o.: 🗌 T 📗 N	и □ L <b>⊘</b> C
MORPHOLOGY																
Bed Material:	Bed Material: Dominant: C Subdom: B Bars: N ☑ SIDE DIAG MID SPAN BR															
	D95: 65.00 D (cm): 25.00															
	Patte Couplii				slands: N ement: FC								T			
		ph: RP		Comm	SITIOTIC. I G				BANCE ATORS		1 0	2 C3	C4	C5	S1 S2 S3	S4 S5
										П			T			
							c	OVE	R							
Total	: Т		Γ	Ту	pe: SWD	LWD	В		U	DF	- T	ov	IV			FSZ:
				Amou		Т	D		N	Т		S	N			
				Loc: P/S	/0:	<b>V</b>	<b>V</b>			<b>V</b>					CROWI	1-20%
LWD:	F			DIS	T: E I	NSTREA	AM VEC	6: N	<b>✓</b> A		M	V			1	1-20%
RB SHP:			Textur		✓ G 🗆 C			_		RIP: M			G: PS			
LB SHP	: S		Textur	e:	✓ G C	В	F	2 /	4 1	RIP: M		510	G: PS			
							FE/	TUR	lES							
	_	Туре	Hgt	Method	Lg	Method	_	Phot			Air	Photo	$\Box$		(Zone/East/Nort	
103I.098 7 Comments:	1270	F	4.0	GE	0	GE	R:	F	:	L:		#:		9 526	6679 609143	31 GIS
oomments.																
							***********		*********							
Site Number		ture thod		nber of vents	Total Length (m)		Total Time		Voltage	е	Sp	ecies		Total Fish	Minimum Length (mm)	Maximum Length (mm)
135	E	EF		1	100	6	08 sec		400		٨	IFC		0		

Reach # ILP Map #

II P#

Site 135

1.0

Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER **Project Code:** 3476 **Project Watershed Code:** Wantelskieb Gazetted Name: Local Name: None NID Map #: 1031.098 NID#: 61270 Reach #: 1.0 Site #: 135 ILP#: ILP Map#: Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site La: 100 Method: HC Access: H 526780 6091161 Ref. Name: Crew: BW/KT Agency: C172 Fish Crd?: 🗸 Incomplete: Date: 2000/08/02 Time: 07:50 eat and the width | width | width | width | width | width | width | width | width | width | Gadient % Mtd Mtd Avg Avg 9.90 13.15 Channel Width (m): 18.40 19.20 7.30 14.10 10.00 Method I: 3.0 6.0 C 4.50 Wetted Width (m): 6.40 5.40 7.30 6.30 5.40 6.10 6.15 Method II: 6.0 3.0 С 0.20 0.30 0.35 0.15 0.26 0.40 0.28 Pool Depth (m): MS No Vis.Ch.: Intermittent: Wb Depth: 1.0 Method: MS Stage: L M ✓ H Avg: 0.93 Dw: Tribs.: COVER Total: T **CROWN CLOSURE** SWD LWD В U DP OV IV Type: D N S N 1-20% Amount Loc: P/S/O: INSTREAM VEG: N A A M W V LWD: F DIST: E LB SHP: S RB SHP: S F G G C B R A Texture: F G G C B R A Texture: RIP: M RIP: M STG: PS STG: PS WATER EMS: Rea #: Temp: 5 Method: T3 Cond.: 40 Method: S4 pH: 6.6 Method: P2 Turb.: T M M L V C Method: GE Flood Signs: NONE Method: GE MORPHOLOGY 01 **B**1 B2 ВЗ D1 D2 D3 Bed Material: Dominant: C Subdom: B Morph: RP D95: 65.0 D (cm): 25.00 DISTURBANCE **INDICATORS** Pattern: SI C1 C2 C4 C5 S1 S2 **S4 S**5 Islands: N Coupling: PC Confinement: FC Bars: N SIDE DIAG MID SPAN **FSZ** NID Map NID Type Hgt Method Lg Method Photo AirPhoto UTM (Zone/East/North/Method) 1031.098 71270 4.0 GE 0 GE 6091431 F: 9 526679 GIS Comments: HABITAT QUALITY Name OverWinter Habitat Overwintering habitat is limited by the number of deep pools Rearing Habitat Low value salmonid rearing habitat limited by high water velocity Spawning Habitat Low value salmonid spawning habitat limited by cobble/boulder substrate **Photo** Foc Lg Dir Comments

CHANNEL

S5 Stream

1.0 135 Foc Lg Photo Dir Comments R: 6 F: 12 STD U Upstream photo showing downed timber caused by an avalanche STD D Downstream photo showing boulder cobble substrates R: 6 F: 13 COMMENTS Section Comments SITE CARD Fish form 30483 CHANNEL No fish present above downstream barriers

Reach # ILP Map #

ILP#

Site

February 12, 2001 Page 111 of 223

Reach #

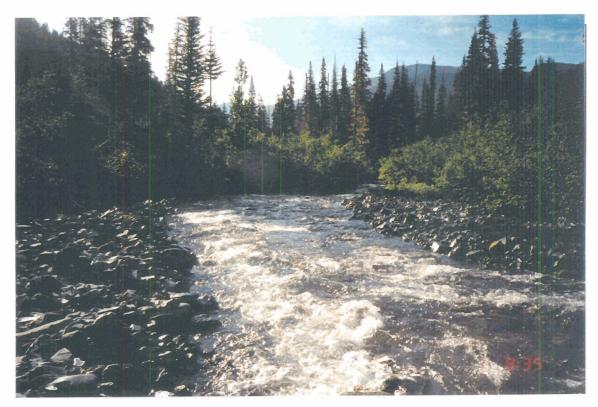
ILP Map #

ILP#

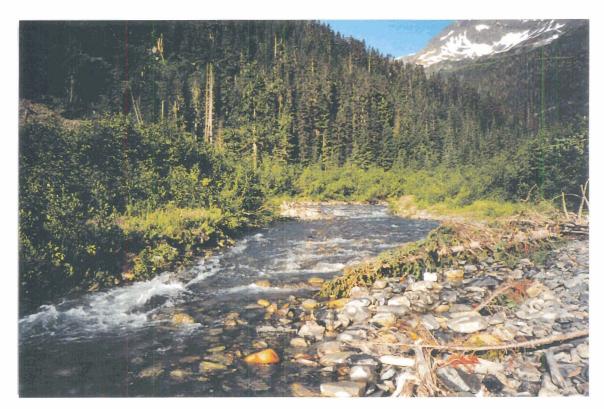
Watershed Code:

00-000-000-000-000 1.0

MANUEL RESTORATION **Gazetted Name:** Local: None ILP Map #: ILP#: Reach #: Project ID: 3476 Lake/Stream: S Lake From Date: Fish Permit #: 25350K Date: 2000/08/02 To: 2000/08/02 Agency: C172 Crew: BW/KT Resample: SITE / METHOD NID Map NID# UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid Comment 135 1031.098 61270 EF 1 5 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 135 EF 1 2000/08/02 07:50 2000/08/02 08:15 C. ELECTROFISHER SPECIFICATIONS Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model SMITH 12B ROOT FISH SUMMARY Site# MTD/NO H/P Species Stage Total # Lgth (Min/Max) FishAct Comment NFC 135 EF 1 1 0



Site #135, Downstream photo showing boulder cobble substrates Roll #6, Frame #13, Date: 2000/08/02



Site #135, Upstream photo showing downed timber caused by an avalanche Roll #6, Frame #12, Date: 2000/08/02

Reach # ILP Map #

ILP#

1.0 1031.098

		S	REAMR	EFERENI	CING				
Gazetted Name:				L	ocal Name: None				
Watershed Code: 000-00000	00-00000-00000-00	00-000-000-000	-000-000-000-0	00	ILP	Map #: 103!.098	lLI	P#: 10834	
			RE	ACH					
Reach #: 1.0	U.	TM(Zone/East/No	orth): 9.535154.	6094982	Sample Type:	R			
Length (km): .39	Gradient (%	): 17.69	US Elev (m)	: 1257	Order:	1	Magnitude:	1	
Confinement: FC	Coupling		Open water		BGC Zone:				
Islands: N	Bars: ✔N	SIDE DI		SPAN BR	Riparian Veg.:	S	Landuse: N	0	
			_	ITE					
Site #: 136         GIS UTM(Zone/East/North)         Date: 2000/08/02         Agency: C172         Crew: BW/KT           Site Lg (m): 100         9         535004         6094649         Ref. Name:									
Site Lg (III). 100	9 : 33300	4, 0034043		NNEL	Nei. Name.				
No Vis.Ch.: Intermittent	. 🗆			Min Max	#	Г	Avg % Min % M	ax % #	
		Channel Width	5	0.7 1.700	6	Gadient %:	7.50 7	8 4	
Dw: Tribs.	:	Wetted Width		0.7 1.700		Pool Depth (m):		0.25 6	
	[	Wb Depth	(m): 0.27	0.2 0.3	3				
Stage: L M ✓ H	Temp (C): 4		pH: 7.6		Cond.: 25	Turt	р.: П Т П <b>М</b>	LVC	
				OLOGY					
Bed Material: Dominant: G	Sı	ubdom: C	***************************************	•	Bars: 🗸 N	SIDE DIAG	MID SI	PAN BR	
D95: 25	.00	D (cm): 10.00							
Pattern: SI		slands: N			O1 B1 B2	B3 D1	D2 D3		
Coupling: PC	Confin	ement: FC		TURBANCE					
Morph: RP			IN	IDICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5	
			60	VER					
Total: T		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LWD B	U	DP OV	IV		FSZ:	
Total: T	Amo	unt: N	TT	D	N T	IV N	CDOWN		
	Amo	ount: N	T T		N T		CROWN	FSZ:  I CLOSURE 1-20%	
LWD: F	Amo P/S DIS	ount: N S/O: D	T T	D N A	N T	N		I CLOSURE	
LWD: F RB SHP: S	Amo P/S DIS Texture: F	unt: N S/O:	T T	D N Z A RI	N T	N G: SHR		I CLOSURE	
LWD: F	Amo P/S DIS	ount: N S/O: D	T T	D N Z A RI	N T	N		I CLOSURE	
LWD: F RB SHP: S	Amo P/S DIS Texture: F	unt: N S/O:	T T  CTREAM VEG: B R B R	D N Z A RI	N T	N G: SHR		I CLOSURE	
LWD: F RB SHP: S	Amo P/S DIS Texture: F	unt: N S/O:	T T  CTREAM VEG: B R B R	N 2 A RII	N T	N G: SHR		I CLOSURE	

Reach #

ILP Map #

ILP#

Site

1.0 1031.098 10834 136 PROJECT Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER 3476 Project Code: WATERSHED Local Name: None **Gazetted Name:** NID Map #: 103I.098 NID #: 61037 Reach #: 1.0 Site #: 136 ILP Map#: 1031.098 ILP #: 10834 Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site La: 100 Method: HC Access: H 535004 6094649 Ref. Name: Crew: BW/KT Fish Crd?: 🗸 Agency: C172 Incomplete: Date: 2000/08/02 Time: 08:30 CHANNEL width width width width width width width Mtd width width Gadient % Mtd Avg Avg Channel Width (m): 0.80 0.70 0.70 0.98 1.70 1.30 0.70 Method I: 8.0 7.0 C 7.50 Wetted Width (m): MS 1.70 1.30 0.80 0.70 0.70 0.70 0.98 Method II: 8.0 7.0 C 0.05 0.25 0.10 Pool Depth (m): MS 0.14 0.05 0.05 0.11 No Vis.Ch.: Intermittent: Wb Depth: .3 .2 .3 Method: MS Stage: L MV H Avg: 0.27 Dw: Tribs.: COVER Total: T **CROWN CLOSURE** Type: SWD LWD В U DP OV IV D Ν Ν 1-20% Loc: P/S/O: INSTREAM VEG: N ✓ A M V DIST: E LWD: F LB SHP: S RB SHP: S Texture: F G C B R A Texture: F G C B R A RIP: M RIP: M STG: SHR STG: SHR WATER Req#: Temp: 4 Method: T3 Cond.: 25 Method: S4 pH: 7.6 Method: P2 Turb.: T M L C Method: GE Flood Signs: NONE Method: GE MORPHOLOGY 01 **B**1 B₂ **B3** D1 D3 D2 Bed Material: Dominant: G Subdom: C D95: 25.0 D (cm): 10.00 Morph: RP DISTURBANCE INDICATORS Pattern: SI C1 C4 C3 C5 51 S2 **S4 S5** Islands: N Coupling: PC Confinement: FC Bars: ✓ N SIDE DIAG MID SPAN FSZ HACEBIAN SELABITY Name Comments OverWinter Habitat No overwintering habitat is present Rearing Habitat Rearing values are poor due to limited cover Spawning Habitat Moderate spawning values-some suitable gravel PHOTOS Foc Lg Photo Dir Comments 14 STD U Upstream photo of riffle/pool habitat meeting a lower gradient section 6 R: 6 F: 15 STD D Downstream photo of a stream flowing through an alpine meadow O O MAN ENTS

Comments

Section

ILP Map # ILP# Reach # Site 1.0 1031.098 10834 136 Section Comments Fish form 30484 SITE CARD CHANNEL No fish present above downstream barriers CHANNEL S6 Stream

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### **FDIS Fish Form**

Reach #

ILP Map #

ILP#

Watershed Code:

000-000000-00000-00000-0000-0000-000-000-000-000-000

1.0

1031.098

10834

Gaz	ette	d Name	:						Loca	al: No	one						
Pr	roje	ct Code	: 400-	00000-00000	-00000-000	0-0000-000-0	00-000-000	0-000-0									
	W	S Code	: 000-(	00000-00000	-00000-000	0-0000-000-0	00-000-000	-000-000									
Wa	ater	body ID	:				ILP Map	<b>#:</b> 1031.09	8		ILP #: 1	0834 R	each #:	1 -			
	Pr	oject ID	: 3476						Lake/Str	eam:	S	Lake From	m Date:				
Fis	sh F	ermit #:	25	350K	Date: 2	000/08/02	To: 20	000/08/02	Age	ency: (	C172 C	ew: BW/KT	Resan	nple:			
						S	ITE /	METH	0 D								
Site#	N	ID Map	NID	NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment													
136	1	031.098	610	37			EF 1	4	25	С							
						A.	GEAR	SETT	NGS								
Site#	M	TD/NO	H/P	Date In	Time In	Date Out	Time Out			**********	Con	nment					
136	E	F 1	1	2000/08/02	09:00	2000/08/02	09:25										
					C. E	LECTRO	FISHE	RSPE	CIFI	CAT	IONS						
Site#	T	MTD/N	10	H/P	Encl	Sec	Lnth	Wdth	Vol	tage	Frequency	Pulse	Make	Mode			
136	E	F	1	1	0	255	80.0	1.0	40	00	60	6	SMITH ROOT	12B			
						F	SHE	UMMA	RY								

February 12, 2001 Page 4 of 96

Reach # ILP Map # 1.0 1031.098

ILP#

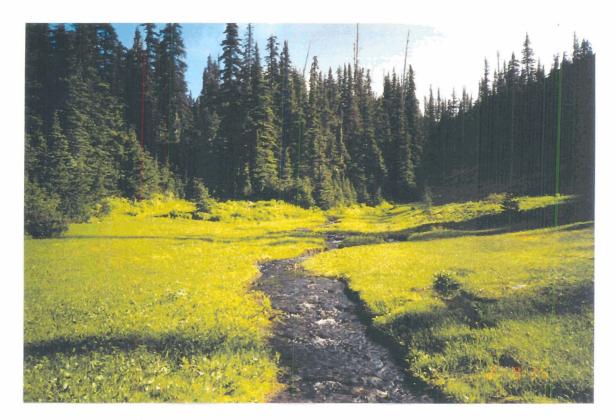
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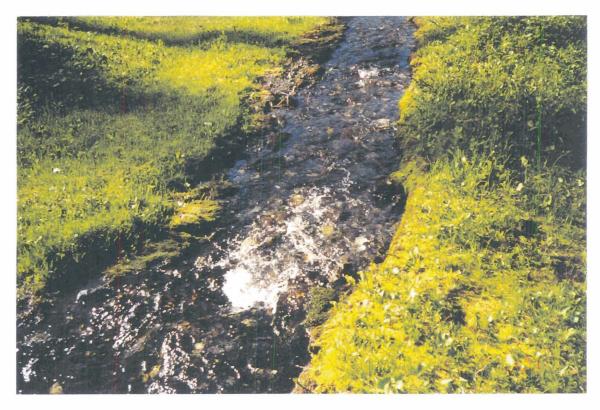
10834

									W A	ne i	BOD	Y						
Gaze	etted N	lame:										Loc	al: N	one				
Pr	oject (	Code:	400-0	000000-	0-0000	0000-00	000-0000-	000-00	00-000	-000-0	00-0							
	WS	ode:	000-0	000000-	0-0000	0000-00	000-0000-	000-00	00-000	-000-0	00-000							
Wa	terbo	ly ID:							ILP M	lap#:	1031.09	8		ILP #	i: 1	0834 R	leach #:	- 1
	Proje	ct ID:	3476									Lake/St	ream:	S		Lake From	m Date:	
Fis	h Peri	nit #:	25	350K		Date:	2000/08/0	)2	То	: 200	0/08/02	Age	ency:	C172	Cr	ew: BW/KT	Resan	nple:
								S	ITE	1 N	ETH	O D						
Site#	NID	Мар	NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment															
136	1031	098	The state of the s															
								Α.	GEA	R S	ETT	NGS						
Site#	MTD	/NO	H/P	Date	In	Time Ir	Date	Out	Time	Out					Com	ment		
136	EF	1	1	2000/0	8/02	09:00	2000/0	08/02	09:	25								
						0	LECT	R O	FIS	HE:	SPE	CIFI	CAI	IONS				
Site#	IV	TD/N	0	H/P	E	ncl	Sec	T	Lnth		Wdth	Vol	tage	Frequ	ency	Pulse	Make	Mode
136	EF		1	1		0	255		80.0		1.0	4	00	60		6	SMITH	12B
								F	ISH	SU	MMA	RY					T KOOT	
Site#	N	TD/N	Ō	H/P	Spec	ies	Stage	Ag	e	Total	# Lgt	h (Min/N	lax)	FishAct		•	Comment	
136	EF	T	1	- 1	NFC	:			1	0					1			

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Site #136, Upstream photo of riffle/pool habitat meeting a lower gradient section Roll #6, Frame #14, Date: 2000/08/02



Site #136, Downstream photo of a stream flowing through an alpine meadow Roll #6, Frame #15, Date: 2000/08/02

Reach # ILP Map #

6.0

ILP#

			8	# # # # # # # # # # # # # # # # # # #		), (C			
Gazetted Na	me:				Loc	al Name: None			
Watershed Co	ode: 400-313700-	-34400-00000-000	00-0000-000-000	-000-000-000-000	כ	ILP I	Map #:	IL.	P#:
				R E	ACH				
Reach	#: 6.0	UI	M(Zone/East/No	orth); 9.534720.6	093501	Sample Type:	В		
Length (ki	m): .62	Gradient (%	•	US Elev (m):		Order:		Magnitude:	1
Confineme	,	Coupling	;: PC	Open water:	Α	BGC Zone:			
islan	ds: N	Bars: VN	SIDE DI			Riparian Veg.:	С	Landuse: N	0
				SI	TE				
Site #:			ne/East/North)	Date: 200	00/08/02	Agency: C172		Crew: BW/K	Т
Site Lg (m): 1	00	9 53463	0 6093345			Ref. Name:			
	-			CHA	NNEL				
No Vis.Ch.:	Intermittent:	لِـا			lin Max	#		Avg % Min % M	
Dw:	Tribs.:		Channel Width		.5 2.1	6	Gadient %:	4.00 4	4 4
		-	Wetted Width Wb Depth		.5 2.1	6 F	Pool Depth (m):	0.14   0.050   0	0.200 6
		L	W Deptil	(111). 0.40	7.4 0.4	<u> </u>			
Stage: L	MV H	Temp (C): 6		<b>pH</b> : 7.6		Cond.: 30	Turl	D.: 🗌 T 🔲 N	LVC
				Mores	(0)E(0)G(Y				
Bed Material:	Dominant: C	-	ubdom: B		В	ars: 🗸 N 🔃 🤄	SIDE DIAG	MID	PAN BR
	D95: 50.00		D (cm): 8.00			O1 B1 B2	B3 D1	D2 D3	
	Pattern: SI		slands: N ement: FC						
	Coupling: PC Morph: RP	Comm	ement. FC		TURBANCE L DICATORS				
	Worph. 13			114	DIOATORO	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				C 0.	VER				
Total	M			LWD B		DP OV	IV		FSZ:
		Loc: P/S		N S	D	N T	T	CDOW	LOLOGUE
		1,000,000,000						1	1-20%
LWD			T: NA IN:	STREAM VEG:	N A	M V V			. 2070
RB SHP		Texture: 🕢 F	GC	□ B □ R □	A RIP:		G: SHR		
LB SHP	S	Texture: 🔽 F	GC	BR	A RIP:	C ST	G: SHR		
Old a Name to a	2	Marentaria		····	Voltare	- Canadas	Total	Adio besses	Admir-
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voitage	Species	Total Fish	Minimum Length (mm)	Meximum Length (mm)
137	EF	1	70	234 sec	400	NFC	0		

ILP Map # Reach #

ILP#

Site

137 6.0

		PROJECT		
Project Name: Mill Area Stream Name (gaz.): SKEENA Project Watershed Code: 400-0000	RIVER		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 400-313700-34400-00000	-0000-0000-000-000	0-000-000-000		
ILP Map#: ILP #:	NID Map #: 1031.09	NID#: 61127	Reach #: 6.0	Site #: 137
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/ 9 534630	<b>/East/North)</b> Site Lg: 100 6093345 Ref. Name:	Method: HC	Access: H
Date: 2000/08/02 Time: 09:40	Agency: C172	Crew: BW/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd   width   width	2.10         1.50         1.7           2.10         1.50         1.7           0.15         0.20         0.1	0 1.80 0 1.80 0 0.05	1.78 Method I: Method II: 0.14 No Vis.Ch.:	Gadient % Mtd Avg 4.0 4.0 C 4.00 4.0 4.0 C  Intermittent:  Tribs.:
	Avg: 0.40	Method: MS Stage: L	Me H	ITIDS.:
Type: SWD	U DP D N	OV IV CROWN CL T T 1 1 INSTREAM	-20%	v 🗹
		RB SHP		
LB SHP: S  Texture:   F □ G □ C □	BRRA	Texture		$\square$ R $\square$ A
	D			
RIP: C STG: SHR		RIP: STG:	SHR	
Euc.				
EMS: Temp: 6	Method: T3	Req #: Cond.: 30	Method	1: 54
pH: 7.6	Method: P2			
Flood Signs: NONE	Method: GE	Turb.: T	M L C Method	i. GE
		MORPHOLOGY		
Bed Material: Dominant: C D95: 50.0 D (cm): 8.00 Pattern: SI Islands: N Coupling: PC Confinement: FC	Subdom: B Morph: RP	DISTURBANCE INDICATORS C1	B1 B2 B3 D1 D2  C2 C3 C4 C5 S1	D3 S2 S3 S4 S5
FSZ		Bars: 🗸 N	SIDE DIAG MID	SPAN BR
		HABITAT QUALITY		
Name		Commer	nts	
	ing habitat is not preser			
		d due to moderate cover e limited due to the large substrate si	ze	
-r		PHOTOS		
Photo Foc Lg	Dir		Comments	
R: 6 F: 16 STD	D	Downstream photo showing modera		
R: 6 F: 17 STD	U	Upstream photo of the lake outlet		
		COMMENTS		
Section		Commer	nts	

February 12, 2001

NFC

Reach #

ILP Map #

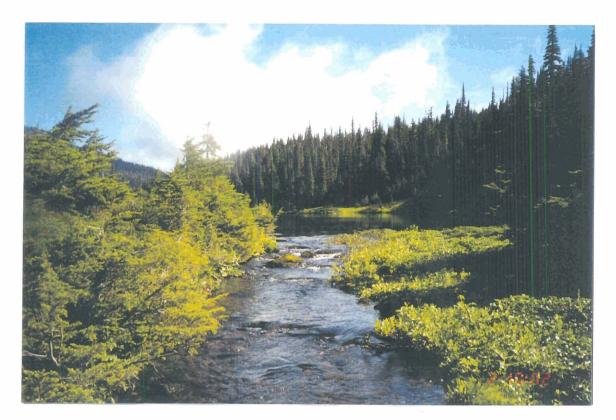
ILP#

Watershed Code:

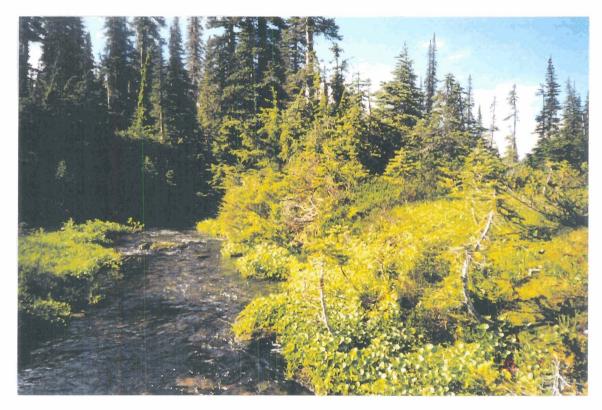
137

6.0

Gaze	tted N	lame:										Loca	il: No	ne			
Pro	oiect (	Code	400-0	000000-	00000	-00000-0	000-0000-0	00-00	00-000-00	0-000-0							
	,						000-0000-0				0						
Wa	terbo								ILP Map					ILP#:	R	each #:	6 -
-			3476								La	ake/Str	eam:	S	Lake From	m Date:	
Fis	Fish Permit #: 25350K Date:							2	To: 2	2000/08/0	2	Age	ncy: C	172	rew: BW/KT	Resai	mple:
								S	ITE /	MET	но	D					
Site#	NID	Мар	NID	#	JTM:	Zone/Eas	st/North/Mt	hd	MTD/NO	Tem	0 (	Cond	Turbi	d	Co	mment	
137	1031	.098	6112	27	T				EF 1	6		30	С				
								Α.,	GEAR	SET	TIA	V G S					
Site#	MTE	/NO	H/P	Date	In	Time I	n Date (	Out	Time Ou	it	00000000		************	Co	mment		•••••
137	EF	1	1	2000/0	8/02	09:40	2000/0	8/02	09:59								
						C.	ELECT	<b>F</b> (0)	FISH	R S	) E (	e II Fili	G/481	IONS			
Site#	١	ITD/N	10	H/P		Encl	Sec	Т	Lnth	Wdtl	1	Volt	age	Frequency	Pulse	Make	Mode
137	EF		1	1		0	234		70.0	1.5		40	00	60	6	SMITH	12B



Site #137, Upstream photo of the lake outlet Roll #6, Frame #17, Date: 2000/08/02



Site #137, Downstream photo showing moderate rearing habitat Roll #6, Frame #16, Date: 2000/08/02

Reach # ILP Map #

ILP#

9.0

	STREAM REFERENCING													
Gazetted Na	ıme: IN	SECT C	REEK						Local	Name: Insect C	Creek			
Watershed C	ode: 40	0-32440	0-00000	-00000-000	00-000-000-000	000-000	-000-00	ס		ILP	Map#:		ILI	P#:
							RE	ACH						
Reach Length (k Confineme Islan	m): 3.3	0		UI radient (%) Coupling rs: N	j:_CO	US E	elev (m): n water: MID	793 A SPAN []	BR I	Sample Type: Order: BGC Zone: Riparian Veg.:	4 CWH		Magnitude: 5	
							************	TE						
Site #: Site Lg (m):			9	52841	ne/East/North) 6098164	_	ate: 20	00/08/02	R	Agency: C172 ef. Name:			Crew: BW/K	Г
							000000000000000000000000000000000000000	NNEL						
No Vis.Ch.:	Inter	rmittent: Tribs.:	_	[	Channel Widtl Wetted Widtl Wb Depti	n (m): 31	1.50 2	lin Max 25 42 8 24 .6 1	6 6 3		Gad Pool Dep	ient %:	Avg %         Min %         M           6.00         6         0.63	6 4 1 6
Stage: L	M	H_	Ter	mp (C): 9		pl	H: 7.4		(	Cond.: 50		Turb	o.:	I □ L 🗸 C
						M	9)(42)	(0) (0) C	Ý					
Bed Material:	Patt Coup	nant: C D95: 60.0 ern: SI ling: CO erph: RP	00	[s	ubdom: G O (cm): 20.00 slands: O ement: FC			TURBANC! DICATORS		S: N		DIAG D1 C5	D2 D3  S1 S2 S3	S4 S5
							co	VER						
Total LWD RB SHP LB SHP	: A : S		Textu	Amor	T: C IN	LWD D STREAM B B	R		S S RIP: C	S S M V S ST	IV N		CROWN 2	FSZ:  I CLOSURE 21-40%
LD OIT			TUNEMI	e. [] .	M 2   2					01				
	NID 0759	Type F	Hgt 8.0	Method AE	Lg I	Method AE		URES Photo	1, 1	AirPhoto			(Zone/East/Nort)	
Comments:	0/59	Г	0.0	AE	0	AE	R: 6	F: 9	L:	#:	9	528	0120   609803	7 GIS
							F.1	SH						
Site Number		pture ethod		mber of vents	Total Length (m)		itai me	Voltag	e	Species		otal ish	Minimum Length (mm)	Maximum Length (mm)
138		EF		1	200	720	sec	400		NFC		0		

Reach # ILP Map #

Site 138

9.0

ILP#

				PROJEC	T			
Project Na Stream Name (g Project Watershed C	az.): SKEENA F				-000-000	Project Co	de:	3476
			1	Van ekski	E(0)			
Gazetted Name: INSECT C Watershed Code: 400-32440		0000-0000-000-000	-000-000-(		Name: Ins	sect Creek		
ILP Map#:	ILP#:	NID Map #: 103	P.008	NID #:	60759	Reach #:	9.0	Site #: 138
Field UTM(Zone/East/No	orth/Method)	GIS UTM(Zo			Site Lg: 1 ef. Name:	00	Method: HC	Access: H
Date: 2000/08/02 Tim	e: 10:30	Agency: C172	Cr	rew: BW/KT		Fish Cro	i?: 🗸	Incomplete:
				CHANNE	L			
Channel Width (m): T Wetted Width (m): T Pool Depth (m): MS  Wb Depth: .9	width         width           26.00         32.00           21.00         18.00           0.80         0.70	36.00 25.00 24.00 20.00	28.00 42 18.00 23 0.30 0.	dth width width	dth widt	31.50 20.67 0.63	Method I: 6.0  Method II: 6.0  No Vis.Ch.:	o 6.0 C
			METH	Ju. IVIS	Stage:	L MV H	Dw:	Tribs.:
Type: SWD I Amount: T Loc: P/S/O:		U DP T S	ov s	IV N	2	CLOSURE 21-40% AM VEG: N A	A □ M □ V	
LWD: A	DIST: C							
LB SHP: S						HP: S		
Texture: F	G C	BRA			Textu	ıre: F 🗸 G	CB	R A
RIP: C STG: MF						RIP: C TG: MF		
				WATER				
EMS:				Req #:				
Temp: 9		Method: T3		Cond.: 5	50		Method:	S4
pH: 7.4 Flood Signs: NONE		Method: P2 Method: GE		Turb.:	_ T	_ M _ L 🗸	C Method:	GE
			M.	ORPHOLO	GY			
	minant: C D (cm): 20.00	Subdom: G Morph: RP		DISTURBA		D1 B1 B2 B	3 D1 D2	D3
Pattern: SI				INDICATO	200	C1 C2 C3 C	4 C5 S1	S2 S3 S4 S5
Islands: O								
Coupling: CO								
Confinement: FC FSZ				E	Bars:	N SIDE D	IAG MID	SPAN BR
			- 1	EATURE	S			
NID Map NID Type	Hgt Meti	nod Lg	Method	Photo		AirPhoto	UTM (Zone/	East/North/Method)
103P.008 70759 F	8.0 AE	0	AE	R: 6 F:	9 L:	#:	9 528128	6098037 GIS
Comments:								
			HAB	ITAT QUA	ALEITY			
Name	0	a and constitution	hitet -			ments		
Other Rearing Habitat		ng and spawning ha				noderate amount of co	over	
	100000			PHOTOS				
Photo	Foc Lg	Dir	T			Commen	rs	
		211				Commen	_	

Reach # ILP Map # ILP #

Site

9.0

							PHOTOS							
	Ph	oto		Foo	: Lg	Dir	Comments							
R:	6	F:	18	ST	STD D		Downstream photo of LWD cover							
R:	6	F:	19	ST	D	U	Upstream photo of the active stream bed							
R:	6	F:	9	ST	D	U	Upstream photo of an 8 m falls							
							COMMENTS							
		Sec	tion				Comments							
		SITE	CARD		Fish form 3	30481								
		CHA	NNEL		Falls (6 m)	located downstream	prevent upstream fish migration							
		CHA	NNEL		S5 Stream	1								

Reach # ILP Map #

ILP#

Watershed Code:

9.0

Gaz	ett	ed N	ame:	INSE	CT CREEK						Loca	ıl: Ins	ect Creek				
P	roj	ect C	ode:	400-0	00000-0000	00-00000-00	00-0000-000-	000-00	0-000-	-000-0							
	1	WS C	ode:	400-3	324400-0000	00-00000-00	00-0000-000-	000-00	0-000-	-000-000							
Wa	ate	rboo	y ID:					ILP	ILP Map #:			ILP #:		R	Reach #: 9 -		
	P	roje	ct ID:	3476							Lake/Stre	eam:	S	Lake Fron	n Date:		
Fis	sh	Pern	nit #:	25	350K	Date: 2	2000/08/02	T	o: 20	00/08/02	Age	ncy: 0	C172 C	rew: BW/KT	Resan	iple:	
								SITI	E / 1	METH	OD						
Site#	Ti	NID I	Лар	NID	# UTN	1:Zone/East	/North/Mthd	MT	D/NO	Temp	Cond	Turbi	d	Cor	nment		
138	1	103P	800	6075	59			EF	1	9	50	С					
							Α.	GE	AR	SETT	INGS						
site#	Ti	MTD	NO	H/P	Date In	Time In	Date Out	Tim	e Out				Co	mment	***************************************		
138		EF	1	1	2000/08/02	10:30	2000/08/0	2 11	1:10								
						C E	LECTR	0 5 1 5	1110	R SP	CIFIC	CAT	IONS				
	т.	M	TD/N	0	H/P	Encl	Sec	Lnth		Wdth	Volt	age	Frequency	Pulse	Make	Mod	
ite#	-																

													ROOT	
- 5								SUMI						***************************************
- }									1118/4/119					
ŀ							-							********
		MTC	NO.	H/P	Species	Stage	Age	Total #	Lgth (M	lin/Max)	FishAct	(	Commont	,
- 1	Site#		,,,,,			01090	7.9.	I Otto II	-9 cm (100	III II IVIIIAA)	1 ISIING	,	Johnnent	
ŀ						orage	rige	TOTAL W	Lgtii (iv	IIII WILLA	Tialinet		Johnnent	
ŀ	138	EF	1	1	NFC	otage	7.9.	0	Lgtii (iv	THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY O	Tistinct		Johnnent	

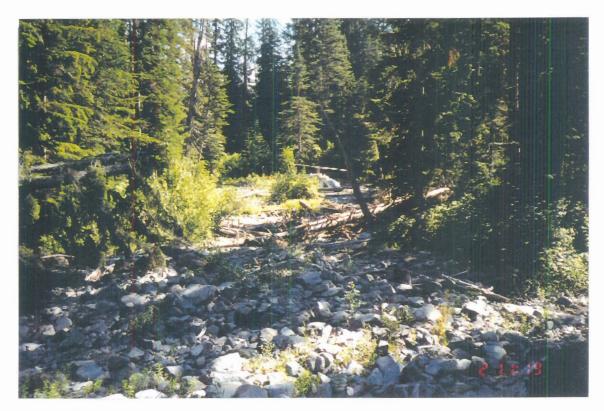
February 12, 2001



Site #138, Downstream photo of LWD cover Roll #6, Frame #18, Date: 2000/08/02



Site #138, Upstream photo of an 8 m falls Roll #6, Frame #9, Date: 2000/08/02



Site #138, Upstream photo of the active stream bed Roll #6, Frame #19, Date: 2000/08/02

Reach # ILP Map #

ILP#

1.0 103P.008

		S	TREAMRE	FERENC	ING			
Gazetted Name:				Loc	cal Name: None			
Watershed Code: 000-000000	0-00000-00000-00	00-000-000-000	-000-000-000-000	0	ILP I	Map #: 103P.00	B ILI	P#: 10163
			RE	ACH				
Reach #: 1.0	U1	ΓM(Zone/East/No	orth): 9.528451.6	098419	Sample Type:	R		
Length (km): .21	Gradient (%	,	US Elev (m):		Order:		Magnitude:	3
Confinement: OC	Coupling		Open water:		BGC Zone:			
Islands: N	Bars: VN	SIDE DI	AG MID	SPAN BR	Riparian Veg.:	M	Landuse: N	0
			SI	TE				
Site #: 139		ne/East/North)	Date: 200	00/08/02	Agency: C172		Crew: BW/K	Г
Site Lg (m): 100	9 52851	4 6098333			Ref. Name:			
			CHA	NNEL				
No Vis.Ch.: Intermittent:				Min Max	#		Avg % Min % M	
Dw: Tribs.:		Channel Width Wetted Width		2.3 4.300	6 P	Gadient %:	5.75 7 0.19 0.100 0	7 4
	-	Wb Depth	` '	0.7 0.8	3	oor beptii (iii).	0.15   0.100   0	.400
Stage: L M ✓ H	Temp (C): 7		pH: 7.0		Cond.: 45	Turt	o.: T N	LVC
			MORPE	OLOGY				
Bed Material: Dominant: C		ubdom: B		В	ars: 🗸 N	SIDE DIAG	MID S	PAN BR
D95: 60.0 Pattern: ST		D (cm): 20.00 slands: N			O1 B1 B2	B3 D1	D2 D3	
Coupling: PC		ement: FC	DIG	DISTURBANCE				
Morph: CP				DICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
			(0)(0)	VER				
Total: T	T	/pe: SWD	LWD B	U	DP OV	IV		FSZ:
	Amo	unt: T	S D	N	N T	N		
	Loc: P/S	5/0:						CLOSURE
LWD: F	DIS	T: C IN	STREAM VEG:	N 🗸 A	MUV		3	41-70%
RB SHP: V	Texture: F	G ✓ C	BR	A RIP:	C ST	G: MF		
LB SHP: V	Texture: F	G ✓ C	BR	A RIP:	C ST	G: MF		
				SH				
Site Number Capture	Number of	Total Length	Total	Voltage	Species	Total	Minimum	Maximum
Method	Events	(m)	Time	linago	27.00.00	Fish	Length (mm)	Length (mm)
139 <i>EF</i>	1	50	210 sec	400	NFC	0		

Reach #

ILP Map #

ILP#

Site

1.0

103P.008

10163

		PROJECT		
Project Name: Mill Area Stream Name (gaz.): SKEENA Project Watershed Code: 400-0000	RIVER		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: No	ne	
Watershed Code: 000-000000-00000-00000-	0000-0000-000-000-0	00-000-000		
ILP Map#: 103P.008 ILP #: 10163	NID Map #: 103P.	008 NID #: 60744	Reach #: 1.0	Site #: 139
Field UTM(Zone/East/North/Method)	GIS UTM(Zone	e/East/North) Site Lg: 10	00 Method: H	C Access: H
	9 528514			
Date: 2000/08/02 Time: 11:10	Agency: C172	Crew: BW/KT	Fish Crd?: 🗸	Incomplete:
		CHANNEL		
Mtd width width	width width wi	dth   width   width   width   width	n width Avg	Gadient % Mtd Avg
Channel Width (m): MS 4.30 3.60		40 2.70	3.00 Method I	9
Wetted Width (m): MS 1.70 1.80	1.80 1.80 1.	40 1.30	1.63 Method II	1: 4.0 5.0 C
Pool Depth (m): MS 0.20 0.15	0.20 0.10 0.	10 0.40	0.19	
	7			h.: Intermittent:
Wb Depth: .8 .7 .8	Avg: 0.77	Method: MS Stage:	L My H D	w: Tribs.:
COVER · Total: T				
Type: SWD LWD B	U DP	OV IV CROWN	CLOSURE	
Amount: T S D	N N	T N 3	41-70%	
Loc: P/S/O:		INSTREA	MVEG: N V A M	V
LWD: F DIST: C				
LB SHP: V		RB SH	HP: V	
Texture: ☐ F ☐ G ✔ C	BRA	Textu	re: F G C	BRA
RIP: C		R	IP: C	
STG: MF		ST	G: MF	
		WATER		
F110				
EMS:	Method: T3	Req #: Cond.: 45	Mont	hod: S4
Temp: 7 pH: 7.0	Method: P2			
Flood Signs: NONE	Method: GE	Turb.:	M L C Met	hod: GE
		MORPHOLOGY		
Bed Material: Dominant: C	Subdom: B	C	01 B1 B2 B3 D1 I	D2 D3
D95: 60.0 D (cm): 20.00	Morph: CP			
	Morph. Of	DISTURBANCE INDICATORS		
Pattern: ST		MADIOATORS	C1 C2 C3 C4 C5	S1 S2 S3 S4 S5
Islands: N				
Coupling: PC Confinement: FC				
FSZ		Bars: 🗸	N SIDE DIAG MIC	SPAN BR
		HABITAT QUALITY		
Name		Comn	nents	
OverWinter Habitat No overwin	tering habitat exists			
	ues are poor due to li			
Spawning Habitat Spawning v	alues are poor due to			
		PHOTOS		
Photo Foc Lg	Dir		Comments	
R: 6 F: 20 STD	U	Upstream photo of a straight char	nnel	
R: 6 F: 21 STD	D	Downstream photo of clumped L\	WD	
		COMMENTS		
Section		Comn	nents	

Reach # ILP Map # ILP# Site 103P.008 10163 139 1.0 Comments Section Fish form 30479 SITE CARD CHANNEL Falls (6 m) downstream on Insect Creek prevent fish access to this stream CHANNEL S5 Stream

February 12, 2001 Page 25 of 223

Reach #

ILP Map #

ILP#

Watershed Code:

139

EF

NFC

000-000000-00000-00000-0000-0000-000-000-000-000-000

1.0

103P.008

10163

								V	VATE	RBOD	Y					
		Code	400-				000-0000-000				Loc	al: N	one			
Wa	aterbo Proje		3476					IL.	.P Map #	: 103P.0	08 Lake/Str	eam:	ILP#:	10163 Lake i	Reach #: From Date:	1 -
Fis	sh Per	mit #:	25	350K		Date:	2000/08/02		To: 20	00/08/02	Age	ency:	C172	Crew: BW	//KT Res	ample:
								SI	TE /	METH	OD					
Site#	NID	Мар	NID	#	UTM:Z	Zone/East	/North/Mtho	I	/TD/NO	Temp	Cond	Turi	bid	Comment		
139	103F	2.008	607	44				E	F 1	7	45	C				
							A	. G	EAR	SETT	INGS					
Site#	MT	O/NO	H/P	Date	In	Time In	Date Ou	t T	Time Out Comment							
139	EF	1	1	2000/0	8/02	11:20	2000/08/0	2	11:40							
						C. E	LECTR	0 F	SHE	R SP	CIFI	C A	TIONS			
Site#	l l	/ITD/N	0	H/P		Encl	Sec	Ln	th	Wdth	Vol	tage	Frequenc	y Pulse	Make	Model
139	EF		1	1		0	210	50	0.0	2.0	4	00	60	6	SMITH	12B
								FIS	H St	AMMA	RY				1 1001	1
Site#	P	ATD/N	0	H/P	Spe	ecies	Stage	Age	Tota	l# Lg	th (Min/N	lax)	FishAct		Comment	

February 12, 2001 Page 6 of 96



Site #139, Upstream photo of a straight channel. Roll #6, Frame #20, Date: 2000/08/02



Site #139, Downstream photo of clumped LWD Roll #6, Frame #21, Date: 2000/08/02

Reach # ILP Map #

5.0

ILP#

Watershed Code: 400-324400-75200-0000-0000-0000-000-000-000-000-000

**Gazetted Name:** Local Name: None ILP Map #: ILP#: UTM(Zone/East/North): 9.528773.6095528 Sample Type: R Reach #: US Elev (m): 1268 Order: 3 Length (km): .94 Gradient (%): 5.53 Magnitude: 8 Confinement: OC Coupling: PC Open water: P BGC Zone: AT Bars: N SIDE DIAG MID SPAN BR Islands: N Riparian Veg.: S Landuse: NO Date: 2000/08/02 Site #: 140 GIS UTM(Zone/East/North) Agency: C172 Crew: BW/KT Site Lg (m): 100 528821 6096126 Ref. Name: CHANNEL No Vis.Ch.: Intermittent: Avg Min Max # Avg % Min % Max % # Channel Width (m): 6.17 3.8 7.300 6 Gadient %: 25.50 21 32 4 Dw: Tribs.: Pool Depth (m): 0.08 | 0.050 | 0.150 Wetted Width (m): 3.12 2.200 6 6 Wb Depth (m): 0.77 0.7 Stage: L M ✓ H Turb.: T M L C Temp (C): 4 pH: 6.2 Cond.: 20 MORPHOLOGY ✓ SIDE Subdom: C Bars: N DIAG MID Bed Material: Dominant: B SPAN D95: 200.00 D (cm): 60.00 01 **B**1 **B**2 **B3** D1 D2 D3 Pattern: SI Islands: N Coupling: CO Confinement: CO DISTURBANCE Morph: CP INDICATORS C1 C2 **S5** COVER Total: T Type: SWD LWD DP OV IV FSZ: Amount N N D N N N Loc: P/S/O: **CROWN CLOSURE** 1-20% LWD: N DIST: NA INSTREAM VEG: RB SHP: V G _ RIP: C STG: PS LB SHP: V Texture: F RIP: C STG: PS ra≡Avatitice≤S **NID Map** NID Type Hgt Method Lg Method AirPhoto UTM (Zone/East/North/Method) 103P.008 70725 F 10.0 GE 0 GE 6 F: 22 #: 9 528832 6097613 Comments: NID Map NID Type Hgt Method Lg Method Photo AirPhoto UTM (Zone/East/North/Method) 103P.008 70725 F 10.0 GE 0 6 F: 23 9 528832 6097613 Comments: F1 S H Site Number Capture Number of Total Length Total Voitage Species Total Minimum Meximum Method Events (m) Time Fish Length (mm) Length (mm)

500

185 sec

NFC

140

EF

Reach #

ILP Map #

ILP#

**Site** 140

5.0

#

					P R 0	80 E 86				
	ct Name: Mil ne (gaz.): Sk ed Code: 40	EENA RIVER				00-000-(	000-000	Project Co	ode:	3476
				W	ATE	RSHI	D)			
Gazetted Name:						Local N	lame: None			
Watershed Code: 400-3	24400-75200-	00000-0000-0	000-000-000-	000-000-00	00-000					
ILP Map#:	ILP#:	NIC	Map #: 103P	.008		NID#:	60725	Reach #:	5.0	Site #: 140
Field UTM(Zone/Ea	st/North/Meti	nod) 9	GIS UTM(Zor 528821		orth) 96126		Site Lg: 100 f. Name:		Method: HC	Access: H
Date: 2000/08/02	Time: 12:00	Ag	ency: C172	Cre	w: B	N/KT		Fish Cro	d?: ✔	Incomplete:
			,		e ii a	XIXI≅I				
Channel Width (m): Wetted Width (m): Pool Depth (m):	Mtd width T 7.30 T 3.00 MS 0.10	width         width           5.40         3.8           3.10         2.7           0.15         0.1	7.10 6 0 2.20 3	idth widt i.40 7.00 i.70 4.00 i.05 0.05	0	th wid		width Avg 6.17 3.12 0.08	Method I: 3	Gadient % Mtd Avg 32.0 21.0 C 25.50 26.0 23.0 C
Wb Depth:	.7 .8	.8 A	vg: 0.77	Method	d: MS		Stage: L	M✔ H	Dw:	Tribs.:
Type: SWD Amount: N Loc: P/S/O: LWD: N	LWD N	B U D N		OV N	IN N		CROWN CL 1 1 INSTREAM	-20%	A [] M []	v 🗆
		IST. NA								
LB SHP: V Texture:		CARI					RB SHP: Texture:			RMA
RIP: C	- G	O V D	_ " "				RIP:		□С₩В	
STG: PS							STG:			
***************************************		••••	••••		***********	**********	**********			
					WA	TER				
EMS:		24-44	- d. T0			Req#:			B.O. of	
Temp: 4 pH: 6.2			od: T3			ond.: 2			Method	
Flood Signs: NON	ΙE		od: GE			Turb.:	_ T _	M L V	C Method	I: GE
				МО	8-8-85	OLO	C.V			
					&&2.88.X	<u>wance</u>	01	B1 B2 B	33 D1 D2	D3
Bed Material: D95: 200.	Dominant: B		Subdom: C					01 02 0	5 51 52	
	D (cm): 6	30.00	Morph: CP			TURBAN DICATO	00			
Pattern: SI Islands: N					11.41	JICH I CI	C1	C2 C3 C	24 C5 S1	S2 S3 S4 S5
Coupling: CO										
Confinement: CO										
FSZ						В	ars; N	SIDE D	NAG MID	SPAN BR
						U R E F				
NID Map NID T	vne Hat	Method	la l	Method		hoto		AirPhoto	TM /7	ne/East/North/Mashad\
	ype Hgt = 10.0	GE	Lg I		R: 6	-	22 L:	AirPhoto #:	9 528832	ne/East/North/Method) 6097613 GIS
Comments:						1 1				
	ype Hgt	Method	Lg I	Viethod	F	hoto		AirPhoto	UTM (Zor	ne/East/North/Method)
103P.008 70725 F	-	Method GE	Lg I		R: 6	F: 2	23 L:	#:	9 528832	
	-			GE F	₹: 6	F:  2				
103P.008 70725 F	-				₹: 6	F:  2				
103P.008 70725 F	10.0	GE		GE F	R: 6	F: 2	LITY	#:		

ILP#

Site

	Ph	hoto		Foo	: Lg	Dir	Comments
R:	6	F:	22	ST	D	U	Upstream photo of a 10 m falls
R:	6	F:	23	ST	D	U	Upstream photo of a 10 m falls
R:	6	F:	24	ST	D	U	Upstream photo of the stream with snow in the background
R:	8	F:	1	ST	D	D	Downstream photo of no potential fish habitat
							COMMENTS
		Sec	ction				Comments
		SITE	CARD		Fish form 164	189	
		CHA	NNEL		No fish prese	nt upstream of t	he falls located downstream
		CHA	NNEL		S5 Stream		

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Reach #

ILP Map #

ILP#

Watershed Code:

400-324400-75200-00000-0000-000-000-000-000-000-000

5.0

WATERBODY **Gazetted Name:** Local: None ILP#: Waterbody ID: ILP Map #: Reach #: 5 -Project ID: 3476 Lake/Stream: S Lake From Date: Date: 2000/08/02 To: 2000/08/02 Agency: C172 Fish Permit #: 25350K Crew: BW/KT Resample: SITE / METHOD NID Map | NID# UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid | Comment Site# 140 103P.008 60725 EF 1 4 20 A. GEAR SETTINGS MTD/NO H/P Date In Time In Date Out Time Out Site# Comment EF 1 1 2000/08/02 12:00 2000/08/02 12:20 C. ELECTROFISHER SPECIFICATIONS MTD/NO H/P Wdth Voltage Frequency Pulse Make Model Site# Encl Sec Lnth 140 EF 185 100.0 2.0 SMITH 12B ROOT FISH SUMMARY MTD/NO Species Stage Age Total # Lgth (Min/Max) FishAct NFC 140

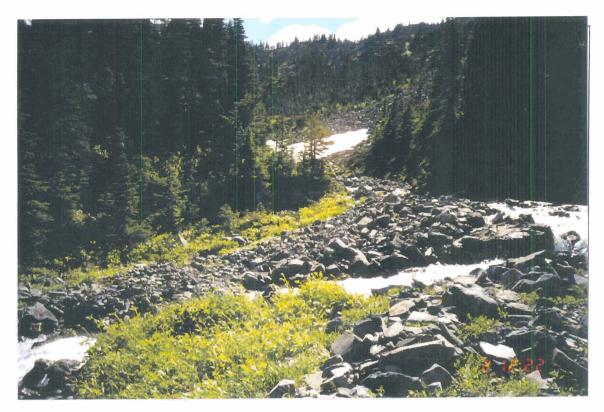
February 12, 2001 Page 66 of 96



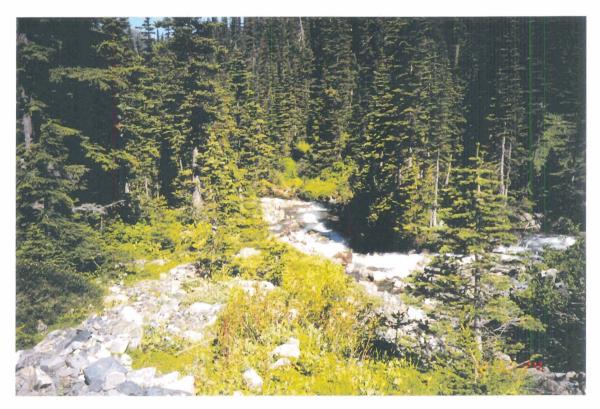
Site #140, Upstream photo of a 10 m falls. Roll #6, Frame #22, Date: 2000/08/02



Site #140, Upstream photo of a 10 m falls. Roll #6, Frame #23, Date: 2000/08/02



Site #140, Upstream photo of the stream with snow in the background Roll #6, Frame #24, Date: 2000/08/02



Site #140, Downstream photo of no potential fish habitat Roll #8, Frame #1, Date: 2000/08/02

Reach # ILP Map #

ILP#

					81	RE	AM I	REFI	REN	CI	A G				
Gazetted Na	ıme: IN	SECT OF	REEK							Loca	Name: Insec	t Creek			
Watershed Co	ode: 40	0-324400	0-00000	-00000-000	0-0000-000-000-	-000-0	00-000	-000			IL	P Map #:		IL	P#:
							F	EAC	Ħ						
Reach	n #:	8.0		UT	M(Zone/East/No	rth): 9	9.53033	1.6099	143		Sample Typ	e: B			
Length (k	m): 2.85	5	Gı	radient (%)				m): 612			Order	r: 4	Mag	nitude: 6	34
Confineme				Coupling				ter: A			BGC Zone	: CWH			
Islan	ds: N		Ва	rs: VN	SIDE DI	AG	MID	SP	AN _E	BR	Riparian Veg.	.: M	La	nduse: N	0
								SITE							
Site #:					ne/East/North)		Date:	2000/0	8/02		Agency: C1	72	Crev	v: BW/K	Т
Site Lg (m):	100		9	531710	6099640					R	ef. Name:				
	_						**********	IANN	•						
No Vis.Ch.:	Inter	mittent:		_	Ob 1 146-445	()	Avg	Min	Max	#		O-di40	Avg %		
Dw:		Tribs.:		-	Channel Width Wetted Width		9.83	14	27	6		Gadient %		0.45 1	11 4
				-	Wb Depth		1.33	1	2	3		rooi beptii (iii	). 0.00	0.45	1.100
			_									_			
Stage: L	MV	H	ren	np (C): 9			pH: 7.4				Cond.: 50		urb.:	T N	ı ✓ r □ c
						Ŋ	OR	241(0)	OG						
Bed Material:		ant: B 95: 300.	00		bdom: C					Bar	s: N	SIDE DIA	G N	MID S	PAN BR
		em: SI	00		(cm): 100.00 slands: N					(	O1 B1 I	B2 B3 D1	D2	D3	1
		ing: CO		-	ement: CO			DISTUE	BANCE	. [					
	Moi	rph: CP							ATORS		C1 C2 (	C3 C4 C5	S1	S2 S3	S4 S5
							6	0.V.E	R						
Total	: M		Г	Ту	pe: SWD I	LWD	В		U	DI	OV	IV			FSZ:
				Amou	int: N	N	0	)	N	S	N	N			
				Loc: P/S	/O:		V			<b>V</b>					CLOSURE
LWD	: N			DIS	T: NA INS	STREA	M VEC	3: N	<b>✓</b> A		M V			1	1-20%
RB SHP	: V		Textur	e: 🔲 F	GCC	<b>✓</b> B	_ F	R	A F	RIP: N		STG: MF			
LB SHP	: V		Textur	e: F	GC	<b>✓</b> B	F	S	A F	RIP: N		STG: MF			
							FE/	TUF	lES						
NID Map	NID	Туре	Hgt	Method	Lg M	ethod		Phot	o	Т	AirPhoto	U1	M (Zone	/East/Nort	h/Method)
	0766	F	6.0	AE	0	AE	R:	F	:	L:	#:	9	531980	609966	6 GIS
Comments:	Too inc	ised for a	a photo												
								FISH							
Site Number		oture	1,000	nber of	Total Length		Total		Voltag	е	Species	Total		nimum	Maximum
44:		ethod	E	vents	(m)		Time					Fish	Len	gth (mm)	Length (mm)
141		EF		1	100	52	26 sec		500		NFC	0			

ILP#

Site 141

						2	0 U E	e T						
	· lame (ga:	z.): SKE	ENA RIVE				0-000-00	00-000-0	000	Project	Code:	34	76	
					¥	VA I	ER5	: E 0						
Gazetted Name: IN	SECT CR	EEK					Loca	al Name	: Insec	t Creek				
Watershed Code: 40			0000-0000-	-000-000-00	0-000-000-	000-00	00							
ILP Map#:	IL	P#:	N	ID Map #: 103	3P.008		NID:	#: 6076	6	Reach #:	8.0		Site #: 141	
Field UTM(Zone	/East/Nor	th/Meth	od)	GIS UTM(Z	one/East/N	orth)		Site L	g: 100		Method	: HC	Access: H	
			31	9 5317		099640		Ref. Na	_					
Date: 2000/08/02	Time	: 12:45	А	gency: C172	С	ew:	BW/KT	Ī		Fish	Crd?: ✔		ncomplete:	
						C H	ANN	EL						
Channel Width (m) Wetted Width (m) Pool Depth (m) Wb Depth COVER	: GE : GE	20.00 12.00 0.80	18.00 14 10.00 11 0.90 0.	dth width .00 25.00 .00 14.00 75 0.45  Avg: 1.33	27.00 20 8.00 4 1.10 0.	00   00   00   00   00   00   00   00			width	width Avg 20.67 9.83 0.80 M✔ H	Metho Metho No Vis	od II: 5.0 10	.0 C 8.50	_
Type: SW Amount: N Loc: P/S/O:	_	ND N	<b>B</b>	U DF	OV N		IV N	1	1	LOSURE 1-20% I VEG: N	A 🗌 N	1 U		
LB SHP: V Texture:  RIP: M STG: MF	F			_ R _ /	A			1	RB SHP exture RIP STG	:	G [ C	<b>⊋</b> B □ R	A	
						W	.11	7						
EMS:							Req #							
Temp: 9				thod: T3			Cond	.: 50			1	Method: S4		
pH: 7 Flood Signs: N				thod: P2 thod: GE			Turb	.:	T	] M 🕢 L 🗌	] C	Method: GE		
r lood digital it		000000000000000000000000000000000000000				00000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000					********
					M		HOL	8 ( 8 )						*****
Bed Material: D95: 36 Pattern: S Islands: N Coupling: C	00.0 D	iinant: B (cm): 10	00.00	Subdom: C Morph: Cl	Þ		ISTURE INDICA		01 C1	B1 B2  C2 C3	C4 C5	D2 D3 S1 S2	S3 S4 S	:5
Confinement: C FSZ								Bars:	N	✓ SIDE	DIAG	MID SPA	BR	
						E A	TUR	ES						
NID Map NID	Туре	Hgt	Method	Lg	Method		Photo	)		AirPhoto	UT	M (Zone/East/N	lorth/Method)	
103P.008 70766	F	6.0	AE	0	AE	R:	F:		L:	#:	9 5	531980 609	9666 GIS	
Comments: Too in	cised for	a photo												
Name					HAE	TA	r eli		r Y omme	nts				
Rearing Habi	tat	Poor	rearing hab	itat due to lim	ited cover									
Spawning Hab	itat	Poor	spawning h	abitat due to	fast water a	nd larg	ge subst	trates						
						PH	0110	Ş						
Photo	F	oc Lg		Dir						Comm	ents			

ILP#

Site 141

8.0

PHOTOS Comments

	Ph	oto		Foo	: Lg	Dir	Comments	
R:	8	F:	2	ST	D	U	Upstream photo of a high gradient section of this reach	
R:	8	F:	3	ST	D	D	Downstream photo of large boulders	
COMMENTS								
	Section Comments							
		CHA	NNEL		Fish form	16488		
		CHA	NNEL		Falls preve	nts upstream fish mig	ration	
		CHA	NNEL		S5 Stream			

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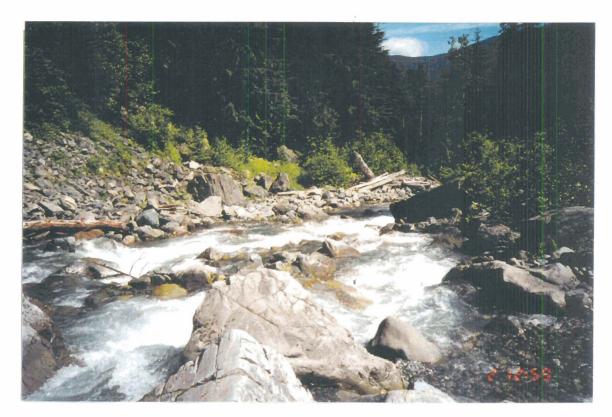
ILP#

Watershed Code:

8.0

									WA	100	RB	OD.	Y									
Gaze	etted	Name	: INSE	CT CR	EEK								Loca	al: In	nsect	Creek						
Pr	roject	Code	: 400-0	000000	-00000	-00000-	0000-0000	-000-0	00-000	000-000	0-000	-0										
	WS	Code	400-3	324400-	-00000	-00000-0	0000-0000	-000-0	00-000	)-000	000-0	-000										
Wa	aterbo	dy ID	:						ILP N	Иaр	#:					ILP#:			Reach	#:	8 -	
	Proj	ect ID:	3476									L	_ake/Str	eam:	S		L	ake Fro	om Date	e:		
Fis	sh Per	mit #:	25	350K		Date:	2000/08	/02	То	: 2	000/0	8/02	Age	ency:	C17	2 (	Crew:	BW/K	T	Resai	nple:	
								S	UTE	1	ME	THE	) D									
Site#	NID	Мар	NID	#	UTM:	Zone/Ea	st/North/	Vithd	MTD	)/NO	Te	emp	Cond	Tur	bid			C	ommen	t		
141	103	P.008	6076	66					EF	1		9	50	0								
								Α.	GEA	\R	SE	TTI	NGS									
Site#	MTI	D/NO	H/P	Date	e In	Time	In Dat	e Out	Time	Ou	t					Co	mmer	nt				
141	EF	1	1	2000/	08/02	13:00	2000	/08/02	13:	:40												
						C.	ELEC	TRO	FIS	ii E	R	SPE	CIFI	C A	1010	NS.						
Site#	1	MTD/N	10	H/F		Encl	Sec		Lnth		W	dth	Vol	tage	F	equency	F	ulse	IV	lake	Model	behinde
141	EF		1	1		0	526		100.0			3.0	5	00		60		6		/ITH	12B	
								********	IS :		25.05.7.0	mener:			*******		0000000000	*********	I R	TOC		3000
											<b>********</b>											
Site#	_	VITD/N	10	H/P		ecles	Stage	Ag	e	Tot	tal#	Lgth	(Min/N	lax)	Fisi	nAct			Comn	nent		
141	EF		1	1	_ N	FC					0											

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Site #141, Downstream photo of large boulders Roll #8, Frame #3, Date: 2000/08/02



Site #141, Upstream photo of a high gradient section of this reach Roll #8, Frame #2, Date: 2000/08/02

Reach # ILP Map #

ILP#

	S	(		110			
Gazetted Name:			Loca	al Name: None			
Watershed Code: 400-324400-52900-00000-00	000-0000-000-000-	000-000-000-000	0	ILP	Map#:	ILF	P#:
		RE	ACH				
Reach #: 3.0 U	TM(Zone/East/No	rth): <b>9.53256</b> 6.6	103872	Sample Type:	В		
Length (km): 1.54 Gradient (%	,	US Elev (m):		Order:		Magnitude: 4	6
Confinement: OC Couplin		Open water:	_	BGC Zone: Riparian Veg.:		Landuse: N	0
		SI	TE				
	one/East/North)	Date: 200		Agency: C172		Crew: BW/K7	r
Site Lg (m): 100 9 53253	38: 6103035			Ref. Name:			
			NNEL		-		
No Vis.Ch.: Intermittent:	Channel Width		lin Max #		Gadient %:	Avg % Min % M 2.00 2	ax % #
Dw: Tribs.:	Wetted Width		700 5.7 6		Pool Depth (m):		400 6
	Wb Depth	(m): 0.67 0	.6 0.8 3	3			
Stage: L M H Temp (C): 10	)	<b>pH</b> : 7.8		Cond.: 40	Tur	b.:	LVC
		M(e) (a:a:	(0)  (0) C  Y				
	Subdom: G		Ва	rs: N 🗸 S	SIDE DIAG	MID SF	PAN BR
	D (cm): 5.00 Islands: N			O1 B1 B2	B3 D1	D2 D3	
	nement; OC	DIG	TURBANCE				
Morph: RP			DICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
		0.0	ØER.				
Total: T	ype: SWD L	.WD B	U D		IV		FSZ:
Loc: P/		N N			T	000111	OL COLUDE
		TREAM VEC.				0	CLOSURE 0%
		TREAM VEG:	A RIP: 0	🛂 🗸 🗀	G: NA		
RB SHP: V Texture: F	<b>№</b> G C C	B   R     B   R	A RIP: 0		G: NA		
		FEAT	URES				
NID Map NID Type Hgt Method	d Lg M	ethod F	Photo	AirPhoto	UTM	(Zone/East/North	n/Method)
103P.008 70891 F 30.0 AE	0	AE R:	F: L:	#:	9 53	2522 610183	GIS GIS
Comments:							
		FI	SH				
	<u></u>	*******************	*******	***********************			
Site Number   Capture   Number of   Method   Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)

Reach # ILP Map #

ILP#

Site 142

		PROJECT		
Project Name: Mill Area Stream Name (gaz.): SKEENA Project Watershed Code: 400-0000	RIVER		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None	e	
Watershed Code: 400-324400-52900-00000			Reach #: 3.0	Site #: 142
ILP Map#: ILP #:	NID Map #: 103P.008			Site #. 142
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/E 9 532538	ast/North) Site Lg: 100 6103035 Ref. Name:	Method: HC	Access: H
Date: 2000/08/02 Time: 14:10	Agency: C172	Crew: BW/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd width width	width width width	width width width width	width Avg	Gadient % Mtd Avg
Channel Width (m): T 6.20 5.10	4.30 6.40 3.70	4.20		2.0 2.0 C 2.00
Wetted Width (m): T 4.30 4.80	4.30 5.70 3.70	4.20	4.50 Method II:	2.0 2.0 C
Pool Depth (m): MS 0.15 0.05	0.40 0.40 0.20	0.20	0.23	
	7		No Vis.Ch.:	
Wb Depth: .6 .6 .8	Avg: 0.67	Method: MS Stage: L	M ✓ H Dw:	Tribs.:
COVER Total: T				
Type: SWD LWD B	U DP	OV IV CROWN C	LOSURE	
Amount: N N N	D T	S T 0	0%	
Loc: P/S/O:		INSTREAM	VEG: N A M	V 🗀
LWD: N DIST: N	A			
LB SHP: V		RB SH	P: V	
Texture: ☐ F ✓ G ☐ C	BRA	Texture	E: F G G C B	RA
RIP: G		RIF	P: G	
STG: NA		STG	S: NA	
		WATER		
EMS:		Req #:		
Temp: 10	Method: T3	Cond.: 40	Method	d: S4
pH: 7.8	Method: P2	Turb.: T	M L C Method	d: GE
Flood Signs: NONE	Method: GE			
		MORPHOLOGY		
Bed Material: Dominant: C	Subdom: G	01	B1 B2 B3 D1 D2	D3
D95: 8.00 D (cm): 5.00	Morph: RP	DISTURBANISE		
Pattern: SI		DISTURBANCE INDICATORS C1	C2 C3 C4 C5 S1	S2 S3 S4 S5
Islands: N			C2 C3 C4 C5 S1	S2 S3 S4 S5
Coupling: PC				
Confinement: OC				
FSZ		Bars: N	SIDE DIAG MID	SPAN BR
		FEATURES		
NID Map NID Type Hgt Me	thod Lg Meti	nod Photo	AirPhoto UTM (Zo	ne/East/North/Method)
103P.008 70891 F 30.0 A	E 0 AE	R: F: L:	#: 9 532522	6101839 GIS
Comments:				
	H	ABITAT QUALITY		
Name		Comme	ents	
	ng habitat is present is li			
		y moderate amount of gravels		
Rearing Habitat Rearing ha	bitat is poor due to limited	d cover		
		PHOTOS		
Photo Foc Lg	Dir		Comments	

Reach # ILP Map #

ILP#

Site

3.0

142

					: Lg	Dir	Comments
R:	8	F:	4	ST	D	U	Upstream photo of riffle/pool habitat
R:	8	F:	0	ST		D	Downstream photo showing overstream vegetation
COMMENTS							
		-	ction				Comments
		SITE	CARD		Fish form 3	30472	
CHANNEL No fish present. Barriers located downstream							
CHANNEL S5 Stream							

Reach #

ILP Map #

ILP#

Watershed Code:

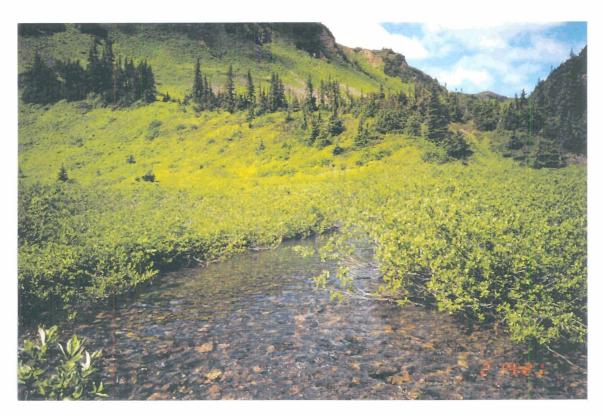
400-324400-52900-0000-0000-000-000-000-000-000-000

3.0

WATERBODY Gazetted Name: Local: None WS Code: 400-324400-52900-00000-0000-000-000-000-000-000-000 ILP#: ILP Map #: Reach #: 3 -Project ID: 3476 Lake/Stream: S Lake From Date: Fish Permit #: Date: 2000/08/02 To: 2000/08/02 Agency: C172 Crew: BW/KT Resample: SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Site# NID Map NID# Comment 103P.008 60891 142 EF 1 10 40 A GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment EF 1 2000/08/02 14:10 2000/08/02 14:40 142 C. ELECTROFISHER SPECIFICATIONS. Site# MTD/NO H/P Encl Lnth Wdth Voltage Frequency Pulse Make Model 142 EF 0 110.0 4.0 500 6 **SMITH** 12B ROOT FISH SUMMARY Total # Lgth (Min/Max) FishAct MTD/NO Age Site# H/P Species Stage Comment NFC 142 EF 0



Site #142, Downstream photo showing overstream vegetation Roll #8, Frame #5, Date: 2000/08/02



Site #142, Upstream photo of riffle/pool habitat Roll #8, Frame #4, Date: 2000/08/02

Reach # ILP Map #

ILP#

Watershed Code: 400-324400-52900-84100-0410-0000-000-000-000-000-000

			S	IREAMR	EFERENC	ING			
Gazetted Na	me:				Lo	cal Name: None			
Watershed Co	ode: 400-324400	-52900-84100-04	10-0000-000-000	-000-000-000-	000	ILP	Map #:	IL	P#:
				R	EACH				
Reach	ı#: 1.0	U1	M(Zone/East/No	orth): 9.530970	).6105375	Sample Type:	R		
Length (ki	m): .24	Gradient (%)	: 17.08	US Elev (n	1): 1349	Order:	4	Magnitude: 1	7
Confineme		Coupling Bars: VN		Open wate	er: A SPAN BR	BGC Zone: Riparian Veg.:		Landuse: N	
ISIAN	ds: N	Bars: YN	SIDEDI		SPANBR	rupanan veg	3	Lariquse. N	0
Site #:	142	GIS LITM/7A	ne/East/North)		2000/08/02	Agency: C172		Crew: BW/K	r
Site Lg (m):		9 53110		Date. 4	.000/00/02	Ref. Name:		olew. Brink	
	-								
No Vis.Ch.:	Intermittent:			Avg	Min Max	#	7	Avg %   Min %   M	ax % #
Dw:	Tribs.:		Channel Width		1.3 3.1	6 6		2.75 2	4 4
		-	Wetted Width Wb Depth	. ,	1.3 3.1 0.2 0.2	3	Pool Depth (m):	0.13   0.06   (	0.21 6
		_ (0) 40							
Stage: L	M₹ H	Temp (C): 10		pH: 7.3	# (0) N (0) G 14	Cond.: 40	Turb	»:	l 🗌 r 🐼 c
Bud Makasiah				888 88 Y 18 P B 7 P 5	e :				
	Daminont: C	e,	ibdom: G			are: [A] N [	RIDE DIAG		DANI TIRD
bed wateriar:	Dominant: C D95: 10.0		bdom: G 0 (cm): 8.00				SIDE DIAG		PAN BR
bed wateriar.	D95: 10.0 Pattern: SI	O [	0 (cm): 8.00 slands: N			ars: ₩ N	SIDE DIAG	MID SI	PAN BR
Ded Material:	D95: 10.0 Pattern: SI Coupling: DC	O [	0 (cm): 8.00		ISTURBANCE	O1 B1 B2	B3 D1	D2 D3	
bed wateriar:	D95: 10.0 Pattern: SI	O [	0 (cm): 8.00 slands: N		E				
	D95: 10.0 Pattern: SI Coupling: DC Morph: RP	0 [ k Confin	0 (cm): 8.00 slands: N ement: UN		ISTURBANCE INDICATORS	O1 B1 B2	B3 D1	D2 D3	
	D95: 10.0 Pattern: SI Coupling: DC Morph: RP	0 E k Confin	0 (cm): 8.00 slands: N ement: UN		ISTURBANCE	O1 B1 B2	B3 D1 C4 C5	D2 D3	S4 S5
	D95: 10.0 Pattern: SI Coupling: DC Morph: RP	0 E k Confin	O (cm): 8.00 slands: N ement: UN		ISTURBANCE INDICATORS	O1 B1 B2 C1 C2 C3	B3 D1	D2 D3	
	D95: 10.0 Pattern: SI Coupling: DC Morph: RP	0 [ k Confin	O (cm): 8.00 slands: N ement: UN	LWD B	ISTURBANCE INDICATORS	O1 B1 B2 C1 C2 C3 DP OV	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
	D95: 10.0 Pattern: S1 Coupling: DC Morph: RP	0 [1]   Residual Confinence   Ty   Among   2: P/S	o (cm): 8.00 slands: N sement: UN  pe: SWD unt: N	LWD B	ISTURBANCE INDICATORS	O1 B1 B2 C1 C2 C3 DP OV	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
Total: LWD: RB SHP:	D95: 10.0 Pattern: S1 Coupling: DC Morph: RP	O [ k Confin	O (cm): 8.00 slands: N ement: UN ement: UN ement: UN ement: UN ement: N eme	LWD B N D STREAM VEG B R	ISTURBANCE INDICATORS  U  N  N  N  A  RIP	O1 B1 B2 C1 C2 C3 DP OV N T M V G ST	B3 D1  C4 C5  IV  N  G: NA	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total:	D95: 10.0 Pattern: S1 Coupling: DC Morph: RP	O E Is Confin	o (cm): 8.00 slands: N ement: UN ement: UN ement: UN ement: UN ement: N eme	LWD B N D STREAM VEG	ISTURBANCE INDICATORS  U  N  N  N  A  RIP	O1 B1 B2 C1 C2 C3 DP OV N T M V G ST	B3 D1  C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total: LWD: RB SHP:	D95: 10.0 Pattern: S1 Coupling: DC Morph: RP	O [ k Confin	O (cm): 8.00 slands: N ement: UN ement: UN ement: UN ement: UN ement: N eme	LWD B N D STREAM VEG B R	ISTURBANCE INDICATORS  U  N  N  N  A  RIP	O1 B1 B2 C1 C2 C3 DP OV N T M V G ST	B3 D1  C4 C5  IV  N  G: NA	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
Total: LWD: RB SHP:	D95: 10.0 Pattern: S1 Coupling: DC Morph: RP	O [ k Confin	O (cm): 8.00 slands: N ement: UN ement: UN ement: UN ement: UN ement: N eme	LWD B N D STREAM VEG B R	ISTURBANCE INDICATORS  U  N  N  N  A  RIP	O1 B1 B2 C1 C2 C3 DP OV N T M V G ST	B3 D1  C4 C5  IV  N  G: NA	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:

Reach # ILP Map #

ILP#

Site 143

Watershed Code: 400-324400-52900-84100-0410-0000-000-000-000-000-000

		PROJECT		
Project Name: Mill Area Stream Name (gaz.): SKEENA Project Watershed Code: 400-0000	RIVER		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None		
Watershed Code: 400-324400-52900-84100-	0410-0000-000-000-000-0	000-000-000		
ILP Map#: ILP #:	NID Map #: 103P.008	NID #: 60911	Reach #: 1.0	Site #: 143
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/Ea	st/North) Site Lg: 100	Method: HC	Access: H
	9 531102	6105450 Ref. Name:		
Date: 2000/08/02 Time: 15:00	Agency: C172	Crew: BW/KT	Fish Crd?:	Incomplete:
		CHANNEL		
Mtd width width	width width width	width width width width	width Avg	Gadient % Mtd Avg
Channel Width (m): MS 2.20 2.40	1.80 1.30 3.10	2.80	2.27 Method I:	2.0 4.0 C 2.75
Wetted Width (m): MS 2.20 2.40	1.80 1.30 3.10	2.80	2.27 Method II:	2.0 3.0 C
Pool Depth (m): MS 0.11 0.21	0.18 0.08 0.06	0.12	0.13	
Wb Depth: .2 .2 .2	7 Avg: 020 M	lethod: MS Stage: L	and the second s	: Intermittent:
Wb Depth: .2 .2 .2	Avg: 0.20 M	ethod: IVIS Stage: L	M ✓ H Dw	: Tribs.:
COVER · Total: T				
Type: SWD LWD B	U DP	OV IV CROWN CL	OSURE	
Amount: N N D	N N	T N 0	0%	
Loc: P/S/O:		INSTREAM	VEG: N 🗸 A 🗌 M 🗍	V
DIST: N	^			
LWD: N DIST: N	A			
LB SHP: V		RB SHP:		
Texture: ☐ F ✓ G ☐ C	B R A	Texture:	F G C E	B R A
RIP: G		RIP:	G	
STG: NA		STG:	NA	
		WATER		
EMS:		Req #:		
Temp: 10	Method: T3	Cond.: 40	Metho	od: S4
pH: 7.3	Method: P2			od: GE
Flood Signs: NONE	Method: GE	Turb.: T	M L V C Wetho	od, GE
		MORPHOLOGY		
Bed Material: Dominant: C	Subdom: G	01	B1 B2 B3 D1 D2	2 D3
D95: 10.0 D (cm): 8.00	Morph: RP	DIGTURDANICE		
Pattern: SI		DISTURBANCE INDICATORS C1	C2 C3 C4 C5 S	1 S2 S3 S4 S5
Islands: N			C2 C3 C4 C5 S	1 S2 S3 S4 S5
Coupling: DC				
Confinement: UN				
FSZ		Bars: V	SIDE DIAG MID	SPAN BR
	H1	ABITAT QUALITY		
Name		Commen	ts	
	ering habitat-no deep poo			
	pitat is limited by a lack of			
Spawning Habitat Moderate s	pawning habitat with lots o			
		PHOTOS		
Photo Foc Lg	Dir		Comments	
R: 8 F: 6 STD		ostream photo of a straight channe		
R: 8 F: 7 STD	D Do	ownstream photo towards lake		
		COMMENTS		
Section		Commen	ts	

Reach # ILP Map # ILP # Site
Watershed Code: 400-324400-52900-84100-0410-0000-000-000-000-000 1.0 143

Section	Comments
SITE CARD	Fish form 16487
CHANNEL	No fish present. Barriers downstream prevent upstream fish migration
CHANNEL	S6 Stream

Reach #

ILP Map #

ILP#

Watershed Code:

400-324400-52900-84100-0410-0000-000-000-000-000-000

.0

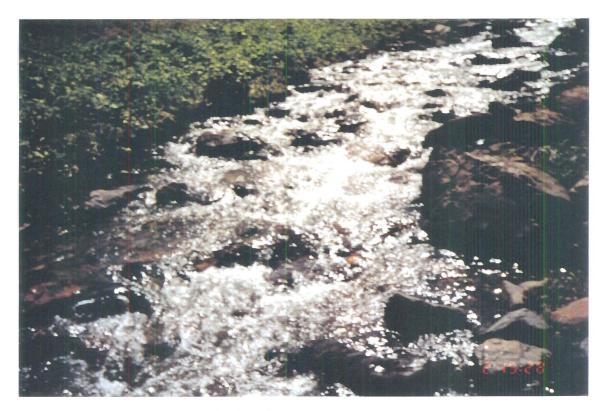
WATERBODY **Gazetted Name:** Local: None WS Code: 400-324400-52900-84100-0410-0000-000-000-000-000-000 ILP#: Nesc.

C Lake From Date: Reach #: Waterbody ID: ILP Map #: 1 -Project ID: 3476 Lake/Stream: S Fish Permit #: 25350K Date: 2000/08/02 To: 2000/08/02 Agency: C172 Crew: BW/KT Resample: SITE / METHOD 
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 EF
 1
 10
 40
 C
 NID Map NID# Comment 143 103P.008 60911 A. GEAR SETTINGS Time In Date Out Time Out Date In Site# MTD/NO H/P Comment 143 EF 1 2000/08/02 14:45 2000/08/02 15:00 C. ELECTROFISHER SPECIFICATIONS Lnth MTD/NO H/P Encl Sec Wdth Voltage Pulse Site# Frequency Make Model 143 0 103 100.0 3.0 500 60 6 SMITH 12B ROOT FISH SUMMARY Total # Lgth (Min/Max) FishAct Site# MTD/NO H/P Species Stage Age Comment 143 NFC 0



Site #143, Downstream photo towards lake Roll #8, Frame #7, Date: 2000/08/02



Site #143, Upstream photo of a straight channel Roll #8, Frame #6, Date: 2000/08/02

Reach # ILP Map #

ILP#

0

			S	TREAME	REFI	REN	CIN	G			
Gazetted Na	me:					L	.ocal	Name: None			
Watershed Co	ode: 400-324400	-52900-00000-00	00-0000-000-000	-000-000-000-	000			ILP I	IL	P#:	
				Ř	EΑG	H					
Reach	#: 7.0	115	M(Zone/East/No	odb\: 0 52420	9 C40E	206		Sample Type:	R		
										Billian Marian	
Length (kr Confineme		Gradient (% Coupling		US Elev (r Open wat	5.	ō		Order: 4 BGC Zone:		Magnitude: 3	18
	ds: N	Bars: VN		_	SP	AN B	R	iparian Veg.:		Landuse: N	0
					SITE						
Site #: 1	44	GIS UTM(Zo	ne/East/North)	Date:	2000/08	8/02		Agency: C172		Crew: BW/K	Т
Site Lg (m): 1	00	9 53132	6105143				Re	f. Name:			
				CH	ANK	IEL					
No Vis.Ch.:	Intermittent:			Avg	Min	Max	#			Avg % Min % N	
Dw:	Tribs.:		Channel Width		3.700	6.300	6		Gadient %:	2.00 2	2 4
		-	Wetted Width Wb Depth		3.700 0.3	6.300	6	_ L_P	ool Depth (m):	0.13   0.050   0	0.200 6
		L	WD Deptil	(111). 0.50	0.0	0.0		_			
Stage: L	MV H	Temp (C): 10		<b>pH</b> : 7.3	ē.		C	ond.: 40	Turi	b.:	LVC
				MORE	HOI	OGY					
Bed Material:			ıbdom: C				Bars	: 🗸 N 🗌 S	DIAG DIAG	MID SI	PAN BR
	D95: 65.00 Pattern: SI		0 (cm): 20.00 slands: N				0	1 B1 B2	B3 D1	D2 D3	
	Coupling: CO		ement: CO	_		STURBANCE DICATORS					
	Morph: RP							1 C2 C3	C4 C5	S1 S2 S3	S4 S5
								1 02 00			
				(6)	OVE	7					1 - 1 - 1
Total:	Τ	Ty	pe: SWD	LWD B		U	DP	l ov l	IV		FSZ:
		Amo	unt: N	N D		N	N	S	N		
		Loc: P/S	5/0:								CLOSURE
LWD:	N	DIS	T: NA INS	STREAM VEG	: N	✓ A		M 🗌 V 📄		0	0%
RB SHP:	ν .	Texture: F	G 🗸 C	BR		A RI	P: G	ST	G: NA		
LB SHP:	V	Texture: F	☐ G 🗸 C	B R		A RI	<b>P</b> : G	ST	G: NA		
					~~~	*************					
Cita Number	C	Number of	Total Langth		ISH	***********		S/	Taral	841-1-	
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time		Voltage		Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
144	EF	1	40	208 sec	_	400		NFC	0		

ILP#

Site

7.0 144 Watershed Code: 400-324400-62900-0000-0000-0000-000-000-000-000-000

			PROJ	3 (*)			
Project Name Stream Name (gaz.) Project Watershed Code	: SKEENAR		-	-000-000-000	Project Code:		3476
			WATER	SHED			
Gazetted Name:			Lo	cal Name: None			
Watershed Code: 400-324400-5	2900-00000-00	00-000-000-000-000	0-000-000-000				
ILP Map#: ILP	#:	NID Map #: 103P.00	NII	D#: 60900	Reach #:	7.0	Site #: 144
Field UTM(Zone/East/North	(Method)	CIS LITM/Zono/	East/North)	Site Lg: 100	844	thod: HC	Access: H
Field OTM(ZOITE/East/NOITI	i/Metriou)	9 531324	6105143	Ref. Name:	We	ethod. nc	Access.
Date: 2000/08/02 Time: 1	5:15	Agency: C172	Crew: BW/	KT	Fish Crd?:	✓	Incomplete:
			CHAN	NEL			
Mtd v	vidth width	width width widt	h width width	width width v	vidth Avg	Gadie	ent % Mtd Avg
3/10/10/10/10/10/10/10/10/10/10/10/10/10/	20 5.10	6.30 4.20 4.00				Method I: 2.0	2.0 C 2.00
	5.20 5.10	6.30 4.20 4.00	3.70		4.75 N	lethod II: 2.0	2.0 C
	0.20 0.15	0.10 0.15 0.05	5 0.10		0.13		
					N	lo Vis.Ch.: 🔲 II	ntermittent:
Wb Depth: .3	.3 .3	Avg: 0.30	Method: MS	Stage: L	MV H	Dw:	Tribs.:
COVER	Total: T						
Type: SWD LWI) В	U DP	OV IV	CROWN CLC	DSURE		
Amount: N N	D	N N	S N	7 0 0	0%		
Loc: P/S/O:				INSTREAM V	ÆG: N 📝 A	MIV	
LWD: N	DIST: NA						
	DIOT. NA			55 0115. Y			
LB SHP: V				RB SHP:			
Texture: F G	C	BRA		Texture:	F G G	C B	R 🗌 A
RIP: G				RIP:	G		
STG: NA				STG: I	NA		
			WATI	F R			
EMS:			Red	# :			
Temp: 10		Method: T3	Con	nd.: 40		Method: S4	
pH: 7.3		Method: P2	Tui	rb.: 🗆 T 🗀	M T L C	Method: GE	
Flood Signs: NONE		Method: GE					
			MORPHO	LOGY			
				01	B1 B2 B3	D1 D2 D3	3
Bed Material: Domin		Subdom: C			0 0 0		7
D95: 65.0 D (d	m): 20.00	Morph: RP		RBANCE			
Pattern: SI			INDIC	ATORS C1	C2 C3 C4	C5 S1 S2	S3 S4 S5
Islands: N							
Coupling: CO							
Confinement: CO				D [4 N			D
FSZ				Bars: 🗸 N	SIDE DIAG	MID S	PAN BR
		ŀ	HABITAT Q	UALITY			
Name				Comment	s		
OverWinter Habitat	No overwinter	ring habitat exists					
Spawning Habitat		ues are poor due to la					
Rearing Habitat	Rearing value	s are poor due to limi		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
			PHOT	O S			
Photo Foo	: Lg	Dir			Comments		
R: 8 F: 8 ST	D	U	Upstream photo to	wards lake			
R: 8 F: 9 ST	D	D I	Downstream photo	showing confinem	nent		
			COMME	NTS			
Section				Comment	S		

February 12, 2001 Page 141 of 223

Reach # ILP Map# ILP#

Watershed Code:

NFC

WATERBODY Gazetted Name: Local: None ILP#: Waterbody ID: Reach #: Lake From Date: Project ID: 3476 Lake/Stream: S Fish Permit #: 25350K Date: 2000/08/02 To: 2000/08/02 Agency: C172 Crew: BW/KT Resample: SITE / METHOD
 NID Map
 NID#
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 103P.008
 60900
 EF
 1
 10
 40
 C
 Comment 144 A GEAR SETTINGS
 Time In
 Date Out
 Time Out

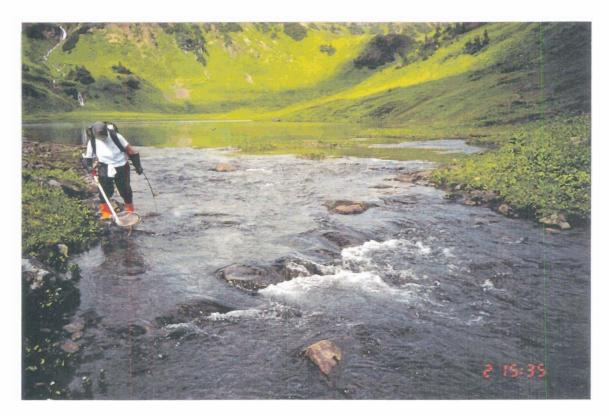
 15:15
 2000/08/02
 15:30
 MTD/NO H/P Date In EF 1 1 2000/08/02 144 C. ELECTROFISHER SPECIFICATIONS. MTD/NO H/P Encl Lnth Wdth Voltage Frequency Site# Sec Pulse Make Model 144 0 208 40.0 4.0 400 60 6 SMITH 12B ROOT FISH SUMMARY Age | Total # | Lgth (Min/Max) | FishAct Site# MTD/NO H/P Species Stage Comment 144

0

February 12, 2001 Page 61 of 96



Site #144, Downstream photo showing confinement Roll #8, Frame #9, Date: 2000/08/02



Site #144, Upstream photo towards lake Roll #8, Frame #8, Date: 2000/08/02

Reach #

ILP Map #

ILP#

				(10			
Gazetted Na	me:					L	.ocal	Name: None			
Watershed Co	ode: 400-324400	-52900-51900-00	00-000-000-000	-000-000-000-	000		ILP#:				
				R	EAC	H					
Reach	#: 4.0	U1	「M(Zone/East/No	orth): 9.53459	8.6102	572		Sample Type:	R		
Length (ki	-	Gradient (% Coupling	*	US Elev (i Open wat				Order: 1		Magnitude:	1
1	ds: N	Bars: VN			SP		R R	Riparian Veg.:		Landuse: N	0
					SITI						
Site #:	145	GIS UTM(Zo	ne/East/North)	Date:	2000/0	8/02		Agency: C172		Crew: BW/K	τ
Site Lg (m):	100	9 53439	5 6103046				Re	ef. Name:			
				(0);	ANI	VEL.					
No Vis.Ch.:	Intermittent:			Avg	Min	Max	#			Avg % Min % N	
Dw:	Tribs.:		Channel Width	-	0.5	0.7	6		Gadient %:	4.75 7	7 4
		-	Wetted Width		0.5	0.7	6	_ L_P	ool Depth (m):	0.04 0.02 0	0.070 6
		L	Wb Depth	(m): 0.10	0.1	0.1	3				
Stage: L	MV H	Temp (C): 12		pH : 7.0			С	Cond.: 35	Turk	o.: 🗌 T 🔲 N	LVC
				ú (•) ka) (O	1(0)(C)(
Bed Material:			ubdom: C				Bars	s: 🗸 N 🗌 S	SIDE DIAG	MID S	PAN BR
	D95: 18.00		D (cm): 1.00				0	o1 B1 B2	B3 D1	D2 D3	
	Pattern: SI		slands: N							D2	
	Coupling: DC Morph: RP	Contin	ement: UN			RBANCE					
	Morph. RP				INDIC	ATORS	С	1 C2 C3	C4 C5	S1 S2 S3	S4 S5
		***************************************	*******************************			**********	LL				
				С	OVE	7					
Total:	Т	Amo		D S	_	U	DP		IV		FSZ:
		Loc: P/S					N	T	N	CROWA	CLOSURE
LWD:	F			STREAM VEG		V A		MOV		2	21-40%
RB SHP:							P: C		G: MF		
LB SHP:		Texture: ✓ F Texture: ✓ F	GCC	B R			P: C		G: MF		
		Texture.				131		-	O. W.		
					¥ ¥ .						
Site Number	Capture	Number of	Total Length	Total		Voltage		Species	Total	Minimum	Maximum
	Method	Events	(m)	Time				•	Fish	Length (mm)	Length (mm)
145	EF	1	30	96 sec		400		NFC	0		

Reach #

ILP Map #

ILP#

Site 145

Watershed Code: 400-324400-52900-51900-0000-000-000-000-000-000-000

1300-213-0

°# S

		PROJECT		
Stream Name (gaz.):	Mill Area 1:20K Stream Inventory SKEENA RIVER 400-000000-00000-00000-00000-		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: N	one	
Watershed Code: 400-324400-5290	00-51900-0000-0000-000-000	00-000-000-000		
ILP Map#: ILP #:	NID Map #: 103P.0	008 NID#: 60890	Reach #: 4.0	Site #: 145
Field UTM(Zone/East/North/M	Method) GIS UTM(Zone	/East/North) Site Lg: 1	00 Method: H	C Access: H
	9 534395	6103046 Ref. Name:		
Date: 2000/08/02 Time: 16:2	20 Agency: C172	Crew: BW/KT	Fish Crd?: 🗸	Incomplete:
		CHANNEL		
Mtd wid	th width width width wid	th width width width width	th width Avg	Gadient % Mtd Avg
Channel Width (m): MS 0.70	0.60 0.50 0.50 0.6		0.57 Method	I: 4.0 7.0 C 4.75
Wetted Width (m): MS 0.7			0.57 Method I	I: 3.0 5.0 C
Pool Depth (m): MS 0.0	0.02 0.03 0.05 0.0	0.04	0.04	h.: Intermittent:
Wb Depth: .1 .1	1 .1 Avg: 0.10	Method: MS Stage:		w: Tribs.:
	Total: T			
Type: SWD LWD	B U DP	OV IV CROWN	CLOSURE	
Amount: T D	S T N	T N 2	21-40%	
Loc: P/S/O:		INSTRE	AM VEG: N 🕢 A 🗌 M	_ v 🗀
LWD: F	DIST: E			
LB SHP: V		PR S	HP: V	
Texture: F G	COBORDA	Text		BRA
RIP: C			RIP: C	
STG: MF			TG: MF	
		WATER		
EMS:		Req #:		
Temp: 12	Method: T3 Method: P2	Cond.: 35	Met	thod: S4
pH: 7.0 Flood Signs: NONE	Method: GE	Turb.:	☐ M ☐ L ✓ C Met	thod: GE
Tiood oighs. NOTE	Molika. GE			
		MORPHOLOGY		
Bed Material: Dominant	tt: G Subdom: C	(D1 B1 B2 B3 D1	D2 D3
D95: 18.0 D (cm)): 1.00 Morph: RP	DISTURBANCE		
Pattern: St		INDICATORS	C1 C2 C3 C4 C5	S1 S2 S3 S4 S5
Islands: N				
Coupling: DC				
Confinement: UN		Bare:	N SIDE DIAG MI	D SPAN BR
FSZ		Dars.	N _ SIDE _ DIAG _ WILL	J SPAN BR
		HABITAT QUALITY		
Name			ments	
	lo overwintering habitat	Colli	Hents	
	oor rearing habitat limited by low	discharge		
	pawning habitat is limited by the			
·		PHOTOS		
Photo Foc L	.g Dir		Comments	
R: 8 F: 10 STD		Upstream photo of the narrow ch		
R: 8 F: 11 STD	D	Downstream photo towards the la	ake	
		COMMENTS		
Section		Com	nents	'

		ar a		Reach #	ILP Map #	ILP#	Site
	Watershed Code:	400-324	100-52900-51900-0000-0000-000-000-000-000-000	4.0			145
ı	Section		ıc	omments			
	SITE CARD		Fish form 30478				
	CHANNEL		No fish present. Downstream barriers prevent upstream fish mi	gration to this rea	ch		
	CHANNEL		S6 Stream				

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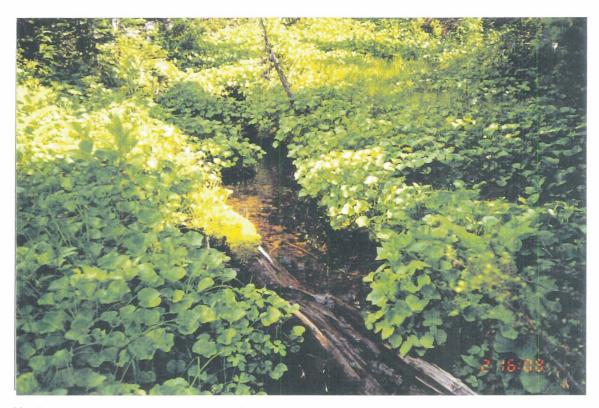
Reach # ILP Map # ILP #

WATERBODY Gazetted Name: Local: None WS Code: 400-324400-52900-51900-0000-000-000-000-000-000-000 ILP#: Reach #: Waterbody ID: ILP Map #: Project ID: 3476 Lake/Stream: S Lake From Date: To: 2000/08/02 Fish Permit #: 25350K Date: 2000/08/02 Agency: C172 Crew: BW/KT Resample: SITE / METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid Comment 103P.008 60890 145 EF 1 12 35 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 145 2000/08/02 16:20 2000/08/02 16:45 C. ELECTROFISHER SPECIFICATIONS Voltage Site# MTD/NO H/P Encl Sec Lnth Wdth Pulse Frequency Make Model 0 30.0 SMITH 12B ROOT FISH SUMMARY Total # Lgth (Min/Max) FishAct Site# MTD/NO H/P Species Stage Comment NFC 145

February 12, 2001 Page 64 of 96



Site #145, Downstream photo towards the lake Roll #8, Frame #11, Date: 2000/08/02



Site #145, Upstream photo of the narrow channel Roll #8, Frame #10, Date: 2000/08/02

Reach # ILP Map #

ILP#

103P.008

10041

	STREAM REFERENCING										
Gazetted Name:						Local N	ame: None				
Watershed Code: 000-000000	0-00000-00000-00	000-000-000-000-000)-000 - 000	0-000			ILP Map #:	103P.008	ILP#:	10041	
				REAG	H						
Reach #: 1.0	U	TM(Zone/East/North): 9.5339	62.6103	701	S	ample Type: R				
Length (km): .28	Gradient (%	6): 4.64	US Elev	(m): 113	37		Order: 1	Mag	nitude: 1		
Confinement: OC	Couplin		Open wa				BGC Zone: MH				
Islands: N	Bars: VN	SIDEDIAG		SP		3R Rip	parian Veg.: C	La	nduse: NO		
				SITE	*************						
Site #: 146		one/East/North)	Date:	2000/0	8/02	A	Crew: BW/KT				
Site Lg (m): 100	9 534051 6103804 Ref. Name:										
No Vis.Ch.: Intermittent:		Channel Width (m	Avg	Min	Max	#	624	Avg % dient %: 0.00	Min % Max %	#	
Dw: Tribs.:		Wetted Width (m		0	0	0	Pool De		0 0	0	
		Wb Depth (m)	: 0.00	0	0	0					
Stage: L M H	Temp (C):		pH:			Col	nd.:	Turb.:	т 🗌 м 🗌	L [C	
			MOR	PHO	(Ø)G)						
Bed Material: Dominant:	S	ubdom:				Bars:	N SIDE	DIAG M	ID SPAN	BR	
D95:		D (cm):		D3							
Pattern: Coupling:		Islands: nement:				01	B1 B2 B3	D1 D2			
Morph:	0011111	Totalit.		DISTUR	BANCE TORS	C1	C2 C3 C4	C5 S1	S2 S3 S	4 S5	
3,000							C2 C3 C4	C5 51	52 53 5	4 55	
			c	OVE	R		101010				
Total:	Т	ype: SWD LWI	D E	3	U	DP	OV IV	7		FSZ:	
	Amo									_	
	Loc: P/	S/O:							CROWN CLC	SURE	
LWD:	DIS	ST: INSTR	EAM VE	G: N	Α	M	V				
1771171 17847717	Texture: F	☐ G ☐ C ☐		R 🗌 A		RIP:	STG:				
LB SHP:	Texture: F	GCC	В	R	A F	RIP:	STG:				

Reach #

ILP Map #

ILP#

Site 146

1.0 103P 008

10041 PROJECT Project Name: Mill Area 1:20K Stream Inventory Project 3476 Stream Name (gaz.): SKEENA RIVER Project Code: WATERSHED Local Name: None **Gazetted Name:** ILP Map#: 103P.008 ILP #: 10041 NID Map #: 103P.008 NID #: 61021 Reach #: 1.0 Site #: 146 Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: H 9 534051 6103804 Ref. Name: Crew: BW/KT Fish Crd?: Agency: C172 Incomplete: Date: 2000/08/02 Time: 17:10 CHANNEL Mtd | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | width | Avg Gadient % Mtd Avg Channel Width (m): 0.00 Method I: 0.00 0.00 Method II: Wetted Width (m): Pool Depth (m): 0.00 No Vis.Ch.: ✓ Intermittent: Stage: L M H Wb Depth: Avg: 0.00 Method: Dw: Tribs.: COVER Total: CROWN CLOSURE SWD LWD В U DP OV IV Туре Amount Loc: P/S/O INSTREAM VEG: N A M V LWD: DIST: LB SHP: RB SHP: Texture: F G C B R A Texture: F G C B R A RIP: RIP: STG: STG: WATER EMS: Req #: Method: Cond.: Temp: Method: Method: pH: TMBLC Turb.: Method: Flood Signs: Method: MORPHOLOGY 01 **B**1 B2 **B**3 D1 D2 D3 Bed Material: Dominant: Subdom: D95: D (cm): Morph: DISTURBANCE INDICATORS Pattern: C1 C2 C3 C4 C5 S1 S2 **S5** Islands: Coupling: Confinement: Bars: N SIDE DIAG MID SPAN FSZ HABITAT QUALITY Name Comments No visible channel Not a stream. No notential fish habitat Other COMMENTS Section Comments

SITE CARD

CHANNEL

No photos taken

NVC

Reach #

ILP Map #

ILP#

						STRE	A M	REF	EREN	CIN	G							
Gazetted Na	ame:									Local	Name	None						
Watershed C	ode: 40	00-32440	0-2900	0-00000-00	00-0000-000-0	00-000-0	000-000	-000				ILP	Map#	:		IL	P#:	
							F	LEAG	Н									
Reac	h #:	5.0		U.	TM(Zone/East	/North):	9.53617	74.6105	573		Samp	le Type:	В					
Length (k	m) : 1.6	18	G	radient (%): 7.62	U	S Elev (m): 820)			Order:	5		Magn	itude:	91	
Confineme	ent: El		В	Coupling ars: VN		DIAG	pen wa		AN E	D 5		Zone: n Veg.:				duse: N	10	
ISIAII	us. I	•	ь	ars. VIV	_SIDE _	DIAG		SITI		or r	прапа	n veg	IVI		Lan	duse: N		
Site #:	150			IS LITM(Zc	ne/East/North	<u>, </u>	Date:	2000/0			Agen	y: C172			Crew	: BW/K	т	
Site Lg (m):			9	53611			Date.	2000/0	0/03	Re	f. Nam				CIEW.	. Daal	1	
							C I	IANI	IEL.									
No Vis.Ch.:	Inte	rmittent					Avg	Min	Max	#					_	Min % N		#
Dw:		Tribs.:			Channel Wid	, ,	19.17	11	28	6	_			adient %:	10.75	11	11	4
				}	Wetted Wid	` '	2.23	5	2.5	6	\dashv	-	001 D	epth (m):	0.50	0.35	0.65	6
			_	L		(/						.=						
Stage: L	_ M.✓	. н	Те	mp (C): 6			pH: 6.6				ond.:	45		Tur	b.:	T N	1 V	L C
							WE CAR		LOGY									
Bed Material:	Domir	nant: B D95: 120	00		ubdom: R D (cm): 65.00					Bars	s:	N V	SIDE	DIAG	MI	D S	PAN	BR
		tern: SI	.00		slands: N					C	1 B	11 B2	ВЗ	D1	D2	D3		
		ling: CO			ement: CO			DISTLIE	RBANCE									
	Mo	rph: CP							ATORS	C	1 0	2 C3	C4	C5	S1	S2 S3	S4	S5
							C	OVE	R									
Total	: M			Ty	ype: SWD	LWD	E	3	U	DP		ov	IV	\neg			ı	SZ:
				Amo		Т			N	S		N	N					
			Į	Loc: P/S	S/O:	~	V			V						CROW		
LWD	: F			DIS	T: C	INSTRE	AM VE	3: N	✓ A		M	V				1	1-20	%
RB SHP			Textu		_ G ✓ C					RIP: C			G: MF					
LB SHP	: V		Textu	re: F	☐ G 🗸 (В В	F	2	A R	RIP: C		ST	G: MF					
							FE	Ven U.S	RES									
1	NID	Туре	Hgt	Method	3	Method	_	Pho		1	Air	Photo			_	East/Nort		-
103P.008 7 Comments:	1039 No pho	F to taken	4.0	AE	0	AE	R:	F		L:		#:		9 53	6055	610551	5	GIS
Johnnents.	NO PITO	io lakeli																
							**********	FISH				<u> </u>						
Site Number		pture ethod		mber of vents	Total Lengti (m)	7-1	Total Time		Voltage	9	Spe	ecies		Total Fish		imum th (mm)		timum th (mm)
150		EF		1	110	3	31 sec		400		N	FC		0				

Reach # ILP Map #

	-

Watershed Code: 400-324400-29000-0000-0000-000-000-000-000-000

5.0

ILP#

		PROJ	ECT			
Project Name: Mill Area Stream Name (gaz.): SKEENA Project Watershed Code: 400-0000	RIVER		0-000-000-000	Project Cod	le:	3476
		WATER	SHED			
Gazetted Name:		L	ocal Name: None			
Watershed Code: 400-324400-29000-00000	-0000-0000-000-000	-000-000-000				
ILP Map#: ILP #:	NID Map #: 103P.00	8 N	ID#: 61039	Reach #:	5.0	Site #: 150
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/E	ast/North)	Site Lg: 100		Method: HC	Access: H
	9 536119	6105523	Ref. Name:			
Date: 2000/08/03 Time: 08:00	Agency: C172	Crew: BW	/KT	Fish Crd?	?: ✔	Incomplete:
		CHAN	NEL			
Mtd width width Width Channel Width (m): GE 28.00 22.00 Wetted Width (m): GE 8.00 7.00 Pool Depth (m): GE 0.50 0.45 Wb Depth: 2.0 2.5 2.2	19.00 11.00 17.00 5.00 7.00 11.00 0.65 0.50 0.55	18.00		width Avg 19.17 8.00 0.50	Method II: 11.0	ient % Mtd Avg 11.0 C 10.75 10.0 C
		wethou. Of	otage. L		DW.	IIIDS
Type: SWD LWD B Amount: N T D Loc: P/S/O: DIST: 0	U DP N S	OV IV N N		OSURE -20% VEG: N 🕢 A	_ M _ V	
LB SHP: V			RB SHP:	V		
Texture:	BRRA		Texture:		✓ C B	R A
RIP: C			RIP:			
STG: MF			STG:			
			0.0.			
		WAT	FER			
EMS:		Re	q #:			
Temp: 6	Method: T3	Co	nd.: 45		Method: S	4
pH: 6.6	Method: P2	Tı	ırb.: T	M V L C	Method: G	E
Flood Signs: NONE	Method: GE					
		MORPHO	LOGY			
Bed Material: Dominant: B	Subdom: R		01	B1 B2 B3	D1 D2 D	03
D95: 120.0 D (cm): 65.00	Morph: CP	DIST	IDDANIOE			
Pattern: SI			CATORS C1	C2 C3 C4	C5 S1 S	2 S3 S4 S5
Islands: N				C2 C3 C4	C5 51 5	S2 S3 S4 S5
Coupling: CO						
Confinement: CO			_	_		_
FSZ			Bars: N	SIDE DIA	AG MID S	SPAN BR
		FEATU	DEC			
NID Man NID Torre Het Ma	Ned Le Ve					
NID Map NID Type Hgt Me 103P.008 71039 F 4.0 A	thod Lg Met		oto L:	AirPhoto #:	9 536055	ast/North/Method) 6105515 GIS
Comments: No photo taken		ix.		77.	9 336033	6105515 GIS
	н	ABITAT O	YTILLE			
Name	- 11			*-		
	ng habitat is present in li	mited quantities	Commen	ıs		
	g values due to the high					
	ning habitat due to large					
		PHOT	OS			
Photo Foc Lg	Dir			Comments		

Reach # ILP Map #

ILP#

Site

5.0

150

	Ph	oto		Foo	Lg	Dir	Comments
R:	8	F:	12	ST	D	U	Upstream photo of a cascade
R:	8	F:	13	ST	_	D	Downstream photo of clumped LWD
							COMMENTS
000000			ction				Comments
		SITE	CARD		Fish form 3	0534	
		CHA	NNEL		Barriers do	wnstream prevent u	upstream fish migration
		CHA	NNEL		S5 Stream		

Reach #

ILP Map #

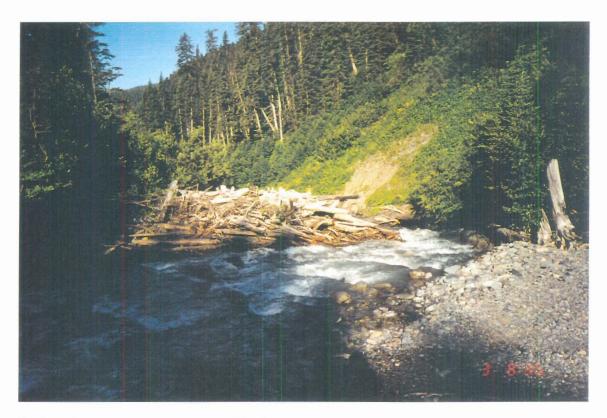
ILP#

Watershed Code:

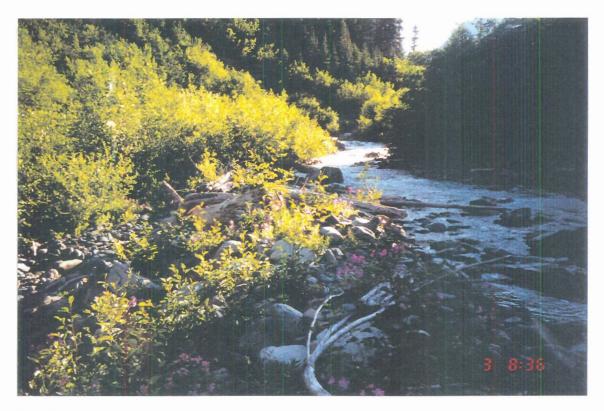
5.0

WATERBODY Local: None **Gazetted Name:** ILP#: Reach #: 5 -ILP Map #: Lake/Stream: S Lake From Date: Project ID: 3476 Fish Permit #: 25350K Date: 2000/08/03 To: 2000/08/03 Agency: C172 Crew: BW/KT Resample: SITE / METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment 103P.008 61039 EF 1 6 45 150 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 2000/08/03 08:00 2000/08/03 08:20 EF 1 1 150 C. ELECTROFISHER SPECIFICATIONS. Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Make Model 150 EF 0 331 110.0 3.0 400 60 6 SMITH 12B ROOT FISH SUMMARY Age Total # Lgth (Min/Max) FishAct Site# MTD/NO H/P Species Stage Comment 150 NFC 1 0

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Site #150, Downstream photo of clumped LWD Roll #8, Frame #13, Date: 2000/08/03



Site #150, Upstream photo of a cascade Roll #8, Frame #12, Date: 2000/08/03

Reach # ILP Map #

ILP#

			\$	TREAMR	EFERENC	NG				
Gazetted Na	me:				Loc	al Name: None				
Watershed Co	ode: 400-324400	-29000-00000-00	00-000-000-000	-000-000-000-00	00	ILP	Map #:	IL	P#:	
				RE	ACH					
Reach	#: 3.0	U1	ΓM(Zone/East/No	orth): 9.535756.	6103997	Sample Type:	В			
Length (ki		Gradient (%	,	US Elev (m)		Order:		Magnitude: 1	10	
Confineme		Coupling		Open water		BGC Zone:		magnitude.		
Island	ds: N	Bars: VN	SIDE DI	AG MID	SPAN BR	Riparian Veg.:	M	Landuse: N	0	
				s	ITE					
Site #: 1	151		ne/East/North)	Date: 20	00/08/03	Agency: C172		Crew: BW/K	Т	
Site Lg (m): 1	00	9 53680	6102615			Ref. Name:				
	-	_		CHA	NNEL		-			
No Vis.Ch.:	Intermittent:					#		Avg % Min % N		
Dw:	Tribs.:		Channel Width Wetted Width			6 F	Gadient %: Pool Depth (m):	6.75 6 0.26 0.150	7 4	
		ŀ	Wb Depth			3	001 D0p ().	0.20 0.100	5.10	
Stage: L M ✓ H Temp (C): 6 pH: 6.6 Cond.: 45 Turb.: T M ✓ L C										
Stage. L	MA L	remp (C). 6			HOLOGY	Cond., 45	Tun	J 1 N		
Bed Material:	Dominant: B	91	ubdom: C	######################################	***************************************	ars: N 🗸	SIDE DIAG	MID S	PAN BR	
Ded Waterial.	D95: 65.00		D (cm): 35.00		D	is. IN V	SIDE DIAG	IVIID 3	AN BR	
	Pattern: SI	Į:	slands: N			O1 B1 B2	B3 D1	D2 D3		
	Coupling: CO	Confin	ement: FC	DIS	TURBANCE					
	Morph: CP			11	IDICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5	
				0.0	VAEIR					
Total:	A			LWD B		OP OV	IV		FSZ:	
		Loc: P/S	10	T D		TT	N	CROW	CLOSURE	
LWD:	E			STREAM VEG:	N V A	MV		1	1-20%	
RB SHP: LB SHP:		Texture: F	G C C	B R R	A RIP:		G: MF G: MF			
25 5111 .					_ A MF.	31	O. 1411			
				FI	SH					
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)	
151	EF	1	60	216 sec	400	DV	2	83	111	

ILP Map #

ILP#

Site

3.0 151 PROJECT Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 WATERSHED Local Name: None Gazetted Name: ILP Map#: ILP#: NID Map #: 103P.008 NID #: 61011 Reach #: 3.0 Site #: 151 Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC Access: H 536806 6102615 Ref. Name: Agency: C172 Crew: BW/KT Fish Crd?: 🗸 Incomplete: Date: 2000/08/03 Time: 09:00 CHANNEL width width width width width width width width width width Avg Gadient % Mtd Mtd Avg 22.00 7.0 6.0 C Channel Width (m): GE 19.00 18.00 20.00 17.00 18.00 19.00 Method I: 6.75 8.00 12.00 14.00 12.00 8.00 7.00 10.17 Method II: 7.0 7.0 С Wetted Width (m): GE Pool Depth (m): GE 0.20 0.30 0.15 0.25 0.20 0.45 0.26 No Vis.Ch.: Intermittent: Wb Depth: Stage: L M ✓ H 1.0 .8 .8 Avg: 0.87 Method: GE Dw: Tribs.: COVER Total: A **CROWN CLOSURE** Type: SWD LWD B 11 DP OV IV 1-20% D N N Amount N T Loc: P/S/O: INSTREAM VEG: N 🗸 A 🗌 M 🔲 V 🗍 V LWD: F DIST: C LB SHP: S RB SHP: S F G G C B R A Texture: F G G C B R A Texture: RIP: C RIP: C STG: MF STG: MF WATER FMS. Reg #: Method: T3 Cond.: 45 Temp: 6 Method: S4 pH: 6.6 Method: P2 Turb.: T M L C Method: GE Flood Signs: NONE Method: GE MORPHOLOGY 01 B1 Bed Material: Dominant: B Subdom: C D95: 65.0 D (cm): 35.00 Morph: CP DISTURBANCE INDICATORS Pattern: SI C1 C2 C3 C4 C5 S1 S2 **S**3 **S5** Islands: N Coupling: CO Confinement: FC N SIDE DIAG MID SPAN FSZ HABITAT QUALITY Comments OverWinter Habitat Overwintering habitat is present in limited quantities Spawning Habitat Poor spawning habitat due to the large substrate size Rearing Habitat Rearing values are moderate in the off channel habitat PHOTOS Photo Foc Lg Dir STD U 8 F: 14 Upstream photo of riffle habitat R: F: 15 STD D Downstream photo showing dead trees due to the stream channel shifting

COMMENTS

Comments

Section

Section	Continents
SITE CARD	Fish form 30533
CHANNEL	DV Present
CHANNEL	S2 Stream

ILP Map #

ILP#

Watershed Code:

151 EF

151 EF

DV

DV

83

111

U

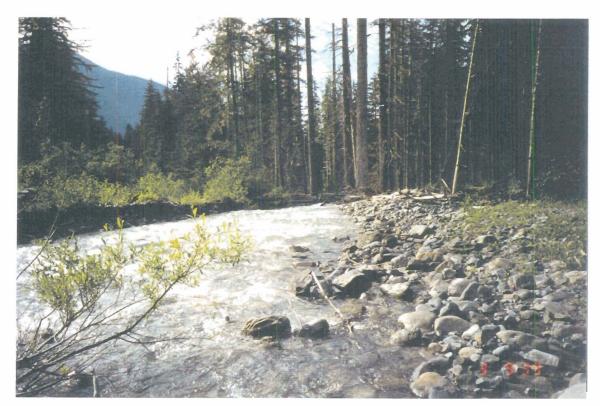
U

U

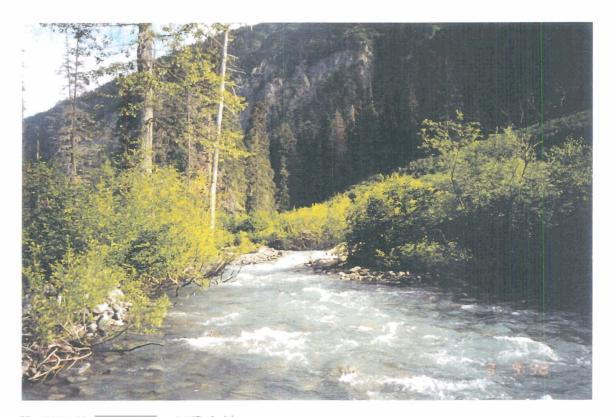
U

3.0

WATERBODY **Gazetted Name:** Local: None Waterbody ID: ILP Map #: ILP#: Reach #: 3 -Project ID: 3476 Lake/Stream: S Lake From Date: Fish Permit #: 25350K To: 2000/08/03 Agency: C172 Date: 2000/08/03 Crew: BW/KT Resample: SITE / METHOD UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid Site# NID Map NID# Comment 103P.008 151 61011 EF 1 6 45 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 2000/08/03 151 09:00 2000/08/03 09:27 C. ELECTROFISHER SPECIFICATIONS Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model 151 EF 0 60.0 2.0 400 60 SMITH 12B ROOT FISH SUMMARY MTD/NO Total # Lgth (Min/Max) FishAct Site# H/P Species Stage Comment



Site #151, Downstream photo showing dead trees due to the stream channel shifting Roll #8, Frame #15, Date: 2000/08/03



Site #151, Upstream photo of riffle habitat Roll #8, Frame #14, Date: 2000/08/03

Reach # ILP Map #

ILP#

				adele e Mort	NG			
Gazetted Name:				Loca	al Name: None			
Watershed Code: 400-3503	00-30200-00000-00	000-0000-000-000	-000-000-000-00	0	ILP I	Map #:	IL	P#:
			RE	ACH				
Reach #: 2.0	U	TM(Zone/East/No	orth): 9.543894.6	107066	Sample Type:	В		
Length (km): 3.66	Gradient (%	-	US Elev (m)		Order: 3	3	Magnitude: 4	13
Confinement: CO	Coupling Bars: VN	_	Open water		BGC Zone: Riparian Veg.:		Landuse: N	10
isianus. I4	Dais. YIV	SIDEDI		TE	Riparian veg	IAI	Landuse. N	
Site #: 152	GIS LITM/7/	one/East/North)	Date: 20	***************************************	Agency: C172		Crew: BW/K	7
Site Lg (m): 100	9 54532		1		Ref. Name:		CIEW. DVV/N	1
No Vis.Ch.: Intermitten	: 🗆				‡	_	Avg % Min % N	1ax % #
Dw: Tribs	: 🗆 📗	Channel Width			6	Gadient %:	9.75 8	12 4
		Wetted Width Wb Depth			6 3	Pool Depth (m):	0.18 0.150	0.25 6
	ı	WD Deptil	(111). 0.07	7.0	,			
Stage: L M ✓ H	Temp (C): 9		pH: 7.7		Cond.: 60	Turt	o.: 🗌 T 🔲 N	/ □ L ✓ C
			MORPH	OLOGY				
Bed Material: Dominant: B		ubdom: C	MORPI	Ba	rs: N 🕢 S	SIDE DIAG	MID SI	PAN BR
D95: 65	.00	D (cm): 15.00	MORPI	Ва	rs: N 🗸 S	SIDE DIAG	MID SI	PAN BR
	.00			Ва				PAN BR
D95: 65 Pattern: SI	.00 i Confir	D (cm): 15.00 slands: O	DIS	Ba	O1 B1 B2	B3 D1	D2 D3	
D95: 65 Pattern: SI Coupling: PC	.00 i Confir	D (cm): 15.00 slands: O	DIS	Ba				
D95: 65 Pattern: SI Coupling: PC	.00 i Confir	D (cm): 15.00 slands: O	DIS IN	Ba	O1 B1 B2	B3 D1	D2 D3	
D95: 65 Pattern: SI Coupling: PC	.00 Confir	D (cm): 15.00 slands: O nement: FC	DIS IN	TURBANCE DICATORS	O1 B1 B2	B3 D1	D2 D3	
D95: 68 Pattern: SI Coupling: PC Morph: RF	.00 Confir	D (cm): 15.00 slands: O nement: FC	DIS IN C O	TURBANCE DICATORS VER	O1 B1 B2 C1 C2 C3	B3 D1 C4 C5	D2 D3 S1 S2 S3	S S4 S5
D95: 68 Pattern: SI Coupling: PC Morph: RF	.00 Confir	D (cm): 15.00 slands: O nement: FC	DIS IN CO	TURBANCE DICATORS VER	O1 B1 B2 C1 C2 C3 P OV T	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	FSZ:
D95: 68 Pattern: SI Coupling: PC Morph: RF	.00 Confir	D (cm): 15.00 slands: O nement: FC	DIS IN CO	TURBANCE DICATORS VER	O1 B1 B2 C1 C2 C3 P OV	B3 D1 C4 C5	D2 D3 S1 S2 S3	S S4 S5
D95: 68 Pattern: SI Coupling: PC Morph: RF Total: M LWD: N RB SHP: V	.00 Confir T. Amo Loc: P/S DIS Texture: F	D (cm): 15.00 slands: O nement: FC ype: SWD ount: T S/O: V G C	DIS IN COLUMN D D D D D D D D D D D D D D D D D D D	TURBANCE DICATORS VER U D N N A A RIP: N	O1 B1 B2 C1 C2 C3 P OV N T M V M	B3 D1 C4 C5 IV N G: PS	D2 D3 S1 S2 S3 CROWN	FSZ:
D95: 68 Pattern: SI Coupling: PC Morph: RF	.00 Confir	D (cm): 15.00 slands: O nement: FC ype: SWD ount: T S/O: V G C	DIS IN COLUMN B N D STREAM VEG:	TURBANCE DICATORS VER U D N N A	O1 B1 B2 C1 C2 C3 P OV N T M V M	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	FSZ:
D95: 68 Pattern: SI Coupling: PC Morph: RF Total: M LWD: N RB SHP: V	.00 Confir T. Amo Loc: P/S DIS Texture: F	D (cm): 15.00 slands: O nement: FC ype: SWD ount: T S/O: V G C	DIS IN COLUMN B N D COLUMN COL	TURBANCE DICATORS VER U D N N A A RIP: N	O1 B1 B2 C1 C2 C3 P OV N T M V M	B3 D1 C4 C5 IV N G: PS	D2 D3 S1 S2 S3 CROWN	FSZ:
D95: 68 Pattern: SI Coupling: PC Morph: RF Total: M LWD: N RB SHP: V	.00 Confir T. Amo Loc: P/S DIS Texture: F	D (cm): 15.00 slands: O nement: FC ype: SWD ount: T S/O: V G C	DIS IN COLUMN B N D COLUMN COL	TURBANCE DICATORS VER U D N A A RIP: N	O1 B1 B2 C1 C2 C3 P OV N T M V M	B3 D1 C4 C5 IV N G: PS	D2 D3 S1 S2 S3 CROWN	FSZ:

Reach # ILP Map #

ILP#

Site

		PROJECT		
Project Name: Mill Area 1:20 Stream Name (gaz.): SKEENA RIV Project Watershed Code: 400-000000-0	ER		Project Code:	3476
		WATERSHED		
Gazetted Name: Watershed Code: 400-350300-30200-00000-000				
	NID Map #: 103P.019	NID #: 60313	Reach #: 2.0	Site #: 152
Field UTM(Zone/East/North/Method)	GIS UTM(Zone/Ea 9 545322	st/North) Site Lg: 100 6107495 Ref. Name:	Method: HC	Access: H
Date: 2000/08/03 Time: 10:00	Agency: C172	Crew: BW/KT	Fish Crd?: 🗹	Incomplete:
		CHANNEL		
Channel Width (m): T 12.20 14.10 8 Wetted Width (m): T 6.70 8.40 8	width width width 8.70 9.10 12.30 8.70 7.30 6.50 0.25 0.15 0.20 Avg: 0.87	width width width width v	11.23 Method I:	Gadient % Mtd Avg 12.0 8.0 C 9.75 9:0 10:0 C
COVER Total: M				
Type: SWD LWD B Amount: T N D Loc: P/S/O:	U DP N N		-40%	v 🖂
LWD: N DIST: NA				
LB SHP: V Texture: FGGCBB RJP: M STG: PS	RA	RB SHP: Texture: RIP: STG:	F G G C B	RA
		WATER		
EMS:		Reg #:		
	fethod: T3	Cond.: 60	Method	i: S4
ļ	lethod: P2 lethod: GE	Turb.: T	M L C Method	t: GE
		MORPHOLOGY		
Bed Material: Dominant; B D95: 65.0 D (cm): 15.00 Pattern: SI Islands: O Coupling: PC Confinement: FC FSZ	Subdom; C Morph: RP	DISTURBANCE INDICATORS C1	B1 B2 B3 D1 D2 C2 C3 C4 C5 S1 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	D3 S2 S3 S4 S5 SPAN BR
No.	H7	ABITAT QUALITY		
Name OverWinter Habitat Limited overwin	ntering habitet due to li	mited number of deep pools	ts .	
	rearing habitat-moder			
		its in pockets behind boulders		
		PHOTOS		
Photo Foc Lg	Dir		Comments	
R: 8 F: 16 STD		ostream photo of large substrates		
R: 8 F: 17 STD	D Do	ownstream photo showing avalanch	ne debris	
		COMMENTS		
Section		Commen	ts	

Site Reach # ILP Map # 2.0 152 Comments SITE CARD Fish form 30533 CHANNEL DV Present CHANNEL S2 Stream

ILP#

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Reach # ILP

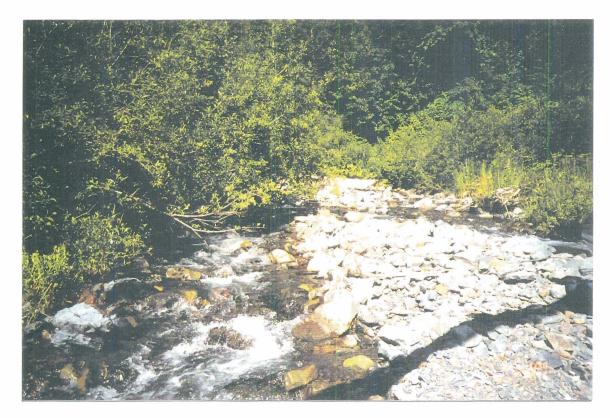
2.0

ILP Map # ILP #

Watershed Code:

WATERBODY Local: None Gazetted Name: ILP Map #: ILP#: Reach #: Lake/Stream: S Lake From Date: Project ID: 3476 Fish Permit #: Date: 2000/08/03 To: 2000/08/03 Agency: C172 Crew: BW/KT Resample: SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Site# NID Map NID# Comment EF 1 9 60 103P.019 60313 152 A. GEAR SETTINGS MTD/NO H/P Date In Time In Date Out Time Out Comment Site# 152 EF 1 2000/08/03 10:00 2000/08/03 10:21 C. ELECTROFISHER SPECIFICATIONS. Lnth Wdth Voltage Pulse Make Model Site# MTD/NO H/P Encl Sec SMITH 12B 152 40.0 5.0 500 60 6 ROOT FISH SUMMARY Total # Lgth (Min/Max) FishAct Comment Site# MTD/NO H/P Species Stage 2 99 107 FF 1 DV 152 INDIVIDUAL FISH DATA Vch# Genetic Roll # Frame# Comment Site# MTD/NO H/P Species Length Weight Sex Mat Age Str/Smpl#/Age Str/Smpl# 152 EF DV 107 U EF U 152 1 DV 99 U

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Site #152, Upstream photo of large substrates Roll #8, Frame #16, Date: 2000/08/03



Site #152, Downstream photo showing avalanche debris Roll #8, Frame #17, Date: 2000/08/03

Reach # ILP Map #

ILP#

Gazetted Name: SEDAN CREE	EK						Local Na	ame: S	edan Creek					
Watershed Code: 400-350300-0	00000-00000-00	000-0000-000-000-	-000-00	0-000-	000				ILP Map #	:		1L	P#:	
				R	EAC	Ħ								
Reach #: 6.0	U	TM(Zone/East/No	orth): 9.	54312	8.61123	344	S	ample	Type: B					
Length (km): 5.82	Gradient (%	s): 2.44	USI	Elev (r	n): 639			0	rder: 4		Magni	itude: 1	41	
Confinement: CO	Couplin				er: A				one: CWH					
Islands: N	Bars:N	SIDE DIA	AG				BR Rip	arian \	Veg.: M		Lan	duse: N	10	
_														
Site #: 153	,	one/East/North)		Date:	2000/08	3/03		gency:			Crew:	BW/K	Т	
Site Lg (m): 100	9 54744	6110977		808000000		o~90~00000	Ket.	Name:				******************************		
	_			00000000000	ANN	00000000000	T	1						
No Vis.Ch.: Intermittent:	- 1	Channel Width		Avg	Min 18.3	Max 41.3	#	_	G.	adient %:	Avg % 4.25	Min % M	4 ax %	4
Dw: Tribs.:	_	Wetted Width		9.63	6.400	12.4	6	1		epth (m):		_	0.800	6
		Wb Depth	, ,	1.67	1.3	2.1	3							
Stage: L ✓ M H	Temp (C): 10		р	H: 7.7			Cor	nd.: 60		Tur	b.:	T _ N	1 🗸	L 🗌 C
			M	ORE	2H(0)H	(a) (c)	Y.							
Bed Material: Dominant: C	S	ubdom: B					Bars:	_ N	✓ SIDE	DIAG	MI) [] SI	PAN	BR
D95: 85.00		D (cm): 22.00					01	B1	B2 B3	D1	D2 I	D3		
Pattern: SI Coupling: PC		slands: O ement: FC						T \Box						
Morph: CP	Comi	ioment. I O			INDICA						24			
					1110107	., ., .	C1	C2	C3 C4	C5	S1 \$	S2 S3	S4	S5
					0.V.E	7			1					
Total: M	Т	ype: SWD L	LWD	В		U	DP	Ιο	V IV					SZ:
,	Amo		D	S		N	T	1 7		\dashv				J2
	Loc: P/S	5/0:		V			V	V				CROWN	CLOS	URE
LWD: A	DIS	T: C INS	STREAM	VEG	: N	✓ A	M		v 📄	_		2	21-40	1%
RB SHP: S Te	exture: F	G C	В	R	A	F	RIP: C		STG: MF					
LB SHP: S Te	exture: F	G ✓ C	В	R	A	F	RIP: C		STG: MF					
						_								

ILP Map #

ILP#

Site 153

6.0

#

		PROJECT		
Project Name: Mill Ar	ea 1:20K Stream Invento	ry Project		
Stream Name (gaz.): SKEE			Project Code:	3476
Project Watershed Code: 400-00	0000-00000-00000-0000	0-0000-000-000-000-000-000		
		WATERSHED		
Gazetted Name: SEDAN CREEK		Local Name: Se	dan Creek	* 1
Watershed Code: 400-350300-00000-000				811-1/- 450
ILP Map#: ILP #:	NID Map #: 103P.		Reach #: 6.0	Site #: 153
Field UTM(Zone/East/North/Method	9 547444		00 Method: H	C Access: H
Date: 2000/08/03 Time: 11:12	Agency: C172	Crew: BW/KT	Fish Crd?: 🗸	Incomplete:
		CHANNEL		
Mtd width wi Channel Width (m): T 32.20 41.		dth width width width width	n width Avg 27.42 Method I	Gadient % Mtd Avg : 4.0 3.0 C 4.25
		90 12.40	9.63 Method II	
	70 0.65 0.50 0.	15 0.35	0.52	
Wb Depth: 1.6 2.1 1	.3 Avg: 1.67	Method: MS Stage:		n.: Intermittent: Tribs.:
COVER Total:				
Type: SWD LWD B	U DP		CLOSURE	
Amount: T D S	N T	T N 2	21-40%	
Loc: P/S/O:		INSTREA	M VEG: N 🗸 A 🗌 M	,
LWD: A DIST	: C			
LB SHP: S		RB SH		
Texture: ☐ F ☐ G ✓ C	BRA	Textu		BRA
RIP: C STG: MF			IP: C 'G: MF	
313.101			G. IVII	
		WATER		
EMS:	Method: T3	Req #: Cond.: 60	Mot	hod: S4
Temp: 10 pH: 7.7	Method: P2			
Flood Signs: NONE	Method: GE	Turb.:	M L C Met	hod: GE
		MORPHOLOGY		
Bed Material: Dominant: C	Subdom: B		01 B1 B2 B3 D1 I	D2 D3
D95: 85.0 D (cm): 22.0	Morph: CP	DISTURBANCE		
Pattern: SI		INDICATORS	C1 C2 C3 C4 C5	S1 S2 S3 S4 S5
Islands: O				
Coupling: PC Confinement: FC				
FSZ		Bars:	N ✓ SIDE ☐ DIAG ☐ MID	SPAN BR
		HABITAT QUALITY		
Name		Comn	nents	
	ering habitat is abundan	t o a fair supply of spawning gravel		
		abitat due to the moderate amount of	of cover and channel complexity	
		PHOTOS		
Photo Foc Lg	Dir		Comments	The state of the s
R: 8 F: 18 STD	U	Upstream photo of clumped LWD		
R: 8 F: 19 STD	D	Downstream photo showing cobb	le substrates	
Section			ante	
Section		Comm	ients	

•					Reach #	ILP Map #	ILP#	Site
1	Watershed Code: Section	400-3503	000-00000-00000-0000-0000-000-000-000-000-000	Comm	6.0 ents			153
	SITE CARD		Fish form 30531					
	CHANNEL		DV are present					
	CHANNEL		S1 Stream					

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ILP Map #

ILP#

Watershed Code:

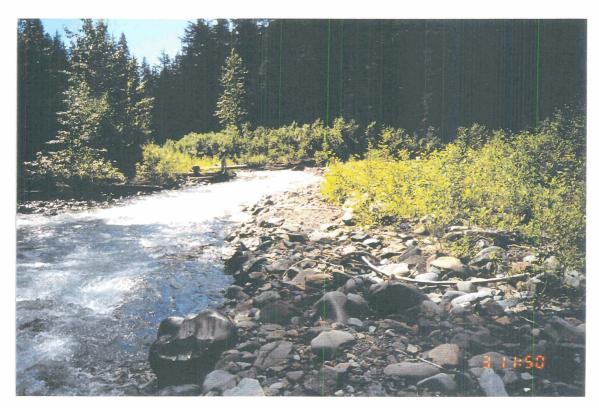
6.0

WATERBODY Gazetted Name: SEDAN CREEK Local: Sedan Creek Reach #: 6 -ILP#: ILP Map #: Lake From Date: Lake/Stream: S Project ID: 3476 Crew: EM/JD/KT/ Resample: Fish Permit #: 25350K Date: 2000/08/03 To: 2000/08/03 Agency: C172 SITE / METHOD UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid NID# Comment Site# NID Map EF 1 153 103P.019 60130 10 60 623 103P.019 60023 EF 1 9 60 C A. GEAR SETTINGS Time In Date Out Time Out MTD/NO H/P Date In Comment Site# 2000/08/03 11:12 2000/08/03 11:33 153 623 EF 1 2000/08/03 10:48 2000/08/03 11:30 C. ELECTROFISHER SPECIFICATIONS MTD/NO Lnth Wdth Voltage Frequency Pulse Make Model Site# H/P Encl Sec 0 313 60.0 3.0 400 60 6 SMITH 12B 153 EF ROOT 153 FF DV 45 97 R EF DV 6 149 187 R 623 1 J INDIVIDUAL FISH DATA Roll # Frame# Comment MTD/NO H/P Species Length Weight Sex Mat Genetic Site# Age Str/Smpl#/Age Str/Smpl# 623 EF DV 187 U U 12 DV 172 623 EF 1 U U 623 EF DV 149 U U 1 623 FF DV 156 U U EF DV 162 U 623 U 1 1 EF DV 623 1 171 U U 153 EF DV 45 U U EF DV 96 153 1 U U 153 EF DV 97 U U

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Site #153, Upstream photo of clumped LWD Roll #8, Frame #18, Date: 2000/08/03



Site #153, Downstream photo showing cobble substrates Roll #8, Frame #19, Date: 2000/08/03

Reach # ILP Map #

ILP#

			S	TREAMR	FEREN	CIA	i G			
Gazetted Na	me: SEDAN CRI	EEK			L	_ocal	Name: Sedan C	Creek		
Watershed Co	ode: 400-350300	-00000-00000-00	00-000-000-000	-000-000-000-00	0		ILP I	Vlap #:	IL	P#:
				R.E	ACH					
Reach	#: 11.0	U.	ΓM(Zone/East/No	orth): 9.540736.6	115773		Sample Type:	R		
Length (ki	m): .57	Gradient (%): 3.16	US Elev (m)	: 1357		Order: 3	3	Magnitude:	9
Confineme		Coupling		Open water			BGC Zone:			
Islan	ds: N	Bars: VN	SIDE DI			R F	Riparian Veg.:	S	Landuse: N	0
				_	ITE					
Site #: ' Site Lg (m): '		GIS UTM(Zo 9 54082	ne/East/North) 4: 6115459	Date: 20	00/08/03	R	Agency: C172 ef. Name:		Crew: BW/K	Τ ,
Site Eg (III).		3 ; 34002	4: 0115455		NNEL	100	er. Ivallie.			2
No Vis.Ch.:	Intermittent:				/lin Max	#			Avg % Min % N	lax % #
Dw:	_		Channel Width		2.5 4.300	6		Gadient %:	2.00 2	2 4
Dw.	_ IIIDS		Wetted Width		2 3	6	Р	ool Depth (m):	0.09 0.050 0	0.150 6
		Ļ	Wb Depth	(m): 0.33	0.3 0.4	3				
Stage: L	MV H	Temp (C): 9		pH : 7.7		C	Cond.: 60	Turk	o.: 🗌 T 📗 N	ı □ L 🗸 C
				MORES	(0) (0) (0) (1)					
Bed Material:			ubdom: C			Bars	s: N 🗸 S	SIDE DIAG	MID SI	PAN BR
	D95: 15.00 Pattern: IR		D (cm): 4.00 slands: N			O	01 B1 B2	B3 D1	D2 D3	
	Coupling: DC		ement: UN	DIS	TURBANCE					>
	Morph: RP				DICATORS	С	1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				0.0	VAEI ?					
Total:	T			LWD B	U	DP		IV		FSZ:
		Loc: P/S		N T	N	N	T	N	CROWA	CLOSURE
LWD:	N			STREAM VEG:	N V A		MV		0	0%
RB SHP:		Texture: F	✓ G □ C	B R		IP: G		G: NA		
LB SHP:		Texture: F	✓ G C	BR		IP: G		G: NA		
					8 H					
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage		Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
154	EF	1	70	211 sec	400		NFC	0		

Reach # ILP Map #

ILP#

Site 154

		PROU	ECT		
Project Name: Mill Are Stream Name (gaz.): SKEEN Project Watershed Code: 400-00	ARIVER		-000-000-000	Project Code:	3476
		WATER	SHED		
Gazetted Name: SEDAN CREEK		Lo	cal Name: Sedar	Creek	
Watershed Code: 400-350300-00000-0000			D. # . 00405	Reach #: 11.0	014 - H- 45 4
ILP Map#: ILP #:	NID Map #: 103P.0		D#: 60135		Site #: 154
Field UTM(Zone/East/North/Method)	GIS UTM(Zone) 9 540824	(East/North) 6115459	Site Lg: 100 Ref. Name:	Method: HC	Access: H
Date: 2000/08/03 Time: 12:00	Agency: C172	Crew: BW/		Fish Crd?: 🗸	Incomplete:
		CHAN			
Mtd width width width width width width min Ms 4.30 3.10	2.70 3.00 3.4 0 2.00 3.00 2.7 5 0.05 0.05 0.0	0 2.50 0 2.50 5 0.10		Method I: Method II: Method II: Method II: Movis.Ch.: Movis.Ch.: Movis.Ch.	Gadient % Mtd Avg 2.0 2.0 C 2.00 2.0 2.0 C
Wb Depth: .3 .4	Avg: 0.33	Method: MS	Stage: L	M H Dw:	: Tribs.:
COVER Total: Type: SWD LWD B Amount: N N T Loc: P/S/O: Image: N DIST:	U DP N N	OV IV	-	0%	v 🗆
	NA		DD CUD.	e	1
LB SHP: S Texture: F G C	BRRA		RB SHP: Texture:		BORDA
RIP: G			RIP:		·
STG: NA			STG:		
		WATI	-4-		
EMS:		Rec			
Temp: 9	Method: T3		nd.: 60	Metho	od: S4
pH: 7.7 Flood Signs: NONE	Method: P2 Method: GE	Tu	rb.: 🔲 T 📋	M L C Metho	od: GE
		MORPHO	LOGY		
Bed Material: Dominant: G D95: 15.0 D (cm): 4.00 Pattern: IR Islands: N Coupling: DC Confinement: UN FSZ	Subdom: C Morph: RP		RBANCE C1 Bars: N	B1 B2 B3 D1 D2 C2 C3 C4 C5 S1	
		HABITAT C	UALITY		
Name OverWinter Habitat No overw	ntering habitat is availab	la	Commer	nts	
	spawning habitat due to		of suitable gravel		
	ng habitat due to limited	cover			
		PHOT	o s		
Photo Foc Lg	Dir	l la de la companya d	f _1 n	Comments	
R: 8 F: 20 STD R: 8 F: 21 STD	U D		f stream flowing the showing the	rough an alpine meadow	1
		COMME	CONTRACTOR OF THE PARTY OF THE		
Section			Commen	its	

i bio oite o		Reach #	ILP Map #	ILP#	Site
Watershed Code: Section	400-350300-00000-00000-0000-0000-000-000-	11.0 Comments			154
SITE CARD	Fish form 30530				
CHANNEL	No fish present above downstream barriers				
CHANNEL	S5 Stream				

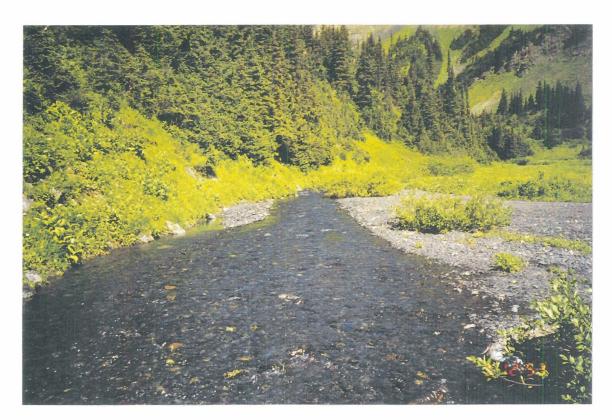
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ILP Map #

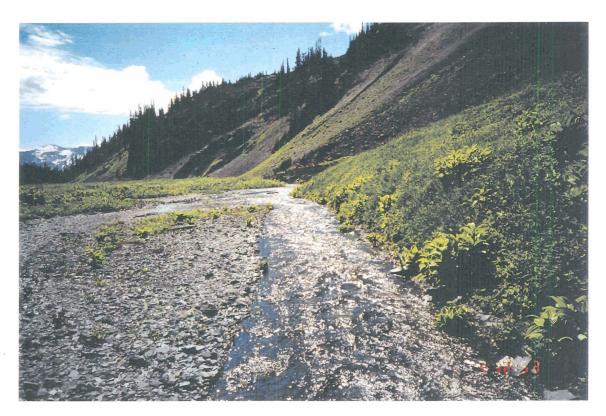
ILP#

Watershed Code:

Gaz	etted Na	ne:	SEDA	AN CRE	EK							Loca	al: S	edan Cre	eek			
Pi	roject Co	de:	400-0	000000-0	00000	-00000-0	0-0000-0	00-00	00-000	-000-00	0-0							
	WS Co	de:	400-3	350300-(00000	-00000-0	0-0000-0	00-00	00-000	-000-00	0-000							
Wa	aterbody	ID:							ILP N	lap#:				ILP	#:	R	each #: 1	1 -
	Project	ID:	3476									Lake/Str	eam:	S		Lake Fron	n Date:	
Fis	sh Permi	#:	253	350K		Date:	2000/08/03	3	То	: 2000	08/03	Age	ncy:	C172	Cr	ew: BW/KT	Resar	nple:
								S	HTE	1 M	-	OD						
Site#	NID Ma	р	NID	# (JTM:Z	one/Eas	t/North/Mt	hd	MTD	/NO	Temp	Cond	Turk	bid		Co	mment	
154	103P.0	19	6013	35					EF	1	9	60	С					
								Δ	GEA	R S	ETT	INGS						
Site#	MTD/N	0	H/P	Date	In	Time Ir	Date (Out	Time	Out		****		**********	Com	ment		
154	EF	1	1	2000/0	8/03	12:00	2000/0	8/03	12:	25								
						0	ELECT	R@	FIS	HER	SP	CIFI	O (4)	TION				
Site#	MT	D/NC	0	H/P		Encl	Sec		Lnth	1	Ndth	Volt	age	Frequ	ency	Pulse	Make	Model
154	EF		1	1		0	211		70.0		2.0	40	00	6	0	6	SMITH ROOT	12B
								F	SH	SUA	MA	RY						
Site#	MT	D/NC)	H/P	Spe	ecies	Stage	Ag	e	Total #	Lg	th (Min/M	ax)	FishAct			Comment	
	EF	_		1	NF					0			\rightarrow		_			



Site #154, Upstream photo of stream flowing through an alpine meadow Roll #8, Frame #20, Date: 2000/08/03



Site #154, Downstream photo showing the gravel substrates Roll #8, Frame #21, Date: 2000/08/03

Reach # ILP Map # ILP#

103P.019 10541 1.0 Local Name: None ILP Map #: 103P.019 ILP#: 10541 REAGH UTM(Zone/East/North): 9.540609.6116213 Sample Type: R Reach #: **Gradient (%): 25.26** Length (km): .19 US Elev (m): 1408 Order: 2 Magnitude: 3 Open water: A Confinement: CO Coupling: CO BGC Zone: AT Bars: VN SIDE DIAG MID SPAN BR Islands: N Riparian Veg.: S Landuse: NO SITE GIS UTM(Zone/East/North) Date: 2000/08/03 Agency: C172 Site #: 155 Crew: BW/KT Site Lg (m): 100 540628 6116147 Ref. Name: CHANNEL No Vis.Ch.: Intermittent: Avg Min Max Avg % Min % Max % # Channel Width (m): | 1.32 | 1.100 | 1.600 6 Gadient %: 1.00 4 Dw: Tribs.: Wetted Width (m): 1.28 | 1.100 | 1.600 6 Pool Depth (m): 0.07 0.050 0.100 6 Wb Depth (m):) 0.57 | 0.4 | 0.8 | 3 Stage: L M H Temp (C): 9 pH: 7.6 Cond.; 30 Turb.: T M L V C Subdom: C Bed Material: Dominant: G Bars: SIDE DIAG MID SPAN D95: 12.00 D (cm): 6.00 01 D1 Pattern: SI Islands: N Coupling: DC Confinement: UN DISTURBANCE Morph: RP **INDICATORS** C1 C2 S2 S3 **S5** (e(0)/#=1; Total: T SWD LWD В Туре: U DP OV IV FSZ: Amount: N Ν N N Loc: P/S/O: **CROWN CLOSURE** 0% LWD: N DIST: NA **INSTREAM VEG:** RB SHP: S R | R | Texture: F RIP: G STG: NA Texture: F LB SHP: S RIP: G STG: NA FISH

Site Number

155

Capture

Method

EF

Number of

Events

Total Length

(m)

60

Total

Time

210 sec

Voltage

500

Species

NFC

Total

Fish

0

Minimum

Length (mm)

Maximum

Length (mm)

Reach # ILP I

ILP Map #

ILP#

Site

		PROJECT		
Stream Name (gaz.):	Mill Area 1:20K Stream Inventor SKEENA RIVER 400-000000-00000-00000-00000-00000-		Project Code:	3476
		WATERSHED		
Gazetted Name:		Local Name: None	2	
Watershed Code: 000-000000-000	00-0000-0000-000-000-00			
	10541 NID Map #: 103P.0		Reach #: 1.0	Site #: 155
Field UTM(Zone/East/North/N	Method) GIS UTM(Zone	/East/North) Site Lg: 100	Method: HC	Access: H
	9 540628	6116147 Ref. Name:		
Date: 2000/08/03 Time: 13:	20 Agency: C172	Crew: BW/KT	Fish Crd?: 🗹	Incomplete:
		CHANNEL		
Mtd wid	0 1.40 1.10 1.20 1.4 60 1.20 1.10 1.20 1.4 10 0.05 0.05 0.05 0.05 8 Avg: 0.57	10 1.20 10 1.20 15 0.10	width Avg 1.32 Method I: 1.28 Method II: 0.07 No Vis.Ch.: Dw:	Gadient % Mtd Avg 1.0 1.0 C 1.00 1.0 1.0 C Intermittent: □ Tribs.: □ □ □ □
COVER Type: SWD LWD Amount: N N Loc: P/S/O:	Total: T B U DP N T N	OV IV CROWN C T N 0 INSTREAM	LOSURE 0% IVEG: N A M	v 🗆
LWD: N	DIST: NA			
LB SHP: S		RB SHI	P; S	
Texture: F 🕢 G	CBBRA	Texture	E: F G G C B	□ R □ A
RIP: G			P: G	
STG: NA		STO	S: NA	
		WATER		
EMS:		Req #:		
Temp: 9	Method: T3	Cond.: 30	Metho	d: S4
pH: 7.6	Method: P2	Turb.: T	M L C Method	d: GE
Flood Signs: NONE	Method: GE			
		MORPHOLOGY		
Bed Material: Dominar	nt: G Subdom: C	01	B1 B2 B3 D1 D2	D3
	i): 6.00 Morph: RP	DISTURBANCE		
Pattern: SI		INDICATORS C1	C2 C3 C4 C5 S1	S2 S3 S4 S5
Islands: N				
Coupling: DC				
Confinement: UN FSZ		Bars: N	SIDE DIAG MID	SPAN BR
		HABITAT QUALITY		
Name		Commo	ents	
	lo overwintering habitat is availab			
	Moderate spawning habitat due to			
Rearing Habitat P	oor rearing habitat due to limited			
		PHOTOS		
Photo Foc L			Comments	
R: 8 F: 22 STD R: 8 F: 23 STD		Upstream photo of the gravel su		
15 F 25 31D	0	Downstream photo of the gravel su	non 4105	
Section			amb o	

	Reacii #	ILP Map #	ILP#	ane
000000-00000-00000-0000-0000-000-000-000-000-000	1.0	103P.019	10541	155
1	Comments			
Fish form 30529				
No fish present above downstream barriers				
S6 Stream				
	Fish form 30529 No fish present above downstream barriers	00000-00000-00000-0000-0000-000-000-00	00000-00000-00000-0000-0000-000-000-00	00000-00000-00000-0000-0000-000-000-00

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Reach # ILP Map #

ILP#

Watershed Code:

000-000000-00000-00000-0000-0000-000-000-000-000-000-000-000

1.0 103P.019

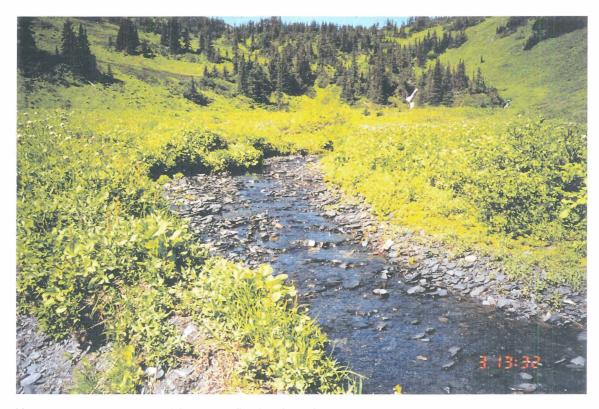
10541

Gaze	etted N	lame:									Local:	None	е					
Pr	oject (Code:	400-0	0-00000	0000-0000	0-0000	0-0000-000-00	00-000	-000-000-	0								
	WS	ode:	000-0	0-00000	0000-0000	0-0000	0-000-000-00	00-000	-000-000-	000								
Wa	terbo	ty ID:						ILP M	lap#: 10	3P.019			ILP#: 1	0541 R	each #: 1	-		
	Proje	ct ID:	3476							Lak	e/Strea	m: S	3	Lake Fron	n Date:			
Fis	sh Peri	nit #:	25	350K	Dat	e: 20	000/08/03	To	: 2000/0	8/03	Agend	y: C1	72 C	rew: BW/KT	Resam	ple:		
							S	ITE	/ ME	THOL)							
Site#	NID	Мар	NID	NID # UTM:Zone/East/North/Mthd				MTD	/NO Te	Temp Cond Turbid Comment								
155	103P	.019	6013	38				EF	1	9	30	С						
							Α.	GEA	RSE	TTIN	GS							
Site#	MTD	/NO	H/P	Date	In Tim	e In	Date Out	Time	Out	Comment								
155	EF	1	1	2000/08		:20	2000/08/03	13:										
					C	. El	ECTRO	FIS	HER .	PEO	IFIC	ATI	ONS.					
Site#	I N	ITD/N	0	H/P	Enc		Sec	Lnth	W	dth	Voltag	ge	Frequency	Pulse	Make	Mode		
155	EF		1	1	0		210	60.0		3.0	500		60	6	SMITH	12B		
							F	ISH	SUM	MARY	7							
Site#	N	ITD/N	0	H/P	Species	St	age Ag	e	Total #	Lgth (I	Min/Max	() Fi	shAct		Comment			
155	EF		1	1	NFC				0									

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Site #155, Downstream photo of the gravel substrates Roll #8, Frame #23, Date: 2000/08/03



Site #155, Upstream photo of the stream flowing through an alpine meadow Roll #8, Frame #22, Date: 2000/08/03

Reach # ILP Map #

ILP#

5.0

STREAM REFERENCING Local Name: Wilson Creek **Gazetted Name: WILSON CREEK** ILP Map #: ILP#: REAGH UTM(Zone/East/North): 9.541531.6103986 5.0 Sample Type: B Reach #: **US Elev (m): 905** Order: 4 Gradient (%): 15.89 Length (km): 1.46 Magnitude: 23 Confinement: EN Coupling: CO Open water: A BGC Zone: CWH Islands: Bars: VN SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: NO SITE Date: 2000/08/03 Site #: 156 GIS UTM(Zone/East/North) Agency: C172 Crew: BW/KT Site Lg (m): 100 541749 Ref. Name: CHANNEL No Vis.Ch.: Intermittent: Avg Min Max # Avg % Min % Max % # Channel Width (m): 6.65 5.800 7.300 6 **Gadient %:** 9.25 6 9 4 Dw: Tribs.: Pool Depth (m): 0.27 | 0.100 | 0.400 Wetted Width (m): 4.07 3.1 5.2 6 6 Wb Depth (m): 0.67 0.6 0.8 Stage: L M ✓ H Temp (C): 12 pH: 7.7 Cond.: 40 Turb.: T M L V C MORPHOLOGY Bed Material: Dominant: C Subdom: G ✓ SIDE DIAG MID SPAN D95: 70.00 D (cm): 20.00 01 **B1 B2 B3** D1 D2 Pattern: SI Islands: N Coupling: CO Confinement: FC DISTURBANCE Morph: CP INDICATORS C1 C2 C4 C5 S2 **S**5 COVER LWD U DP Total: M Type: В OV IV FSZ: Amount D S Ν Loc: P/S/O: **CROWN CLOSURE** 41-70% LWD: F INSTREAM VEG: N V □ R □ A
□ R □ A RB SHP: S RIP: C STG: MF LB SHP: S Texture: F RIP: C STG: MF **FEATURES** NID Map Type Hgt Method Method Photo AirPhoto UTM (Zone/East/North/Method) Lg 103P.009 70541 F 8.0 AF 0 AE F: L: #: 9 542718 6103220 Comments FISH Site Number Number of Total Length Total Capture Voltage Species Total Minimum Meximum Method **Events** (m) Time Fish Length (mm) Length (mm) EF 156 70 350 sec 400 NFC 0

Reach # ILP Map #

ILP#

Site

PROVEG	
Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: Project Watershed Code: 400-000000-00000-0000-0000-000-000-000-	3476
WATERSHED	
Gazetted Name: WiLSON CREEK Local Name: Wilson Creek Watershed Code: 400-339200-00000-0000-0000-000-000-000-000-000	
ILP #: NID Map #: 103P.009 NID #: 60542 Reach #: 5.0	Site #: 156
Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 100 Method: HC	Access: H
9 541749: 6103855 Ref. Name: Agency: C172 Crew: BW/KT Fish Crd?: ✓	Incomplete:
Date: 2000/08/03 Time: 14:05 CHANNEL	
Channel Width (m): T 7.00 6.30 5.80 7.10 6.40 7.30 6.65 Method I: 6 Wetted Width (m): T 4.40 4.10 5.20 4.30 3.30 3.10 4.07 4.07 Pool Depth (m): MS 0.40 0.35 0.35 0.20 0.10 0.25 0.27 No Vis.Ch.: Image: Channel Width (m): T 4.07 4.07 4.07	
Wb Depth: .8 .6 .6 Avg: 0.67 Method: MS Stage: L M ✓ H Dw:	Tribs.:
Type: SWD LWD B U DP OV IV CROWN CLOSURE Amount: T D S N T T N 3 41-70% Loc: P/S/O: P/S/O:<	v 🗆
LWD: F DIST: E	
LB SHP: S Texture: F G C B R A Texture: F G C B	RA
RIP: C	
STG: MF	
WATER	
EMS: Req #:	
Temp: 12 Method: T3 Cond.: 40 Method	: S4
pH: 7.7 Method: P2 Turb.: ☐ T ☐ M ☐ L ☑ C Method Flood Signs: NONE Method: GE	: GE
MORPHOLOGY	
01 81 82 82 01 02	D3
Ded Waterial: Dominant, C Subdom: G	
DISTORBANCE	
Pattern: SI Islands: N	S2 S3 S4 S5
Coupling: CO	
Confinement: FC	
FSZ Bars: N SIDE DIAG MID	SPAN BR
FEATURES	***************************************
	ne/East/North/Method)
103P.009 70541 F 8.0 AE 0 AE R: F: L: #: 9 542718	
103P.009 70541 F 8.0 AE 0 AE R: F: L: #: 9 542718 Comments:	
103P.009 70541 F 8.0 AE 0 AE R: F: L: #: 9 542718 Comments: HABITAT QUALITY	
103P.009 70541 F 8.0 AE 0 AE R: F: L: #: 9 542718 Comments:	
103P.009 70541 F 8.0 AE 0 AE R: F: L: #: 9 542718 Comments: HABITAT QUALITY Name Comments	
103P.009 70541 F	

Reach # ILP Map #

ILP#

Site 156

5.0

Section	Comments							
SITE CARD	Fish form 30528							
SITE CARD	No photos taken due to camera malfunction							
CHANNEL	No fish present above downstream barrier							
CHANNEL	S5 Stream							

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Reach # ILP Map # ILP #

WATERBODY Gazetted Name: WILSON CREEK Local: Wilson Creek JLP#: Lake From Date: Reach #: ILP Map #: Waterbody ID: Project ID: 3476 Lake/Stream: S Agency: C172 Resample: Fish Permit #: 25350K Date: 2000/08/03 To: 2000/08/03 Crew: BW/KT SITE / METHOD
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 EF
 1
 12
 40
 C
 NID Map Comment NID# Site# 156 103P.009 60542 A. GEAR SETTINGS Date In Time In Date Out Time Out Comment Site# MTD/NO H/P 2000/08/03 14:05 2000/08/03 14:40 156 EF 1 C. ELECTROFISHER SPECIFICATIONS. Lnth Wdth Model Voltage Frequency Pulse Make MTD/NO H/P Encl Sec Site# 156 EF 0 350 70.0 4.0 400 60 6 SMITH 12B ROOT FISH SUMMARY Site# MTD/NO Species Stage Age Total # Lgth (Min/Max) FishAct Comment 156 EF NFC 0

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Reach # ILP Map #

ILP#

			S	TRE	AM RI	FE	REN	CINC	3							
Gazetted Na	me:							Local N	ame: N	one						
Watershed Co	de: 400-330700	-00000-00000-00	000-0000-000-000	-000-0	00-000-00	0				ILP	Map #:				ILP#:	
REACH																
Reach	Reach #: 6.0 UTM(Zone/East/North): 9.539425.6098869 Sample Type: R															
Length (kr	n): .29	Gradient (%	a): 6.55	US	S Elev (m)	: 828			0	rder:	1		Magr	nitude:	1	
Confineme		Couplin			pen water MID			D D:-	BGC Z				Lar	nduse:	ED	
Island	ds: N	Bars: ✔N	_SIDE _DI	AG		TE		ok Kit	oarian \	veg	IVI		Lai	iuuse.	FK	
64-4-4	[CIE LITMIT	no/East/North)		Date: 20	00000000	**********	Δ.	gency	C172			Crew	: BW	/KT	
Site #: 1 Site Lg (m): 1		GIS UTM(Zone/East/North) 9 539559 6098934			Date. 20	00/00	3/03		Name:				Olew	. Dee	IX I	
CHANNEL																
No Vis.Ch.:	Intermittent:				Avg I	Viin	Max	#					Avg %	Min %	Max %	#
Dw:	Dw: Tribs.:			(m):		0.9	1.5	6] [Gadien		0.00	0	0	4
			Wetted Width Wb Depth			0.9	1.5	6	1	F	Pool Depth	(m):	0.08	0	0.5	6
			WD Deptil	(111).	0.03	0.0	1.1	01	J B1	B2	B3 I	D1	D2	D3		
Pattern: IR			Islands: N							1						
Coupling: DC Morph: LC			finement: UN DISTURBANCE INDICATORS							-	24	25	04	00 4	S3 S	4 S5
						Віол		C1	C2	C3	C4 (C5	S1	S2 :	53 5	4 55
					6.0	V.E	R									
Total:	М	Т	ype: SWD	LWD	В	Т	U	DP	Το	v	IV		***************************************			FSZ:
		Amo	7.	Т	N	İ	D	Т	1		Т					
	Loc: P/	S/O: 🗸 🗌 🕟			V		V	V		V			CROV	NN CLO	SURE %	
LWD:	F	DIS	ST: E IN	STRE	AM VEG:	N	Α	✓ N	1	V _				U	U	70
RB SHP: U Texture: ✓			F G G C B G R G A				RIP: G									
LB SHP:	U	Texture: 🗸 F	GC	В	R	A	A R	RIP: G		ST	rg: NA				Ja	
					F	SH										
Site Number	Capture Method	Number of Events	Total Length (m)		Total Time		Voltage	е	Spec	ies	Tota Fish			nimum gth (mm		ximum gth (mm)
157	EF	1	70	1	55 sec		400		NFC	2	0					

ILP Map #

ILP#

Site 157

6.0

P#

				Р	ROJEC	T			
Projec Stream Nam Project Watershe	ne (gaz.):	SKEENA F			000-000-000	-000-000	Project Co	ode:	3476
				WA	TERSH	•••••			
Gazetted Name:	20700 000	200 00000 0		0 000 000 000		Name: None	e		
Watershed Code: 400-33 ILP Map#:	ILP#		NID Map #: 103			60516	Reach #:	6.0	Site #: 157
					-				
Field UTM(Zone/Ea	st/North/I	Method)	9 5395	one/East/Norti	· ·	Site Lg: 100 ef. Name:)	Method: HC	Access: H
Date: 2000/08/03	Time: 15	:10	Agency: C172	Crew:	BW/KT		Fish Cro	d?: ✓	Incomplete:
				C	HANNE	L			
	Mtd wi	dth width	width width	width width	width w	idth width	width Avg	Gad	dient % Mtd Avg
(,	MS 1.3		0.90 1.40	1.50 1.10			1.22	Method I: 0.0	
		30 1.10	0.90 1.40	1.50 1.10			1.22	Method II: 0.0	0.0 C
Pool Depth (m):	MS 0.	00.00	0.50 0.00	0.00 0.00			0.08	No Vis.Ch.:	Intermittent:
Wb Depth:	.8 .	6 1.1	Avg: 0.83	Method:	MS	Stage: L	✓ M H	Dw:	Tribs.:
COVER		Total: M							
Type: SWD	LWD	В	U DP		IV	CROWN C			
Amount: T	T	N	D T	T	T	0 INSTREAM	0% IVEG: N	A M U	
LWD: F		DIST: E							
LB SHP: U						RB SHF	D-11		
Texture: F	G	ПСП	BRRA	Δ		Texture	100 mm	СВВ	RA
RIP: G				•					
STG: NA							P: G B: NA		
						010	. 147		
					WATER				
EMS:					Req #:				
Temp: 14			Method: T3		Cond.:	80		Method:	S4
pH: 7.8 Flood Signs: NON	_		Method: P2 Method: GE		Turb.:	T	M L	C Method: (GE
Flood Signs, NON			Wethod, GE	мов	PHOLO	I C Y			
D. IM.	-				************	01	B1 B2 B	3 D1 D2	D3
Bed Material: D95: 0.01	Domina D (on	nt: F n): 0.01	Subdom: NA						
	D (CII	1). 0.01	Morph: LC	,	DISTURBA	ODC.			
Pattern: IR					INDICATO	C1	C2 C3 C	24 C5 S1	S2 S3 S4 S5
Islands: N Coupling: DC									
Confinement: UN									
FSZ]					Bars: 🗸 N	SIDE	IAG MID	SPAN BR
				HABIT	AT QU	ALITY			
Name		2				Comme	ents		
OverWinter Habita Rearing Habitat			g habitat is abund		ounts of cov	or			
Spawning Habitat	_		ring habitat due to habitat is presen			OI.			
		,	pro-		HOTOS				
Photo	Foc		Dir				Commen	ts	
R: 8 F: 24	STE		U				nnel morphology		
R: 8 F: 25	STE)	D				ant overwintering ha	abitat	
				0.0	MMENT	5			
Section						Comme	ents		

Reach #

ILP Map #

ILP#

Site

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157

EF

Reach # ILP Map #

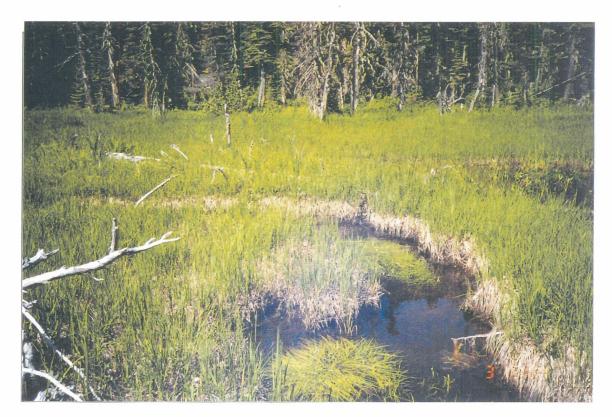
ILP#

NFC

WATERBODY Local: None **Gazetted Name:** Waterbody ID: ILP#: Reach #: 6 -Lake From Date: Project ID: 3476 Lake/Stream: S Fish Permit #: 25350K Date: 2000/08/03 To: 2000/08/03 Agency: C172 Crew: BW/KT Resample: Site# NID Map NID# Comment 103P.009 60516 157 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 2000/08/03 EF 1 2000/08/03 15:50 157 15:10 Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model 157 1 0 155 70.0 2.0 400 SMITH 12B ROOT ER SELEKSTUM MARKEY Site# MTD/NO H/P Species Stage Total # Lgth (Min/Max) FishAct Comment

0

February 12, 2001 Page 71 of 96



Site #157, Upstream photo showing large channel morphology Roll #8, Frame #24, Date: 2000/08/03



Site #157, Downstream photo showing abundant overwintering habitat Roll #8, Frame #25, Date: 2000/08/03

Reach # ILP Map #

103P.009

ILP# 10250

Local Name: None **Gazetted Name:** ILP Map #: 103P.009 11 P# 10250 REACH UTM(Zone/East/North): 9.543108.6099832 Reach #: Sample Type: R **US Elev (m): 357** Length (km): .76 Gradient (%): 2.37 Order: 1 Magnitude: 1 BGC Zone: ICH Confinement: OC Coupling: DC Open water: A Bars: VN SIDE DIAG MID SPAN BR islands: N Riparian Veg.: M Landuse: FR (3) Site #: 158 GIS UTM(Zone/East/North) Date: 2000/08/03 Agency: C172 Crew: BW/KT Site Lg (m): 100 9 543403 Ref. Name: CHANNEL No Vis.Ch.: Intermittent: Min Max Avg % Min % Max % # Avg # Channel Width (m): 30 14.50 6 Gadient %: 0.00 0 4 0 Dw: Tribs.: Wetted Width (m): 14.50 30 6 Pool Depth (m): 1.33 0.5 6 Wb Depth (m): 1.00 Stage: L M ✓ H Temp (C): 15 pH: 7.8 Cond.: 60 Turb.: T M V L C MORPHOLOGY Bed Material: Dominant: F Subdom: NA Bars: SIDE DIAG MID D95: 0.01 D (cm): 0.01 01 **B**1 **B3** D1 D2 D3 Pattern: ST Islands: N Coupling: DC Confinement: UN DISTURBANCE Morph: LC INDICATORS C1 C2 C4 C5 S1 S2 **S3** S4 **S5** COVER LWD В Total: A Type: SWD U DP FSZ: S N D Amount: T T Loc: P/S/O: **CROWN CLOSURE** 41-70% LWD: N INSTREAM VEG: RB SHP: S Texture: 🗸 F 🗌 G 🗎 C 📗 B 🔲 R 🔲 A RIP: M STG: MF LB SHP: S Texture: ✓ F G G C B RA RIP: M STG: MF REATURES NID Map NID Method Type Hat Method Photo UTM (Zone/East/North/Method) AirPhoto 103P.009 BD #: 3.0 GE 25 GE F: L: 543154 6099841 Comments:

					SH				
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
158	EF	1	50	110 sec	500	NFC	0		

Reach # ILP Map #

ILP#

Site

2.0 103P.009 10250 158

			PROJ	ECT			
Project Na Stream Name (g Project Watershed Co	az.): SKEENA F			-000-000-000	Project Code	:	3476
			WATER	SHED.			
Gazetted Name:				ocal Name: Non	е		
Watershed Code: 000-00000	0-00000-00000-0	000-0000-000-000-00			-		
	LP #: 10250	NID Map #: 103P.0		D#: 60564	Reach #:	2.0	Site #: 158
Field UTM(Zone/East/No	orth/Method)	GIS UTM(Zone	/East/North)	Site Lg: 100) [Method: HC	Access: H
		9 543403	6099910	Ref. Name:			
Date: 2000/08/03 Time	e: 15:45	Agency: C172	Crew: BW/		Fish Crd?:		Incomplete:
			CHAN	NEL			
Mtd Channel Width (m): GE Wetted Width (m): GE Pool Depth (m): GE Wb Depth: 1.0	width width 12.00 25.00 12.00 25.00 2.00 1.00	width width width 30.00 14.00 4.0 30.00 14.00 4.0 2.00 1.50 0.5	0 2.00 0 2.00 0 1.00		width Avg 14.50 14.50 1.33	Method I: 0.0 Method II: 0.0 No Vis.Ch.:	ient % Mtd Avg 0.0 C 0.00 C 0.00 C Intermittent:
2000 2000	1.0 1.0	Avg: 1.00	Method: GE	Stage: L	MV H	Dw:	Tribs.:
Type: SWD L Amount: T Loc: P/S/O:	Total: A WD B S N DIST: NA	U DP N D	OV IV	_	SLOSURE 41-70% A VEG: N A	<u> M</u>	2
	DIST. NA						
LB SHP: S Texture: F		B R A		RB SHF			B 🗆 🛦
	G C C	BRA				СВ	R _ A
RIP: M STG: MF					P: M G: MF		
			WAT	ER			
EMS:			Re	q #:			
Temp: 15		Method: T3	Cor	nd.: 60		Method: S	4
pH: 7.8		Method: P2	Tu	rb.: 🔲 T	M Z L C	Method: G	Ε
Flood Signs: WATER I	NIREES	Method: GE					
			MORPHO	L G G Y			
Bed Material: Do	minant: F	Subdom: NA		01	B1 B2 B3	D1 D2 D	03
D95: 0.01	O (cm): 0.01	Morph: LC	DISTLI	RBANCE			
Pattern: ST			INDIC	CATORS C1	C2 C3 C4	C5 S1 S	32 S3 S4 S5
Islands: N							
Coupling: DC							
Confinement: UN FSZ				Bars: V N	SIDE DIA	G MID S	SPAN BR
			E E A T S	RES			
NID Map NID Type	Hgt Meth	od Lg Me	ethod Pho		AirPhoto	UTM (Zone/E	ast/North/Method)
103P.009 70564 BD	3.0 GE			F: L:		9 543154	6099841 GIS
Comments:							
1			HABITAT G	UALITY			
Name				Comme	ents		
Other Spawning Habitat		overwintering habitat habitat present	is abundant				
Opavining Flabitat	I to spawillig	nabitat present	PHOT	a C			
Photo	Foc Le	Dir					
Photo	Foc Lg	Dir			Comments		

SITE CARD

CHANNEL

Fish form 30526

ILP Map # Reach #

2.0

This stream has been heavily impacted by beaver activity. Effective electrofishing was not possible. Inferred fish bearing stream. None of the channel widths represent the actual stream size.

103P.009

ILP# 10250 Site 158

						PHOTOS
	P	hoto		Foc Lg	Dir	Comments
R	9	F:	1	STD	U	Upstream photo showing beaver dams
R	9	F:	2	STD	D	Downstream photo showing the influence of beaver dams
						COMMENTS
		Se	ction			Comments

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ILP Map#

ILP#

Watershed Code:

000-000000-00000-00000-0000-0000-000-000-000-000-000

2.0

103P.009

10250

								W A	TER	8 O D	Y						
Gaz	etted I	Name:									Loc	al: N	lone				
Pi	roject	Code:	400-0	0-00000	0000-00000	-0000-0000	-000-00	0-000	-000-00	0-0							
	WS	Code:	000-0	0-00000	0000-00000	-0000-0000	-000-00	0-000)-000-00	0-000							
Wa		dy ID:						ILP N	/lap #:				ILP#:				2 -
	Ргоје	ect ID:	3476							1	Lake/St	eam:	S		Lake Fro	om Date:	
Fis	sh Per	mit #:	253	350K	Date	: 2000/08/	03	То	: 2000	/08/03	Age	ency:	C172	Crew	: BW/K	T Resa	mple:
							S	III E	i M	E T H	0 D						
Site#	NID	Мар	NID	# L	TM:Zone/E	ast/North/N	1thd	MTD)/NO	Temp	Cond	Tur	bid		C	omment	
158	103F	2.009	6056	64				EF	1	15	60	0	;				
							A. (G E A	VR S	ETTI	NGS						
Site#	MT	O/NO	H/P	Date	In Time	In Date	Out	Time	Out		***********	00000000	***************************************	Comm	ent		
158	EF	1	1	2000/08	3/03 15:4	5 2000/	08/03	16:	:05								
					0	FLEC	TRO	FILS	HER	SPE	OHEI	e A	TIONS				
Site#	1	MTD/N	0	H/P	Enci	Sec	L	nth		Wdth	Vol	tage	Freque	псу	Pulse	Make	Model
158	EF		1	1	0	110		50.0		2.0	5	00	60		6	SMITH	12B
				200000000000000000000000000000000000000		*************		2073050		275078785755	*********	000000000			000000000000000000000000000000000000000	ROOT	
								***************************************	SU	**********	**********						
Site#	_	/ITD/N		H/P	Species	Stage	Age		Total #	Lgt	h (Min/N	lax)	FishAct			Comment	
158	EF		1	1	NFC				0								

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Site #158, Downstream photo showing the influence of beaver dams Roll #9, Frame #2, Date: 2000/08/03



Site #158, Upstream photo showing beaver dams Roll #9, Frame #1, Date: 2000/08/03

ILP#

Reach # ILP Map # 2.0 1031.089

10778

		S	TREAMR	EFERENC	ING			
Gazetted Name:				Lo	cal Name: None			
Watershed Code: 000-000	000-00000-00000-0	000-0000-000-000	-000-000-000-0	00	ILP	Map #: 1031.089	ILI	P#: 10778
			R.I	ACH				
Reach #: 2	.0 L	TM(Zone/East/N	orth): 9.538899	6077260	Sample Type:	R		
Length (km): .90	Gradient (%		US Elev (m): 322	Order:	1	Magnitude:	1
Confinement: FC	Couplin	g: DC SIDE DI	Open wate		BGC Zone:		Landina N	•
Islands: N	Bars: VN			TTE	Riparian Veg.:	IVI	Landuse: N	0
Site #: 601	CIS LITM/Z	one/East/North)		000/08/01	Aganau C172		Crew: JD/EN	
Site #: 601 Site Lg (m): 100	9 5393			000/08/01	Agency: C172 Ref. Name:		Crew: JD/EIV	1
			C H	INNEL				
No Vis.Ch.: Intermitte	nt:		Avg	Min Max	#		Avg % Min % M	lax % #
Dw: Trib	s.:	Channel Width	, ,	.600 1.100	6	Gadient %:	2.50 2	3 4
, market - 1		Wetted Width		.400 0.9	6 F	Pool Depth (m):	0.20 0.100 0	.300 6
		Wb Depth	(m): 0.33	0.3 0.4	3			
Stage: L M ✓ H	Temp (C): 10)	pH : 7.1		Cond.: 80	Turi	b.:	LC
				HOLOGY			***********************	***********
			***********	1878:X78::XX				
Bed Material: Dominant: F	-	Subdom: C			Bars: ✔ N 🔲	SIDE DIAG	MID SF	PAN BR
D95: 1	0.00	D (cm): 3.00						PAN BR
D95: 1 Pattern: IF	0.00	D (cm): 3.00 Islands: N		E		SIDE DIAG	MID SF	PAN BR
D95: 1 Pattern: IF Coupling: D	0.00 R C Confi	D (cm): 3.00	DI	STURBANCE	O1 B1 B2	B3 D1	D2 D3	
D95: 1 Pattern: IF	0.00 R C Confi	D (cm): 3.00 Islands: N	DI	E		B3 D1		
D95: 1 Pattern: IF Coupling: D	0.00 R C Confi	D (cm): 3.00 Islands: N	DI II	STURBANCE NDICATORS	O1 B1 B2	B3 D1	D2 D3	
D95: 1 Pattern: IF Coupling: D	0.00 R C Confii P	D (cm): 3.00 Islands: N nement: OC	DI II	STURBANCE NDICATORS	O1 B1 B2	B3 D1	D2 D3	S4 S5
D95: 1 Pattern: IF Coupling: D Morph: R	0.00 R C Confii P	D (cm): 3.00 Islands: N nement: OC	DI II	STURBANCE NDICATORS	O1 B1 B2 C1 C2 C3	B3 D1 C4 C5	D2 D3	
D95: 1 Pattern: IF Coupling: D Morph: R	0.00 R C Confii P	D (cm): 3.00 Islands: N nement: OC	DI: III	STURBANCE NDICATORS	O1 B1 B2 C1 C2 C3 DP OV T S	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5 FSZ:
D95: 1 Pattern: IF Coupling: D Morph: R	0.00 R C Confii P T Ame Loc: P/	D (cm): 3.00 Islands: N Inement: OC Type: SWD Dunt: T S/O: V	DI: III	STURBANCE NDICATORS VER U T	O1 B1 B2 C1 C2 C3 DP OV T S	B3 D1 C4 C5 IV D	D2 D3 S1 S2 S3	S4 S5
D95: 4 Pattern: IF Goupling: D Morph: R Total: A	0.00 R C Confii P T Ame Loc: P/	D (cm): 3.00 Islands: N nement: OC Type: SWD Dunt: T S/O: ST: NA IN:	DI:	STURBANCE NDICATORS VER U T	O1 B1 B2 C1 C2 C3 DP OV T S M V V	B3 D1 C4 C5 IV D	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: 1 Pattern: IF Coupling: D Morph: R Total: A LWD: N	O.00 C Confii P	D (cm): 3.00 Islands: N nement: OC Type: SWD Dunt: T S/O: M N ST: NA IN:	DI: II LWD B T N STREAM VEG:	STURBANCE NDICATORS VER U T N A	O1 B1 B2 C1 C2 C3 DP OV T S M V ✓	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: A Pattern: IF Coupling: D Morph: R Total: A LWD: N RB SHP: S	0.00 C Confii P TAme Loc: P/ DI: Texture: ✓ F	D (cm): 3.00 Islands: N nement: OC Type: SWD Dunt: T S/O: M N ST: NA IN:	LWD B T N STREAM VEG:	STURBANCE NDICATORS VER U T N A RIP:	O1 B1 B2 C1 C2 C3 DP OV T S M V ✓	B3 D1 C4 C5 IV D G: YF	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:
D95: A Pattern: IF Goupling: D Morph: R Total: A LWD: N RB SHP: S LB SHP: S	0.00 C Confii P TAme Loc: P/ DI: Texture: ✓ F	D (cm): 3.00 Islands: N nement: OC Type: SWD Dunt: T S/O: M N ST: NA IN:	LWD B T N STREAM VEG:	STURBANCE NDICATORS VER U T N A RIP: A RIP:	O1 B1 B2 C1 C2 C3 DP OV T S M V CC ST S ST	B3 D1 C4 C5 IV D G: YF G: SHR	D2 D3 S1 S2 S3 CROWN 2	S4 S5 FSZ: I CLOSURE 21-40%
D95: A Pattern: IF Goupling: D Morph: R Total: A LWD: N RB SHP: S LB SHP: S	O.00 C Confii P TAme Loc: P/ DI: Texture: F Texture: F	D (cm): 3.00 Islands: N nement: OC Type: SWD Dunt: T S/O: M N ST: NA IN:	CCC LWD B T N P	STURBANCE NDICATORS VER U T N A RIP:	O1 B1 B2 C1 C2 C3 DP OV T S M V ✓	B3 D1 C4 C5 IV D G: YF	D2 D3 S1 S2 S3 CROWN	S4 S5 FSZ:

ILP Map #

ILP#

Site

Reach # 2.0 1031.089 10778 601 PROJECT Project Name: Mill Area 1:20K Stream Inventory Project 3476 Project Code: Stream Name (gaz.): SKEENA RIVER WATERSHED Local Name: None Gazetted Name: 20 Site #: 601 NID Map #: 1031.089 NJD #: 60001 ILP Map#: 1031.089 ILP #: 10778 Reach #: -Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site La: 100 Method: HC Access: H 539353 Ref. Name: 6077682 Agency: C172 Fish Crd?: 🗸 Incomplete: 🗸 Crew: JD/EM Date: 2000/08/01 Time: 08:21 CHANNEL Gadient % Avg width width width width Avg Mtd Mtd width width width width width 0.60 1.10 1.00 0.80 0.88 Method I: 3.0 2.0 AL 2.50 Channel Width (m): 1.10 0.70 0.40 0.90 0.80 0.70 0.70 Method II: 3.0 AL Wetted Width (m): 0.90 0.50 0.16 0.20 Pool Depth (m): MS 0.20 0.15 0.30 0.29 0.10 No Vis.Ch.: Intermittent: .3 Avg: 0.33 Method: MS Wb Depth: Dw: Tribs.: COVER Total: A **CROWN CLOSURE** SWD LWD В Type: 21-40% S D Amount: Loc: P/S/O: INSTREAM VEG: N A A M V LWD: N DIST: NA LB SHP: S RB SHP: S F G C B R A Texture: F G C B R A RIP: S RIP: C STG: YF STG: SHR WATER EMS: Rea #: Temp: 10 Method: T3 Cond.: 80 Method: S4 pH: 7.1 Method: P2 Turb.: T M M L C Method: GE Flood Signs: NONE Method: GE MORPHOLOGY 01 Subdom: C Bed Material: Dominant: F D95: 10.0 D (cm): 3.00 Morph: RP DISTURBANCE INDICATORS Pattern: IR C2 C5 S1 S2 54 S5 Islands: N Coupling: DC Confinement: OC Bars: N SIDE DIAG MID SPAN **FSZ** HABITAT QUALITY Comments Name OverWinter Habitat No overwintering habitat present within sample site. Overwintering habitat present downstream Low value rearing habitat limited by low discharge, habitat complexity, fine substrates, and ephemeral nature Rearing Habitat Spawning Habitat No spawning habitat-fines overtop of cobbles PHOTOS Foc Lg Dir Comments Photo F STD U Upstream photo of overstream vegetation D

Downstream photo of overstream vegetation

Comments

O O M M E N T S

F

Section

2

STD

4

4

R:

Watershed Code: Section	000-000000-00000-00000-0000-0000-000-000-000-000-000	2.0 Comments	103!.089	10778	601
SITE CARD	Fish Form 30496				
CHANNEL	Large beaver dams may provide overwintering habitat				
CHANNEL	No permanent barriers to upstream fish migration were in fish migration.	dentified. Numerous be	aver dams present do	wnstream may li	mit upstream
CHANNEL	IS4* Stream				

Reach # ILP Map #

ILP#

Site

February 12, 2001 Page 66 of 223

ILP Map #

ILP#

Watershed Code:

000-000000-00000-00000-0000-0000-000-000-000-000-000

2.0

1031.089

10778

								W	ATE	(8)(0)	DΥ						
Gaze	etted N	lame:									Lo	cal:	None				
Pr	oject (Code:	400-0	000000	-00000	-00000-0	000-0000-000	-000-0	00-000-	000-0							
	WS	Code:	000-0	000000	-00000	-00000-0	000-0000-000	-000-0	00-000-	000-00)						
Wa	terbo							ILF	Map #	1031.0				.P#: 1			2 -
	Proje	ct ID:	3476								Lake/S	stream	: S		Lake From	n Date:	
Fis	sh Peri	mit #:	25	350K		Date:	2000/08/01		To: 20	00/08/0	1 A	gency	: C172	Cr	ew: EM/JD	Resan	nple:
								SIT	E /	MET	HOD						
Site#	NID	Мар	NID	#	UTM:	Zone/Eas	t/North/Mthd	M	TD/NO	Temp	Con	d Tu	rbid		Co	mment	
601	1031	.089	6000	01				E	1	10	40		L				
							Α.	GE	AR	SET	TING	\$					
Site#	MTD	/NO	H/P	Dat	te In	Time I	n Date Out	Tir	ne Out					Com	ment		
601	EF	1	1	2000	/08/01	08:15			08:50		******	******	******	******			
						C.	ELECTR	OFI	SHE	R S F	ECIF	IC A	TIOI	us.			
Site#	N	ITD/N	0	H/	P	Encl	Sec	Lnt		Wdth		oltage	Fre	quency	Pulse	Make	Model
601	EF		1	1		0	287	100	.0	1.0		200		60	6	SMITH	12B
								FIS	H St	MM	ARY						
Site#	IV	ITD/N	0	H/P	Sp	ecies	Stage /	ge	Tota	1# L	gth (Min	/Max)	Fish/	Act		Comment	
601	EF		1	1	N	FC)				No fis	sh caught		
								¢	OMN	ENT	5						
	Sect	ion									Con	ments					
V	VATER	BOD	Y	Α	II availa	ble habita	at within samp	le site	was she	ocked							

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Site #601, Downstream photo of overstream vegetation Roll #4, Frame #2, Date: 2000/08/01



Site #601, Upstream photo of overstream vegetation Roll #4, Frame #1, Date: 2000/08/01

Reach # ILP Map #

ILP#

1.0

Local Name: TAYLOR CREEK **Gazetted Name: TAYLOR CREEK** ILP Map #: ILP#: REAGE: Reach #: 1.0 UTM(Zone/East/North): 9.539719.6079255 Sample Type: R **Gradient (%): 3.46** US Elev (m): 156 Order: 3 Length (km): .81 Magnitude: 7 Coupling: DC BGC Zone: ICH Confinement: OC Open water: P Islands: N Bars: VN SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: OT SITE Agency: C172 Site #: 602 GIS UTM(Zone/East/North) Date: 2000/08/01 Crew: EM/JD 540342 Ref. Name: Site Lg (m): 100 CHANNEL No Vis.Ch.: Intermittent: Min Max Avg % Min % Max % Ava # # Channel Width (m): 1.88 1.600 2.3 6 Gadient %: 4.25 5 6 Dw: Tribs.: Wetted Width (m): 1.50 1.200 1.8 6 Pool Depth (m): 0.18 0.100 0.300 6 Wb Depth (m): 0.47 0.4 0.5 3 Stage: L M ✓ H Temp (C): 12 pH: 7.1 Cond.: 80 Turb.: T M L V C MOREHOLOGY Bed Material: Dominant: C Subdom: G V N DIAG D95: 20.00 D (cm): 15.00 **B1 B**2 D1 D2 D3 Pattern: IR Islands: N Coupling: DC Confinement: OC DISTURBANCE Morph: RP INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 **S4 S5** (0,0)/8≅₹ SWD LWD U Total: M В DP Type: OV IV FSZ: D S s Amount: Loc: P/S/O: **CROWN CLOSURE** 21-40% LWD: N INSTREAM VEG: RB SHP: O RIP: C STG: YF LB SHP: S RIP: D STG: PS NID Map NID UTM (Zone/East/North/Method) Type Hgt Method Method Photo AirPhoto Lg 1031.089 88001 CV .9 GE R: 4 F: 3 540305 6079550 #: Comments: Barrier to fish-1.5m drop with no plunge pool. Culvert located at railway crossing 50 C () Site Number Capture Number of Total Length Total Voltage Species Total Minimum Maximum Method **Events** Time Fish Length (mm) Length (mm) (m) 602 EF 180 417 sec 200 NFC 0 602 EF 100 151 sec 200 CO 45 68 10 602 EF 100 151 sec 200 CH 2 60 75

ILP Map #

ILP#

Site 602

1.0

°# :

							P	(0)()	(0)					
	Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476													
1		100			:R 2 000-00000 -0	000 0000	200 0	00.000.	000.000	200	Project Cod	le:	3476	
Projec	it water	siled CC	Jue. 40	-000000-00	7000-00000-0		J00-0	00-000-	000-000-	500				
						1	H A	TERS	HED					
Gazetted Na									cal Name	: TAYL	OR CREEK			
Watershed Co	ode: 400		0-00000- LP #:		-0000-000-00 ID Map #: 10		-000-)#: 6000	12	Reach #:	1.0	Site #	: 602
Field UTI	MIZonel				GIS UTM(Z		Vorth			_g: 100	Reacii #.	Method: HC		cess: H
l leid off	W(ZOTIE)	Lastric	T LI I/WELI	lou,	9 5403		0795		Ref. Na	_		metilou. 110	Αυ.	
Date: 2000/08	8/01	Time	e: 09:08	А	gency: C172	С		EM/JI			Fish Crd	?: 🗸	Incor	nplete:
							e	HAND	(EL					
[a		Mtd	width		dth width		idth	width	width	width	width Avg	20.4111.		Mtd Avg
Channel Wi Wetted Wi		-	1.80		.60 1.70 .30 1.20		.70 .50			-	1.88	Method II:	6.0 5.0 3.0 3.0	AL 4.25
Pool De		-	0.20		20 0.10		.15			_	0.18	Wicthou II.	0.0 0.0	74
	Depth:		.5	.5	Avg: 0.47	Meth	od:	MS	Sta	ge: L	MV H	No Vis.Ch.: Dw:	=	=
COVER	2		Tot	al: M										
Тур	_	D L	.WD	В	U DF		'	IV	_		OSURE			
Loc: P/S/C			T		D S	S		T	2		1-40% VEG: N	MV	v 🖂	
								V	livis	IREAN	VEG: 14 A		• 🗆	
LWI				IST: E							_			
LB SHI				C \square B		Δ.				RB SHP: exture:				
	e. 🔽 P: D	F 🗸	G	С ПВ	R	^				RIP:			3 R /	1
	3: PS									STG:				
							· · · · · · · · · · · · · · · · · · ·	VATE	R					
	EMS:							Req	#:					
Т	emp: 12	2		Me	thod: T3			Con	d.: 80			Metho	nd: S4	
	pH: 7.				thod: P2			Tur	b.:	T [м 🗌 L 🗹 С	Metho	od: GE	
Flood S	Signs: No	ONE		Me	thod: GE	>>>>>>>	00000000					000000000000000000000000000000000000000	***************************************	
						M	OR	P. H. (0)	LOGY		D4 D0 D0	54 50		
Bed Ma	terial: D95: 20		minant: C		Subdom: G					01	B1 B2 B3	D1 D2	2 D3	
) (cm): 1	5.00	Morph: R				RBANCE ATORS					
	attern: IR ands: N							1110101	110110	C1	C2 C3 C4	C5 S1	S2 S3	S4 S5
	pling: DO													
Confine														
FS	Z								Bars:	₩ N	SIDE DI	AG MID	SPAN	BR
							FE	ATUF	ES					
NID Map	NID	Type	Hgt	Method	Lg	Method		Pho	to		AirPhoto	UTM (Zo	ne/East/North	/Method)
1031.089	88001	CV	.9	GE	20	GE	R:	4 F		L:	#:	9 54030	5 6079550	GIS
Comments	: Barrier	to fish-	1.5m dro	p with no plu	inge pool. Ci			,	0					
	Name					HAB	1818	A F Q	UALI	T Y Commer	ite			
	inter Hat	oitat	Mode	erate overwi	ntering habita	it in beaver	pond	s upstre			crossing. Organic	matter may lir	mit DO in ponds	over the
Reari	ng Habit	at	winte High	er. quality rear							pitat for coho. Grea			
Spawn	ing Habi	tat	LWD		ning habitat-	limited to th	ne lov	ver 150 r	n of stree	ım				
	-				-	CONTRACTOR OF THE STREET	-			executive.				

Reach # ILP Map #

ILP#

Site 602

1	Water	shed	Code:	400-297	800-00000-000	00-0000-0000-0	000-000-000-000-000 1.0 602	
							PHOTOS	
	Ph	oto		Foo	Lg	Dir	Comments	
R:	4	F:	3	ST	D	U	Upstream photo of concrete culverts-barrier to upstream fish migration	
R:	4	F:	4	ST	D	D	Downstream photo of the lower 50 m of stream	
R:	4	F:	6	ST	D	U	Upstream photo of the habitat above the railway crossing	
R:	4	F:	7	ST	D	U	Upstream photo of the culvert immediately above the railway crossing	
							COMMENTS	
		Sec	tion				Comments	
		SITE	CARD		Fish Form 304	195		
		CHA	NNEL			red below the r m of the railway	ailway crossing. Railway crossing blocks upstream fish migration. Fish may be present in the bea y crossing	ver
		CHAI	NNEL		S3 Stream			

February 12, 2001 Page 77 of 223

Reach # ILP Map # ILP #

WATERBODY Gazetted Name: TAYLOR CREEK Local: TAYLOR CREEK ILP#: Waterbody ID: ILP Map #: Reach #: 1 -Project ID: 3476 Lake/Stream: S Lake From Date: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: EM/JD Resample: SITE METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment EF 2 602 1031.089 60002 12 80 C Above Culvert EF 1 602 1031.089 60002 12 80 C Below Culvert A GEAR SETTINGS MTD/NO H/P Date In Time In Date Out Time Out Comment 2000/08/01 10:30 602 1 09:45 2000/08/01 2000/08/01 2000/08/01 09:45 602 EF 1 1 09:08 C. ELECTROFISHER SPECIFICATIONS MTD/NO Lnth Wdth Voltage Frequency Make 602 0 417 180.0 200 60 1.8 6 **SMITH** 12B ROOT 2.0 602 EF 100.0 0 151 200 60 6 SMITH 12B ROOT FISH SUMMARY Site# MTD/NO H/P Species Stage Total # Lgth (Min/Max) | FishAct Comment EF NFC 0 2 Above Culvert EF 602 CH 2 **Below Culvert** EF 602 CO 10 45 68 R Below Culvert INDIVIDUAL FISH DATA MTD/NO Site# Species Length Weight Sex | Mat Vch# Genetic Roll # Frame# Age Comment Str/Smpl#/Age Str/Smpl# 602 EF CO 51 U U EF 602 CO H 1 1 56 4 5 Photo of coho on anode ring 602 EF 1 CO 61 U U 1 602 EF CO 45 U U 602 FF CO 49 U U 602 EF 1 CO 63 U U 602 EF 1 1 CO 48 U U 602 FF 1 1 CO 68 1.1 11 602 EF 53 1 CO U 1 U 602 EF CO 65 U U 602 EF CH 60 11 U 602 EF 1 CH 75

February 12, 2001 Page 31 of 96



Site #602, Upstream photo of the culvert immediately above the railway crossing Roll #4, Frame #7, Date: 2000/08/01



Site #602, Downstream photo of the lower 50 m of stream Roll #4, Frame #4, Date: 2000/08/01



Site #602, Upstream photo of concrete culverts-barrier to upstream fish migration Roll #4, Frame #3, Date: 2000/08/01



Site #602, Upstream photo of the habitat above the railway crossing Roll #4, Frame #6, Date: 2000/08/01



Site #602, Photo of a coho on electrofisher ring Roll #4, Frame #5, Date: 2000/08/01

Reach # ILP Map #

ILP#

			S	8	30 30 30 30 30 40	ù C			
Gazetted Na	me: SOUTH LO	RNE CREEK			Loc	al Name: South Lo	orne Creek		
Watershed Co	ode: 400-301700	-28100-00000-00	00-0000-000-000	-000-000-000-00	00	ILP I	Map#:	IL	P#:
					(10)				
Reach	#: 2.0	1.15	TM(Zone/East/No		000778	Sample Type:	В		
		Gradient (%	•	US Elev (m)		Order:		Magnitude: 5	.
Length (ki	•	Coupling	•	Open water		BGC Zone:		mayintuae	,5
Islan	ds: N	Bars: VN		AG MID	SPAN BR	Riparian Veg.:	M	Landuse: N	10
					3.7				
Site #: 6	503	GIS UTM(Zo	ne/East/North)	Date: 20	00/08/01	Agency: C172		Crew: JD/EN	Λ
Site Lg (m): 4	100	9 53357	4 6081057		I	Ref. Name:			
				3.7					
No Vis.Ch.:	Intermittent:					#		Avg % Min % M	
Dw:	Tribs.:		Channel Width Wetted Width	, ,		6 P	Gadient %:	11.25 10 0.72 0.400	0.9 6
		ł	Wb Depth	()		3	oor bepair (m).	0.72 0.400	0.5
04	M U	T (C): 7		pH: 7.2		Cond.: 60	Turk		
Stage: LV	M H	Temp (C): 7		,		Cond.: 60	Turk	o.:	1 □ L ✔ C
Bed Material:	Dominant: B	c	ubdom: C	WORF	HOLOGY	ırs: 🗆 N 🗀 S	SIDE DIAG	A MID C	PAN BR
Deu Material.	D95: 90.0		D (cm): 45.00		De	iis. N	SIDE DIAG	✓ MID SI	PAN DR
	Pattern: iR	I	slands: N			O1 B1 B2	B3 D1	D2 D3	
	Coupling: CO	Confin	ement: CO		TURBANCE				
	Morph: CP			11/	IDICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
					L				
					VER				_
Total:	Α	Amo		T D		OP OV	IV N		FSZ:
		Loc: P/S						CROWN	I CLOSURE
LWD:	N	DIS		STREAM VEG:	N V A	MV		0	0%
RB SHP:	S	Texture: F	□ G ✓ C	BBR	A RIP:	c st	G: MF		
						_	G: PS		
LB SHP		Texture: F	G ✓ C	BR	A RIP:	31	9.10		
LB SHP:		Texture: F	G ✓ C			31	G . 1 G		
	S			F	SH				
LB SHP:		Texture: F	☐ G ✓ C Total Length (m)			Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)

Reach # ILP Map #

ILP#

Site 603

		PROJ	ECT										
Stream Name (gaz.): SKEEN	Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Project Watershed Code: 400-00000-0000-0000-0000-000-000-000-00												
		WATER	SHED										
Gazetted Name: SOUTH LORNE CREEK		L	ocal Name: South	Lorne Creek	*								
Watershed Code: 400-301700-28100-0000	0-0000-0000-000-000	0-000-000-000											
ILP Map#: ILP #:	NID Map #: 1031.08	8 N	ID#: 60003	Reach #: 2.0	Site #: 603								
Field UTM(Zone/East/North/Method)	GIS UTM(Zone	East/North)	Site Lg: 400	Method: I	HC Access: H								
	9 533574	6081057	Ref. Name:										
Date: 2000/08/01 Time: 10:35	Agency: C172	Crew: JD/	EM	Fish Crd?:	Incomplete:								
		CHAN	NEL										
Mtd width width width width width width mis T 31.50 32.0	0 33.00 31.00 28.0 00 13.00 10.00 110. 0 0.60 0.70 0.8	00 27.00 00 111.00	stage: L	width Avg 30.42 44.50 0.72 Method Method Mo Vis.C	II: 11.0 12.0 AL								
COVER Total: /													
Type: SWD LWD B Amount: T T D Loc: P/S/O:	U DP N S	OV IV	CROWN CLO	0%	_ v _								
LWD: N DIST:	E												
LB SHP: S			RB SHP:										
	BRA		Texture:	FGGC	BRA								
RIP: D			RIP:										
STG: PS			STG:	MF									
		WAT	ER										
EMS:		Re	eq #:										
Temp: 7	Method: T3	Co	nd.: 60	Me	ethod: S4								
pH: 7.2 Flood Signs: LWD ON ELEVATE	Method: P2 Method: GE	Tu	ırb.: T	M ☐ L ☑ C Me	ethod: GE								
		MORPHO	DLOGY										
Bed Material: Dominant: B	Subdom: C		01	B1 B2 B3 D1	D2 D3								
D95: 90.0 D (cm): 45.00	Morph: CP	OICTI	JRBANCE										
Pattern: IR			CATORS C1	C2 C3 C4 C5	S1 S2 S3 S4 S5								
Islands: N													
Coupling: CO													
Confinement: CO FSZ			Bars: N	SIDE DIAG M	ID SPAN BR								
		HABITAT (QUALITY										
Name Moderate	oversinterin- babitat O	anada ne -l t	Commen	ts									
	overwintering habitat- Ca			rater,high energy disturbed str	eam								
	vning habitat-disturbed c												
		PHOT	~~~~~										
Photo Foc Lg	Dir			Comments									
R: 4 F: 8 STD	U	Upstream photo o	of a high energy sec	tion of stream with LWD rafte	d on bars								
R: 4 F: 9 STD	D		to of elevated bars										
		COMME											
Section			Commen	ts									

Reach # ILP Map #

ILP#

Site

February 12, 2001 Page 89 of 223

2.0

Local: South Lorne Creek

ILP Map #

ILP#

Watershed Code:

400-301700-28100-00000-0000-000-000-000-000-000-000

WATERBODY

Gazetted Name: SOUTH LORNE CREEK

ILP #: Reach #:
Lake/Stream: S Lake From Date: Waterbody ID: Reach #: 2 -ILP Map #:

Project ID: 3476

Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: EM/JD Resample:

SITE / METHOD

 Site#
 NID Map
 NID #
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 603
 103I.088
 60003
 EF
 1
 7
 60
 C
 Comment

A. GEAR SETTINGS

MTD/NO H/P Date In Time In Date Out Time Out Site# EF 1 1 2000/08/01 10:30 2000/08/01 11:15 603

C. ELECTROFISHER SPECIFICATIONS.

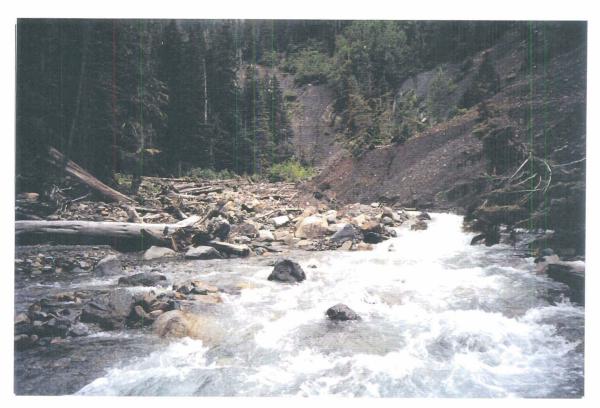
Sec MTD/NO Encl Lnth Wdth Voltage Frequency Pulse Make Model 0 745 7.0 603 400.0 500 60 6 SMITH 12B ROOT

Site# MTD/NO H/P Species Stage Age Total # Lgth (Min/Max) FishAct Comment 603 EF 1 1 NFC 0 Image: Comment with the co								c) (
		MTE	D/NO	H/P	Species	Stage	Age	Total #	Lgth (M	lin/Max)	FishAct	Comment
	603	EF	1	1	NFC			0				

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Site #603, Downstream photo of elevated bars Roll #4, Frame #9, Date: 2000/08/01



Site #603, Upstream photo of a high energy section of stream with LWD rafted on bars Roll #4, Frame #8, Date: 2000/08/01

Reach # ILP Map #

ILP#

				(4. % - V. ())				(3)			
Gazetted Na	me: SOUTH LO	ORNE CREEK					Local	Name: South L	orne Creek		
Watershed Co	ode: 400-30170	0-28100-00000-0	000-0000-000-000	-000-000-000	-000			ILP I	Мар #:	IL	P#:
					¥ : V : V ;						
React	n#: 1.0	į	TM(Zone/East/Ne	orth): 9.5338	46.6081	288		Sample Type:	В		
Length (ki	m): .49	Gradient (%	%): 16.73	US Elev	(m): 468	}		Order: 3	3	Magnitude: 6	i3
Confineme		Couplin		Open wa				BGC Zone:			
isian	ds: N	Bars: ✔N	SIDEDI	AGMID		AN B	RR	liparian Veg.:	М	Landuse: N	0
					SITE						
Site #: 6 Site Lg (m): 3		9 5341	one/East/North) 35: 6081581	Date:	2000/0	8/01	Po	Agency: C172 ef. Name:		Crew: EM/J)
Site Eg (III).	300	3 : 3341	33. 0001301		ANN	· · · · · · · · · · · · · · · · · · ·		ii. Ivaille.			
No Vis.Ch.:	Intermittent:			Avg	Min	Max	#			Avg % Min % N	Max % #
_	Tribs.:	_	Channel Width		18	26	6	_	Gadient %:	16.00 15	16 4
Dw:	_ ITIDS.:		Wetted Width		7	11.10	6	F	Pool Depth (m):	0.78 0.7	0.9 6
			Wb Depth	(m): 2.70	2.5	3	3				
Stage: L✓	M H	Temp (C): 7		pH: 7.	2		С	ond.: 60	Tur	b.: _ T _ N	/
				MOR	24.0	(e)(c)(
Bed Material:			Subdom: C				Bars	: VN _ 5	SIDE DIAG	MID S	PAN BR
	D95: 150.		D (cm): 80.00 Islands: N				0	1 B1 B2	B3 D1	D2 D3	
	Coupling: CO		nement: CO		DICTLIE	DANCE					
	Morph: CP					BANCE ATORS	С	1 C2 C3	C4 C5	S1 S2 S3	3 S4 S5
					O V E	R					
Total	: A		ype: SWD	LWD E	3	U	DP	OV	IV		FSZ:
		Ame		T [N	S	N	N		
	_	Loc: P/					<u> </u>			CROW!	1-20%
LWD:				STREAM VE		✓ A		M _ V _		,	1-2070
RB SHP:		Texture: F			R		IP: C	-	'G: MF 'G: MF		
LD GITT.		rexture.					ir. C	31	G. IVIF		
				P.E.		(E.S.					
	NID Type	Hgt Metho		lethod	Phot		Lat	AirPhoto		(Zone/East/Nort	,
	Cascade is impa	50.0 GE	150	GE R:	4 F	: 11	L:	#:	9 53	3923 608142	8 GIS
Olde November	One to the	Man 4			Cas	000000000000000000000000000000000000000					
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time		Voltage	'	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
604	EF	1 1	300	401 sec		300	\dashv	ВТ	3	220	280

Reach # ILP Map #

ILP#

Site 604

			PROJ	ECT				
Project Nam Stream Name (gaz Project Watershed Coo	.): SKEENA F		0-0000-000-000-000		Project Cod	le:	3476	
			WATER	SHED				
Gazetted Name: SOUTH LOR	NE CREEK		Lo	ocal Name: South	Lorne Creek			
Watershed Code: 400-301700-	28100-00000-0	000-0000-000-000-0	000-000-000					
ILP Map#: ILI	P#:	NID Map #: 1031.0	088 NI	D#: 60004	Reach #:	1.0	Site #: 604	
Field UTM(Zone/East/Nor	th/Method)	GIS UTM(Zon	e/East/North)	Site Lg: 300		Method: HC	Access:	Н
		9 534135	6081581	Ref. Name:				
Date: 2000/08/01 Time:	11:20	Agency: C172	Crew: EM/	JD	Fish Crd?	?: 🗸	Incomplete	: 🗆
			CHAN	NEL				
Mtd	width width	width width wi	idth width width	width width	width Avg	Ga	dient % Mtd	Avg
	22.50 18.00		1.60 26.00		22.57	Method I: 15		16.00
Wetted Width (m): T	11.10 10.00	9.70 8.50 7	.00 8.90		9.20	Method II: 18	.0 15.0 AL	
Pool Depth (m): MS	0.70 0.80	0.80 0.90 0	.70 0.80		0.78		1	7
Wb Depth: 2.5	3.0 2.6	Avg: 2.70	Method: GE	Stage: L	MH	No Vis.Ch.: Dw:	Intermittent:	-
		Avg. 2.70	Wethod. GL	Stage. L	INI	Dw.	IIIDS.:	7
COVER	Total: A							
Type: SWD LW	/D B	U DP	OV IV	CROWN CL	OSURE			
Amount: T T	D	N S	N N	1 1	-20%			
Loc: P/S/O:				INSTREAM	VEG: N 🗸 A	M V		
LWD: F	DIST: E							
LB SHP: S				RB SHP	W			
	6 7 6 7	BRA		Texture:			RA	
	G 🗸 C 🗸	B K A				✓ C ✓ B		
RIP: C STG: MF				RIP: STG:				
313. WII				010.	IVII			
			WAT	4;				
EMS:			Red	q #:				
Temp: 7		Method: T3	Cor	nd.: 60		Method:	S4	
pH: 7.2		Method: P2	Tu	rb.: T	M L C	Method:	GE	
Flood Signs: RAFTED LV	VD	Method: GE						
			MESIR BHE	E(0)(0)Y				
Bed Material: Domi	nant: B	Subdom: C		01	B1 B2 B3	D1 D2	D3	
D95: 150.0 D	(cm): 80.00	Morph: CP	DISTLI	RBANCE				
Pattern: IR				CATORS C1	C2 C3 C4	C5 S1	S2 S3 S4	S5
Islands: N								
Coupling: CO								
Confinement: CO								
FSZ				Bars: 🗸 N	SIDE	AG MID	SPAN BR	
			FEATU	RES				
NID Map NID Type	Hgt Meth	nod Lg N	Method Pho		AirPhoto	UTM (Zone	/East/North/Metho	od)
103I.088 88002 C	50.0 GE	150	GE R: 4	F: 11 L:	#:	9 533923	6081428	GIS
Comments: Cascade is impa	ssible to fish							
			HABITAT C	UALITY				
Name				Commer	nts			
OverWinter Habitat	Moderate ov	erwintering habitat in	cascade pool section	ons of stream				
Rearing Habitat		habitat-high gradien						
Spawning Habitat	Poor spawni	ng habitat-large sub	strates, high gradien					
			PHOT	O S				
Photo Fo	oc Lg	Dir			Comments			

CHANNEL

CHANNEL

S1 Stream

Reach # ILP Map #

ILP#

Site

	Watershed Code: 400-301700-28100-00000-0000-0000-000					700-28100-	00000-0000-0000-000-	000-000-000-000 1.0	604				
Photo Foc Lg Dir				Foo	c Lg	Dir	Comments						
	₹:	4	F:	10	ST	STD U Upstream photo of high energy section of stream							
	₹:	4	F:	11	ST	TD .	U	Upstream photo of lower portion of cascades					
	₹:	4	F:	12	ST	D Downstream photo of boulder cascade habitat							
								COMMENTS					
	Section							Comments					
	SITE CARD Fish form 30493						30493						

Bull trout captured below cascades. Cascades are impassible to upstream fish migration.

February 12, 2001

ILP Map #

ILP#

Watershed Code:

400-301700-28100-00000-0000-000-000-000-000-000-000

1.0

WATERBODY Gazetted Name: SOUTH LORNE CREEK Local: South Lorne Creek WS Code: 400-301700-28100-00000-0000-0000-000-000-000-000 Waterbody ID: ILP#: ILP Map #: Reach #: 1 -Project ID: 3476 Lake/Stream: S Lake From Date: To: 2000/08/01 Fish Permit #: 25350K Date: 2000/08/01 Agency: C172 Crew: EM/JD Resample: SITE / METHOD UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid NID Map NID# Site# Comment EF 1 604 1031.088 60004 A. GEAR SETTINGS MTD/NO H/P Time In Date Out Time Out Site# Date In Comment 11:20 2000/08/01 12:00 604 EF 1 2000/08/01 C. ELECTROFISHER SPECIFICATIONS. Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model 401 300.0 10.0 300 SMITH 604 EF 0 40 4 12B ROOT FISH SUMMARY Age Total # Lgth (Min/Max) FishAct Site# MTD/NO H/P Species Stage Comment 604 EF BT 3 220 280 Fish caught below cascade section above INDIVIDUAL FISH DATA MTD/NO H/P Species Length Weight Site# Sex Mat Age Vch# Genetic Roll# Frame# Comment Str/Smpl#/Age Str/Smpl# 604 FF ВТ 280 U U 4 13 Bull trout EF ВТ 220 604 U 1 1 U

604 EF

ВТ

240

U



Site #604, Upstream photo of high energy section of stream Roll #4, Frame #10, Date: 2000/08/01



Site #604, Upstream photo of lower portion of cascades Roll #4, Frame #11, Date: 2000/08/01



Site #604, Downstream photo of boulder cascade habitat Roll #4, Frame #12, Date: 2000/08/01



Site #604, Photo of a bull trout caught at this site Roll #4, Frame #13, Date: 2000/08/01

Reach # ILP Map #

ILP#

STREAM REFERENCING											
Gazetted Name: SOUTH LORNE	.ocal Na	me: Sou	th Lorne Cre	ek							
Watershed Code: 400-301700-2810	00-00000-0000-0000)-000-000-00	00-000-	-000		iLP Map #:				ILP#:	
REACH											
Reach #: 4.0 UTM(Zone/East/North): 9.526563.6077840 Sample Type: B											
Length (km): 5.44	Gradient (%): 6.36	US	Elev (ı	m): 1198	3		Orde	er: 3	Magnitude: 39		
Confinement: FC	Coupling: CO	<u> </u>	en wat	_	—		3GC Zor				
islands: NV E	Bars: VN SID	E DIAG	_MID	SPA		R Ripi	arian Ve	g.: M	Lane	duse: NO	
Site #: 605	DIE LITHIZONA/Earl	V(North)		SITE		A -		470	0	EMUD	
Site #: 605 9	GIS UTM(Zone/East 526996	6077803	Date:	2000/08	/01	_	gency: C Name:	31/2	Crew:	EM/JD	
			e i	ANN	EL						
No Vis.Ch.: Intermittent:			Avg	Min	Max	#			Avg %	Min % Max %	#
Dw: Tribs.:			5.80	4.800	6.400	6			ent %: 5.50	5 6	4
		. , ,	4.90 0.77	0.7	5.6	6	1	Pool Dep	th (m): 0.31	0.25 0.41	6
		, , , ,									
Stage: L M ✓ H To	emp (C): 6		pH: 7.2				d.: 60		Turb.:	Т М	L V C
Dad Matadala Danianak C	0.14		#*###	2000	(0) (C) Y			ODE -	DIAC DIA	anau	- PD
Bed Material: Dominant: G D95: 30.00	Subdom: (D (cm):	_				Bars:	N	SIDE	DIAG MIC	SPAN	✓ BR
Pattern: IM	Islands: I					01	B1	B2 B3	D1 D2 I	03	
Coupling: PC	Confinement:	UN	[DISTUR	BANCE						
Morph: RP		INDICATORS				C1	C2	C3 C4	C5 S1 S	32 S3 S	34 S5
			C	OVE	3						
Total: M	- /1	T D	В	_	U	DP	OV	IV			FSZ:
	Amount:	T D	S		_	T	S	N		CROWN CLC	SURF
LWD: F	DIST: E	INSTREA			✓ A	M	V		Í		20%
RB SHP: S Texto		СПВ	□ R		-	P: S	_ ′	STG: SHR			
LB SHP: S Text		C B	R			P: C		STG: PS			

Reach # ILP Map #

Site 605

4.0

ILP#

		PROJEC	3 T				
Stream Name (gaz.):	Mill Area 1:20K Stream Inventor SKEENA RIVER 400-000000-00000-00000-0000	-0000-000-000-000		Project Code:	3476		
		WATERS	HED				
Gazetted Name: SOUTH LORNE	E CREEK	Loca	I Name: South Lo	orne Creek			
Watershed Code: 400-301700-28	100-0000-0000-000-000-00	00-000-000-000					
ILP Map#: ILP #	: NID Map #: 1031.08	88 NID#	¢: 60005	Reach #: 4.0	Site #: 605		
Field UTM(Zone/East/North/l	Method) GIS UTM(Zone	/East/North)	Site Lg: 300	Method:	HC Access: H		
	9 526996		Ref. Name:				
Date: 2000/08/01 Time: 12	2:05 Agency: C172	Crew: EM/JD		Fish Crd?:	Incomplete:		
		CHANNE	= [
Mtd wi	dth width width width wid			idth Avg	Gadient % Mtd Avg		
Channel Width (m): T 5.66			videri Wideri Wi	5.80 Metho			
	80 5.30 4.20 4.40 5.1			4.90 Method			
	41 0.38 0.25 0.32 0.2			0.31			
				No Vis.	Ch.: Intermittent:		
Wb Depth: .7 .	.8 Avg: 0.77	Method: MS	Stage: L	M✔ H	Dw: Tribs.:		
COVER	Total: M						
Type: SWD LWD	B U DP	OV IV	CROWN CLOS				
Amount: T D	S T T	S N	1 1-20	0%			
Loc: P/S/O:			INSTREAM VE	EG: N 🗸 A 📗 M	L V L		
LWD: F	DIST: E						
LB SHP: S			RB SHP: S				
Texture: F 🗸 G	C B B R A		Texture:	FFGCC	BRTA		
RIP: C			RIP: S				
STG: PS			STG: SI				
0.0			0.0.0				
		WATER					
EMS:		Req #:					
Temp: 6	Method: T3	Cond.:	: 60	M	lethod: S4		
pH: 7.2	Method: P2	Turb.:	:	M I L V C M	lethod: GE		
Flood Signs: BRAIDED CHA	ANNE Method: GE				2.		
		MORPHOL	0.6 Y				
Bed Material: Dominal	nt: G Subdom: C		01	B1 B2 B3 D1	D2 D3		
	n): 30.00 Morph: RP			ПППППП			
The second secon	.,,,	DISTURBA INDICAT	ODC				
Pattern: IM		11101011	C1	C2 C3 C4 C5	S1 S2 S3 S4 S5		
Islands: N							
Coupling: PC Confinement: UN							
FSZ			Bars: N	SIDE DIAG A	AID SPAN BR		
		HABITAT QU	ALITY				
Name			Comments				
OverWinter Habitat No overwintering habitat observed							
Rearing Habitat	Poor quality rearing habitat-subjec	t to low flows in the wi	nter, shallow dept	th, lack of holding water			
Spawning Habitat High quality spawning habitat-gravels are abundant, flows adequate and compaction low							
		PHOTOS	5				
Photo Foc I				Comments			
R: 4 F: 14 STC		Upstream photo of cre		king in riffle habitat			
R: 4 F: 15 STD	D D	Downstream photo of					
		COMMEN	10				
Section			Comments				

February 12, 2001 Page 91 of 223

4.0

ILP Map #

ILP#

Watershed Code:

WATERBODY Gazetted Name: SOUTH LORNE CREEK Local: South Lorne Creek WS Code: 400-301700-28100-00000-0000-000-000-000-000-000-000 ILP#: Waterbody ID: ILP Map #: Reach #: 4 -Lake From Date: Project ID: 3476 Lake/Stream: S Resample: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: EM/JD SITE / METHOD NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Site# NID Map Comment EF 1 606 1031.088 60006 6 60 C 1031.088 EF 1 6 605 60005 60 C A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment EF 1 12:40 606 1 2000/08/01 2000/08/01 13:45 EF 1 2000/08/01 12:05 605 1 2000/08/01 12:35 C ELECTROFISHER SPECIFICATIONS MTD/NO Site# H/P Encl Lnth Wdth Voltage Frequency Pulse Make Model 606 EF 1 0 SMITH 426 300.0 6.0 500 60 6 12B ROOT 605 EF 300.0 1 0 610 5.0 500 60/40 6/4 12B SMITH ROOT FISH SUMMARY MTD/NO Total # Lgth (Min/Max) | FishAct Site# H/P Species Stage Age Comment 606 NFC 0 605 EF NFC 0 No Fish caught COMMENTS Section Comments WATERBODY Changed frequency and pulse to be sure no fish were here.

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Site #605, Downstream photo of riffle habitat Roll #4, Frame #15, Date: 2000/08/01



Site #605, Upstream photo of crew member shocking in riffle habitat Roll #4, Frame #14, Date: 2000/08/01

Reach # ILP Map #

ILP#

				S							
Site #:	606	GIS UTM(Zone/East/North)		Date: 2	Date: 2000/08/01		Ā	Agency: C172		Crew: EM/JD	
Site Lg (m):	300	9 529272 6078417			Ref. Name:						
				(6)	ANN	E (.					
No Vis.Ch.:	Intermittent:			_	Min	Max	#			Avg % Min % R	/lax % #
Dw:	Tribs.:		Channel Width	, ,		21.20	6		Gadient %:		10 4
			Wetted Width			8.100	6	Р	ool Depth (m):	0.44 0.29	0.610 6
		L	Wb Depth	(m): 2.43	2.3	2.6	3				
Stage: L	M H _	Temp (C): 6		pH: 7.2			Cor	nd.: 60	Tur	b.: 🗌 T 📋 I	w □ L ✔ C
				MORE		6)(c)()					
Bed Material:	Dominant: B	Si	ubdom: C				Bars:	VN S	SIDE DIAG	MID S	PAN BR
	D95: 60.0	0 1	O (cm): 45.00				01	D4 D2	B2 D4	D2 D3	
	Pattern: IR		slands: N				01	B1 B2	B3 D1	D2 D3	1
	Coupling: CO	Confin	ement: FC		STURB						
	Morph: CP			1	NDICAT	TORS	C1	C2 C3	C4 C5	S1 S2 S	3 S4 S5
				0.0							
Total:	: A	Ty	/pe: SWD L	.WD B		U	DP	OV	IV		FSZ:
		Amo		N D		Т	S	Т	N		
		Loc: P/S	5/0:								N CLOSURE
LWD:	: N	DIS	T: NA INS	TREAM VEG:	N v	A	М	_ v _		0	0%
RB SHP:	: V	Texture: F	V G V C	B R	ПА	RIF	: S	ST	G: SHR		1
LB SHP:	V	Texture: F	✓ G ✓ C	B R	_ A	RIF	: S	ST	G: SHR		
Site Number	Capture	Number of	Total Length	Total	V	/oitage		Species	Total	Minimum	Maximum
	Method	Events	(m)	Time	-				Fish	Length (mm)	Length (mm)
605 606	EF	1	300	610 sec	+	500	+	NFC	0		
806	EF	1	300	426 sec		500		NFC	0		

ILP Map #

ILP#

Site 606

4.0

23:300 2300 Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 WATERSHED Gazetted Name: SOUTH LORNE CREEK Local Name: South Lorne Creek NID Map #: 1031.088 NID#: 60006 Reach #: 4.0 Site #: 606 ILP Map#: ILP#: Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site La: 300 Method: HC Access: H 529272 6078417 Ref. Name: Crew: EM/JD Agency: C172 Fish Crd?: 🗸 Incomplete: Date: 2000/08/01 Time: 13:04 (MISANNE) width | width | width | width | width | width | width | width | width | Avg Gadient % Mitd Mtd Avg 13.60 14.90 21.20 15.93 Channel Width (m): 15.10 17.20 13.60 Method I: 10.0 8.0 AL 8.75 Wetted Width (m): 6.50 7.20 6.30 8.10 5.80 7 40 6.88 Method II: 8.0 9.0 AL 0.42 0.50 0.61 0.36 0.29 0.45 0.44 Pool Depth (m): MS No Vis.Ch.: Intermittent: Wb Depth: 2.6 2.4 2.3 Avg: 2.43 Method: GE Stage: L M H Dw: Tribs.: COVER Total: A **CROWN CLOSURE** Type: SWD LWD B DP IV D S N 0% Amount N Loc: P/S/O: INSTREAM VEG: N A M V LWD: N DIST: NA LB SHP: V RB SHP: V Texture: FFGCBBRA Texture: F G G C B R A RIP: S RIP: S STG: SHR STG: SHR ://#: 10 = 1: EMS: Req #: Temp: 6 Method: T3 Cond.: 60 Method: S4 Method: P2 pH: 7.2 Turb.: T M L C Method: GE Flood Signs: RAFTED DEBRIS Method: GE MERCHEN 01 B1 B2 **B**3 D1 D2 D3 Bed Material: Dominant: B Subdom: C D95: 60.0 Morph: CP D (cm): 45.00 DISTURBANCE **INDICATORS** Pattern: IR C1 C3 C4 C5 **S1** S2 **S4 S**5 Islands: N Coupling: CO Confinement: FC Bars: ✓ N SIDE DIAG MID SPAN FSZ CANCERDANGE PERMENT Name Comments Spawning Habitat Poor spawning habitat-large substrates, high gradient OverWinter Habitat Poor overwintering habitat-very few pools with enough depth to overwinter fish Rearing Habitat Poor rearing habitat-high energy, lack of holding water, subject to low flows in the winter a contest Foc Lg Photo Dir Comments 4 16 STD U F Upstream photo of a cascade section of stream R: F: 17 STD ח Downstream photo of a cascade section of stream (0(0))) (1) (2)

Comments

Section

. 210 0100 0	ori or		Reach #	ILP Map #	ILP#	Site		
	400-3017	/00-28100-00000-0000-0000-000-000-000-000-000	4.0			606		
Section		Co	Comments					
SITE CARD		30491						
CHANNEL Cascades in Reach 1 prevent upstream fish migration to this reach								
CHANNEL		S5 Stream						

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4.0

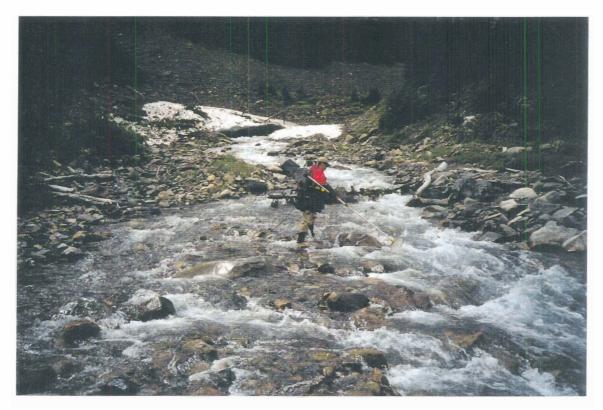
ILP Map #

ILP#

Watershed Code:

WATERBODY Gazetted Name: SOUTH LORNE CREEK Local: South Lorne Creek Waterbody ID: ILP Map #: ILP#: Reach #: Lake/Stream: S Project ID: 3476 Lake From Date: Fish Permit #: 25350K Date: 2000/08/01 To: 2000/08/01 Agency: C172 Crew: EM/JD Resample: SITE / METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment 606 1031.088 60006 EF 1 6 60 C 605 1031.088 60005 EF 1 6 A. GEAR SETTINGS Time Out Site# MTD/NO H/P Date In Date Out Time In Comment 2000/08/01 12:40 2000/08/01 13:45 606 605 EF 1 2000/08/01 12:05 2000/08/01 12:35 C. ELECTROFISHER SPECIFICATIONS Site# MTD/NO H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model 0 426 300.0 6.0 500 60 6 SMITH 12B ROOT 605 0 610 300.0 5.0 500 60/40 6/4 SMITH 12B ROOT ELSE: SUMMARY Site# MTD/NO H/P Species Stage Age Total # Lgth (Min/Max) FishAct Comment 606 NFC 0 EF NFC 0 No Fish caught 605 1 COMMENTS Section Comments WATERBODY Changed frequency and pulse to be sure no fish were here.

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Site #606, Upstream photo of a cascade section of stream Roll #4, Frame #16, Date: 2000/08/01



Site #606, Downstream photo of a cascade section of stream Roll #4, Frame #17, Date: 2000/08/01

Reach # !LP Map #

ILP#

			S.	TREAMRI	EFERENCI	NG			
Gazetted Na	me:				Loc	al Name: None			
Watershed Co	ode: 400-301700	-65700-00000-00	00-0000-000-000	-000-000-000-00	00	ILP I	Vlap #:	ILI	P#:
				RE	ACH				
Reach	1#: 4.0	וט	M(Zone/East/No	orth): 9.528508.0	8086135	Sample Type:	В		
Length (ki	m): .57	Gradient (%): 6.14	US Elev (m)	: 1322	Order: 2	2	Magnitude: 2	2
Confineme		Coupling		Open water		BGC Zone:			
islan	ds: NV	Bars: ✔N	_SIDEDi	AG MID		Riparian Veg.:	S	Landuse: N	0
	Г				ITE				
Site #: 6 Site Lg (m): 2		9 52846	ne/East/North) 8: 6085949	Date: 20		Agency: C172 Ref. Name:		Crew: EM/JD	1
3.53	1			CHA	NNEL				
No Vis.Ch.:	Intermittent:				000000000000000000000000000000000000000	#	Г	Avg % Min % M	ax % #
Dw:	Tribs.:		Channel Width	` '		6		10.00 8	12 4
		_	Wetted Width			6 3	ool Depth (m):	0.24 0.200 0	.270 6
		L	Wb Depth	(m): 0.43	0.4 0.5	3			
Stage: L	MV H	Temp (C): 7		pH: 7.1		Cond.: 30	Turt	o.: 🗌 T 📗 N	LVC
				M O Kesa	(0)E(0)G(y				
Bed Material:			ubdom: C		Ba	rs: 🗸 N 🔃 S	SIDE DIAG	MID SF	PAN BR
	D95: 80.00		O (cm): 20.00 slands: N			O1 B1 B2	B3 D1	D2 D3	
	Coupling: CO		ement: CO	DIS	TURBANCE				
	Morph: CP				IDICATORS	C1 C2 C3	C4 C5	S1 S2 S3	S4 S5
				C O	VER				
Total	: M		1	LWD B		P OV	IV		FSZ:
		Amo		N D		T S	N		
		Loc: P/S	2/().[CECUM	
LWD	N	Loc: P/S		TREAM VEG:				CROWN 0	0%
LWD:		DIS	T: NA INS	STREAM VEG:	N 🗸 A 🗌	M V	G: INUT		
LWD: RB SHP: LB SHP:	: V		T: NA INS			M V ST	G: INIT G: SHR		
RB SHP	: V	DIS	T: NA INS	BTREAM VEG:	N 🗸 A 🗌	M V ST			
RB SHP	: V	DIS	T: NA INS	BTREAM VEG: BREAM R	N 🗸 A 🗌	M V ST			
RB SHP	: V	DIS	T: NA INS	BTREAM VEG: BREAM R	N A RIP:	M V ST			

ILP#

Site

Watershed Code: 400-301700-65700-00000-0000-000-000-000-000-000 4.0 607

Project Name: Mill Arsa 1/20K Stream Inventory Project			PROJECT			
Contact Name: Cocal Name: None Cocal Name: Name: None Cocal Name: None Cocal Name: None Cocal Name: Name: None Cocal Name: Name: None Cocal Name: Name	Stream Name (gaz.): SKEENA	RIVER		*	le:	3476
Water shock Code: 400-301700-69700-0000-0000-0000-0000-0000-0000-			WATERSHED			
LP # NID Map #: 101.008	Gazetted Name:		Local Name:	None		
Field UTM/Zone/East/North/Method:		0000-0000-000-000-000	-000-000-000			
Field UTM/Zone/East/North/Method:				Reach #:	4.0	Site #: 607
Date: 2000/08/01 Time: 14.06 Agency: C172 Crew: EMJ/D Flah Crd?: Incomplete:				m: 200	Mathod: HC	Access: H
Date: 20000801 Time: 14:05 Agency: C172 Crew: EMJD Fish Crd?: Incomplete:	Field OTM(2016/East/North/Method)	1			WELLIOG. FIC	Access. II
CHANNEL					_	
Mid width	Date: 2000/08/01 Time: 14:06	Agency: C172	Crew: EM/JD	Fish Crd?	?: 🗸	Incomplete:
Mid width			70.204 GREEN			
Channel Width (m): T 1.61 1.54 1.92 1.94 1.73 1.52					·	
Wethod Width (m):						
Pool Depth (m): MS	The second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section					
Wb Depth: A					Method II: 10.0	10.0 AL
Wb Depth:	Pool Depth (m): MS 0.20 0.21	0.25 0.26 0.27	0.24	0.24	No Vis Ch :	ntermittent:
COVER	Wh Depth: 4 4 5	7 Ave: 0.43	Method: MS Stag	e I M M H		A CONTRACTOR OF THE PARTY OF TH
Type: SWD LWD		_ Avg. 0.45	metrod. No otag	e. L III V	DW	11103
Loc: P/S/O	COVER Total: M					
Amount: N N D T T T S N INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M V C INSTREAM VEG: N A M M V C INSTREAM VEG: N A M M V C INSTREAM VEG: N A M M V C INSTREAM VEG: N A M M V C INSTREAM VEG: N A M M V C INSTREAM VEG: N A M M C C INSTREAM VEG: N A M C C INSTREAM VEG: N A M C IN	Type: SWD LWD B	U DP	OV IV CRO	WN CLOSURE		
LWD: N DIST: NA LB SHP: V Texture: F	1/1/2			0%		
LWD: N DIST: NA LB SHP: V Texture:				DEAM VEG. N A.		7
LB SHP: V Texture:			V INSTI	REAM VEG. II W		_
Texture:	LWD: N DIST: N	A				
Texture:	I B SUB: \/		DI	P CHD·\/		
RIP: S STG: SHR WATER EMS:						
STG: SHR	Texture: F G G C	B R A	10	exture: F G	M C B	R L A
## Figure 1	RIP: S			RIP: G		
EMS: Temp: 7	STG: SHR			STG: INIT		
EMS: Temp: 7			778 % - 2 - 2 - 2			
Temp: 7						
Ph: 7.1			***			
Method: GE	Temp: 7	Method: T3	Cond.: 30		Method: S4	1
Morphology Morphic Morphology Morphic	pH : 7.1	Method: P2	Turb.:	TOMPLERO	Method: Gi	E
Bed Material: Dominant: B Subdom: C D95: 80.0 D (cm): 20.00 Morph: CP DISTURBANCE INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5	Flood Signs: NONE	Method: GE				
Bed Material: Dominant: B Subdom: C D95: 80.0 D (cm): 20.00 Morph: CP DISTURBANCE INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5			MORPHOLOGY			
Dest internal: Dest i			***************************************	O1 B1 B2 B2	D1 D2 D	2
Pattern: SI Islands: N Coupling: CO Confinement: CO FSZ Bars: N SIDE DIAG MID SPAN BR HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments PHOTOS Photo Foc Lg Dir Comments COMMENTS COMMENTS	Bed Material: Dominant: B	Subdom: C		01 01 02 00	0 01 02 0	5
Pattern: S INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5 Islands: N	D95: 80.0 D (cm): 20.00	Morph: CP	DISTURBANCE			
Islands: N Coupling: CO Confinement: CO FSZ	Pattern: SI			C1 C2 C3 C4	C5 S1 S	2 S3 S4 S5
Coupling: CO Confinement: CO FSZ Bars: N SIDE DIAG MID SPAN BR HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments Comments PHOTOS R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS						
Bars: N SIDE DIAG MID SPAN BR HABITAT QUALITY Name						
HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Phot Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS						
HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS			Bars:	N SIDE DIA	AG MID S	PAN BR
Name Comments OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Phot Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS	132					_
OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat C O M N E N T S		;	VACORINATING BIJARDIN	Y		
OverWinter Habitat Overwintering habitat is present in upstream pond Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat C O M N E N T S	Name			ammente		
Spawning Habitat Poor spawning habitat-large compact substrates Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS		na habitat is procent in		omments		
Rearing Habitat Moderate rearing habitat limited by gradient and lack of deep pool habitat PHOTOS Photo Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS			A CONTRACTOR OF THE CONTRACTOR			
PHOTOS PHOTOS R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS				ol habitat		
Phots Foc Lg Dir Comments R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat C O M N ENTS	rearing habitat Noderate re	army nabital limited by		or navitat		
R: 4 F: 18 STD U Upstream photo of lake outlet R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS						
R: 4 F: 19 STD D Downstream photo of crew member shocking riffle habitat COMMENTS					S	
COMMENTS	The state of the s					
	R: 4 F: 19 STD	D		ember shocking riffle habi	tat	
Section Comments			COMMENTS			
	Section		Co	omments		

			Reach #	ILP Map #	ILP#	Site
Watershed Code:	400-301700-65700-00000-0000-0000-0	000-000-000-000-000	.0			607
Section	1	Comme	nts			
SITE CARD	Fish form 30490					
CHANNEL	Gradient in Reach 1 prevents	fish access to this reach				
CHANNEL	S6 Stream					

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ILP#

WATERBODY Gazetted Name: Local: None WS Code: 400-301700-65700-00000-0000-000-000-000-000-000-000 ILP#: Press.

Lake From Date: ILP Map #: 4 -Waterbody ID: Project ID: 3476 Lake/Stream: S To: 2000/08/01 Agency: C172 Crew: EM/JD Resample: Fish Permit #: 25350K Date: 2000/08/01 SITE / METHOD UTM:Zone/East/North/Mthd | MTD/NO | Temp | Cond | Turbid NID Map Site# NID# Comment 607 1031.098 60007 EF 1 7 A. GEAR SETTINGS Time In Date Out Time Out MTD/NO H/P Date In Comment Site# 2000/08/01 14:06 2000/08/01 14:40 607 EF 1 ONE DECEMBER OF SHERES DECEMBED AND ONES MTD/NO Sec Lnth Wdth Voltage Frequency Pulse Site# H/P Encl Make Model 0 369 200.0 400 6 SMITH 12B 607 1.6 60 EF ROOT FISH SUMMARY MTD/NO Age | Total # | Lgth (Min/Max) | FishAct Comment Site# Species Stage 607 NFC 0

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Site #607, Upstream photo of lake outlet Roll #4, Frame #18, Date: 2000/08/01



Site #607, Downstream photo of crew member shocking riffle habitat Roll #4, Frame #19, Date: 2000/08/01

Reach # ILP Map #

ILP#

2.0 1031.098 10885 Local Name: None **Gazetted Name:** ILP Map #: 103I.098 ILP#: 10885 REACH UTM(Zone/East/North): 9.528926.6086251 Reach #: Sample Type: R Length (km): .77 Gradient (%): 7.79 US Elev (m): 1388 Order: 1 Magnitude: 1 Confinement: FC Coupling: PC Open water: A BGC Zone: AT Bars: ✓N SIDE DIAG MID SPAN BR Riparian Veg.: S Islands: NV Landuse: NO SITE GIS UTM(Zone/East/North) Site #: 608 Date: 2000/08/01 Agency: C172 Crew: EM/JD 528701 6085827 Ref Name Site Lg (m): 100 CHANNEL Min Max Avg % Min % Max % No Vis.Ch.: Intermittent: # Avg # Channel Width (m): 0.45 0.29 0.59 6 Gadient %: 8.50 10 10 4 Dw: Tribs.: Wetted Width (m): 0.36 0.200 0.5 6 Pool Depth (m): 0.09 0.070 0.100 6 Wb Depth (m): 0.23 0.2 0.3 3 Turb.: T M L V C Stage: L M✓ H Temp (C): 7 pH: 7.1 Cond.: 30 MORPHOLOGY SPAN Bed Material: Dominant: R Subdom: C Bars: V N SIDE DIAG MID D95: 40.00 D (cm): 5.00 01 **B**1 B2 **B3** D1 Pattern: IR Islands: N Coupling: PC Confinement: FC DISTURBANCE Morph: CP **INDICATORS** C1 C2 C4 C5 52 S3 \$5 Ø Ø V/ □ ? SWD LWD В U DP ov Total: M Type: IV FSZ: Amount N D T Loc: P/S/O: **CROWN CLOSURE V** 0% LWD: N INSTREAM VEG: N RB SHP: S Texture: ☐ F ✓ G ✓ C RIP: G STG: INIT В LB SHP: S Texture: F G G C B RIP: G STG: INIT

				131	56				
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
608	EF	1	200	206 sec	600	NFC	0		

Reach #

ILP Map #

ILP#

Site

2.0

1031.098

10885

608

		PROJ	ECT			
Project Name: Mill Area (Stream Name (gaz.): SKEENA Project Watershed Code: 400-00000	RIVER		0-000-000-000	Project C	ode:	3476
		WATER	SHED			
Gazetted Name:		L	ocal Name: Non	e		
Watershed Code: 000-000000-00000-00000-0	0000-0000-000-000-0	000-000-000				
ILP Map#: 103I.098 ILP #: 10885	NID Map #: 1031.	098 N	IID#: 60008	Reach #:	2.0	Site #: 608
Field UTM(Zone/East/North/Method)	GIS UTM(Zor	ne/East/North)	Site Lg: 100		Method: HC	Access: H
	9 528701		Ref. Name:			
Date: 2000/08/01 Time: 14:45	Agency: C172	Crew: EM	/JD	Fish C	rd?: 🗸	Incomplete:
		CHAN	INEL			
Mtd width width	width width w	idth width widtl	h width width	width Avg	G	adient % Mtd Avg
Channel Width (m): T 0.48 0.52	0.39 0.29 0	0.46 0.59		0.45	Method I: 8	3.0 10.0 AL 8.50
Wetted Width (m): T 0.40 0.39	0.28 0.20 0	0.50		0.36	Method II: 7	.0 9.0 AL
Pool Depth (m): MS 0.10 0.10	0.07 0.08 0	0.09 0.10		0.09		¬
Wb Depth: .3 .2 .2	Avg: 0.23	Method: MS	Stage: L	MV H	No Vis.Ch.: Dw:	Intermittent: Tribs.:
		11100110011 1110	otage		DW	
COVER Total: M						
Type: SWD LWD B	U DP	OV IV	CROWN C			
Amount: N N D	TT	TT	0	0%		, =
Loc: P/S/O:			INSTREAM	A VEG: N	A [] M [] \	
LWD: N DIST: N	A					
LB SHP: S			RB SHI	P:S		
Texture: F G G C	BRRA		Texture	e:	G C B	RA
RIP: G			RIF	P: G		
STG: INIT			STO	G: INIT		
		WAT	FR			
EMS:			eq #:			
Temp: 7	Method: T3		ond.: 30		Method:	S4
pH: 7.1	Method: P2	т.	urb.:	MIL	C Method:	GE
Flood Signs: NONE	Method: GE		ui i		C. Wethod.	GL
		MORPHO	DLOGY			
Bed Material: Dominant: R	Subdom: C		01	B1 B2	B3 D1 D2	D3
D95: 40.0 D (cm): 5.00	Morph: CP	DISTI	JRBANCE			
Pattern: IR			CATORS C1	C2 C3	C4 C5 S1	S2 S3 S4 S5
Islands: N						
Coupling: PC						
Confinement: FC						
FSZ			Bars: V	SIDE	DIAG MID	SPAN BR
		HABITAT	QUALITY			
Name			Comme	ents		
	g habitat-limited by g					
	ering habitat-residua g habitat-substrates					
aparining reserved 1100 aparinin	a manual administra	PHOT	os			
Photo Foc Lg	Dir	1		Comme	nts	
R: 4 F: 20 STD	D	Downstream pho	oto of representativ		111.0	
R: 4 F: 21 STD	U		of stream channel			
		COMM				
Section			Comme	ents		

			Reach #	ILP Map #	ILP#	Site
Watershed Code: Section	000-000	000-00000-00000-0000-0000-000-000-000-000-000	2.0 Comments	1031.098	10885	608
SITE CARD		Fish form 30489				
CHANNEL		Barrier in mainstern downstream prevents upstream fish mi	gration to this reach	-		
CHANNEL		S6 Stream				

February 12, 2001 Page 68 of 223

Reach #

і∟Р мар#

ILP#

Watershed Code:

000-000000-00000-00000-0000-0000-000-000-000-000-000

2.0

1031.098

10885

Gaz	etted	Name:									Loca	I: No	ne			
Pr	rojec	t Code:	400-0	000000-	00000-	00000-000	0-000-000-0	00-000-0	000-000	-0						
	WS	Code:	000-0	000000-	00000-	00000-000	0-000-000-0	00-000-0	000-000	-000						
Wa	aterb	ody ID:						ILP Ma	ap#: 10	31.098	3		ILP#:	10885 R	each #: 2	
	Pro	ject ID:	3476								Lake/Stre	eam:	S	Lake Fron	n Date:	
Fis	sh Pe	ermit #:	25	350K		Date: 2	000/08/01	То:	2000/0	08/01	Age	ncy: (0172	Crew: EM/JD	Resam	ple:
								ITE	/ ME	TH	0 D					
Site#	NII	О Мар	NID	#	UTM:Z	one/East/	North/Mthd	MTD/	NO T	emp	Cond	Turb	id	Cor	mment	
608	10	31.098	600	08				EF	1	7	30	С				
							Α.	GEA	R SE	TTI	NGS					
Site#	M	D/NO	H/P	Date	In	Time In	Date Out	Time	Out				Co	omment		
608	EF	1	1	2000/0	8/01	14:45	2000/08/01	15:3	_							
						C. E	LECTRO	FISH	1 E R	SPE	CIFI	CAT	IONS.			
Site#	T	MTD/N	0	H/P		Encl	Sec	Lnth	V	/dth	Volt	age	Frequency	Pulse	Make	Mode
608	E	F	1	1		0	206	200.0		0.5	60	00	60	6	SMITH ROOT	12B
							f	ISH	SUM	MA	RY					
Site#	T	MTD/N	0	H/P	Spe	cies S	Stage Ag	je .	Total #	Lgt	h (Min/M	ax)	FishAct		Comment	
	-				NF				0	_						

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Site #608, Upstream photo of stream channel Roll #4, Frame #21, Date: 2000/08/01



Site #608, Downstream photo of representative habitat Roll #4, Frame #20, Date: 2000/08/01

Reach # ILP Map # ILP #

						TREA	MRE	FEREN	CIN	G			
Gazetted Na	me: Ql	JILL CR	EEK						Local	Name: Quill Cr	eek		
Watershed Co	ode: 40	0-31370	00-00000	-00000-000	0-000-000-00	0-000-000	0-000-00	0		ILP	Map #:	IL	P#:
							RE	ACH					
Reach Length (k Confineme Islan	m): 4.62		G	UT radient (%) Coupling rs: _N	: PC	US E	Elev (m): n water:	702	R F	Sample Type: Order: ! BGC Zone: liparian Veg.:	5 CWH	Magnitude: 6	
							SI	TE					
Site #: (Site Lg (m):			GI 9	S UTM(Zo 52808	ne/East/North) 609037		ate: 200		Re	Agency: C172 of. Name:		Crew: EM/JD)
_	_							NNEL	•				
No Vis.Ch.:	_ Inter	Tribs.	_		Channel Widt Wetted Widt Wb Dept	th (m): 33 th (m): 13	3.98 28 3.60 10	Max 3.10 42 3.60 16.20 3.4 2.8	6 6 3	F	Gadient %:	Avg % Min % M 4.63 4 0.59 0.360 0	5 4 0.850 6
Stage: L	M	Н	Ten	np (C): 10		р	H: 7.1		C	ond.: 60	Turk	o.: 🗌 T 🔲 N	LVC
						ĺΫI	ORPH	OLOGY					
Bed Material:	Patte Coupl	ant: C 095: 80. ern: SI ing: CO rph: RP	00	E is	bdom: B) (cm): 55.00 slands: N ament: FC			TURBANCE DICATORS	Bars	91 B1 B2		MID SI D2 D3 S1 S2 S3	S4 S5
							0.0	VER					
Total				Amou Loc: P/S	/O: / O:	T V	D D	U T	S S	T	N N	CROWI	FSZ: CLOSURE
LWD				DIS		NSTREAM		N 🗸 A		M	0.145		
RB SHP LB SHP			Textur Textur		✓ G ✓ C	B B			IP: C		G: MF G: MF		
							FEAT	URES					
NID Map	NID	Type	Hgt	Method	Lg	Method	I	Photo		AirPhoto	UTM	(Zone/East/Nort	h/Method)
103I.098 8 Comments:	8003 View ur	LS slope a	600.0	GE	10	GE	R: 4	F: 23	L:	#:	9 52	7917 609050	0 GIS
	NID	Туре	Hgt	Method	Lg	Method		Photo	1	AirPhoto	LITM	(Zone/East/Nort	h/Method)
	8003	LS	600.0	GE	10	GE	R: 4	F: 22	L:	#:		7917 609050	
Comments:	Large la	andslide	blocks s	tream									
							FI	SH					
Site Number		pture ethod		nber of vents	Total Length (m)		otal me	Voltage	9	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
609		EF		1	400	510	sec	400	\dashv	NFC	0		

ILP Map # Reach #

ILP#

Site

609 6.0 PROJECT Project Name: Mill Area 1:20K Stream Inventory Project Stream Name (gaz.): SKEENA RIVER Project Code: 3476 Gazetted Name: QUILL CREEK Local Name: Quill Creek Site #: 609 ILP Map#: ILP#: NID Map #: 1031.098 NID #: 60009 Reach #: 6.0 GIS UTM(Zone/East/North) Method: HC Access H Field UTM(Zone/East/North/Method) Site Lg: 350 528081 6090378 Ref. Name: Agency: C172 Crew: EM/JD Fish Crd?: V Incomplete: Date: 2000/08/01 Time: 15:40 CHANNEL Mtd width width width width width width width width width Avg Gadient % Mtd Avg Channel Width (m): 28.10 39.60 42.00 29.60 31.20 33.40 33.98 5.0 4.0 AL 4.63 GE Method I: 15.00 Wetted Width (m): GE 10.60 12.40 13.30 16.20 14.10 13.60 Method II: 5.0 4.5 AL Pool Depth (m): MS 0.60 0.71 0.85 0.36 0.42 0.59 0.59 No Vis.Ch.: Intermittent: Stage: L ✓ M H Wb Depth: 2.6 2.8 2.4 Method: GE Dw: Tribs.: Avg: 2.60 COVER Total: A **CROWN CLOSURE** Type: SWD LWD R DE OV IV S 1-20% D N Amount Loc: P/S/O: INSTREAM VEG: N A M V LWD: F DIST: F LB SHP: V **RB SHP: S** FFGCBBRA Texture: Texture: F G G C B R A RIP: C RIP: C STG: MF STG: MF WATER EMS: Rea #: Temp: 10 Method: T3 Cond.: 60 Method: S4 pH: 7.1 Method: P2 TTMTLVC Turb.: Method: GE Flood Signs: LWD ON BARS Method: GF MESICALISM 01 **B**1 **B2 B3** D1 D2 D3 Bed Material: Dominant: C Subdom: B D95: 80.0 D (cm): 55.00 Morph: RP DISTURBANCE INDICATORS Pattern: Si C1 C2 C3 C4 C5 S1 S2 S4 **S**5 Islands: N Coupling: CO Confinement: FC Bars: N SIDE DIAG ✔ MID SPAN FS7 NID Map NID Type Hgt Method Method Photo AirPhoto UTM (Zone/East/North/Method) 1031.098 88003 LS 600.0 GE 10 GE R: 4 F: 23 #: 9 527917 6090500 Comments: View upslope at slide UTM (Zone/East/North/Method) NID Map NID Type Hgt Method Lg Method Photo AirPhoto 1031.098 88003 LS GE 10 GE R: 4 F: 22 9 527917 6090500

#:

Comments

600.0

Moderate overwintering habitat

Comments: Large landslide blocks stream

Name

OverWinter Habitat

ILP#

Site 609

		Na	ame			Comments
	F	Rearing	Habitat			ted by the lack of pool habitat
	Sp	pawnin	g Habitat	Mode	ate quality spawning ha	abitat-substrates too large for small fish but suitable for larger species
						PHOTOS
****	Ph	noto		Foc Lg	Dir	Comments
R:	4	F:	22	STD	U	Downstream photo of where a landslide has diverted the stream channel
R:	4	F:	23	STD	NS	Upslope photo of a 600 m landslide
R:	4	F:	24	STD	U	Upstream photo of riffle pool habitat
R:	4	F:	25	STD	D	Downstream photo of riffle pool habitat
						COMMENTS
******		Sec	tion			Comments
		SITE	CARD	Fish f	orm 30488	
		CHA	NNEL	The la	ndslide diverts the stream	am into the adjacent timber. The slide is 100 % natural.
		CHA	NNEL	Falls	lownstream prevent up:	stream fish migration to this reach
		CHAI	NNEL	S5 St	eam	

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Reach #

6.0

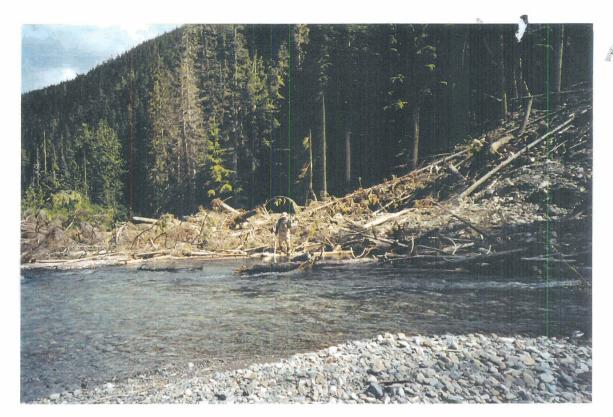
ILP Map#

ILP#

Watershed Code:

WATERBODY Gazetted Name: QUILL CREEK Local: Quill Creek ILP#: Reach #: ILP Map #: 6 -Waterbody ID: Project ID: 3476 Lake/Stream: S Lake From Date: Date: 2000/08/01 To: 2000/08/01 Agency: C172 Fish Permit #: 25350K Crew: EM/JD Resample: SITE / METHOD NID Map NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Site# Comment 609 1031.098 60009 EF 1 10 60 A. GEAR SETTINGS MTD/NO H/P Time In Date Out Time Out Date In Site# Comment EF 1 1 2000/08/01 15:40 2000/08/01 16:30 609 CHERCHROEISHER SPECIFICATIONS MTD/NO Site# H/P Encl Sec Lnth Wdth Voltage Frequency Pulse Make Model 609 EF 1 0 510 400.0 12.0 400 60 SMITH 6 12B ROOT FISH SUMMARY MTD/NO Total # Lgth (Min/Max) FishAct Site# H/P Stage Species Comment 609 NFC

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Site #609, Downstream photo of where a landslide has diverted the stream channel Roll #4, Frame #22, Date: 2000/08/01



Site #609, Downstream photo of riffle pool habitat Roll #4, Frame #25, Date: 2000/08/01



Site #609, Upstream photo of riffle pool habitat Roll #4, Frame #24, Date: 2000/08/01



Site #609, Upslope photo of a 600 m landslide Roll #4, Frame #23, Date: 2000/08/01

Reach # ILP Map #

ILP#

			\$	TREAMES	FERENCI	N G			
Gazetted Na	me: QUILL CRE	EK			Loca	al Name: Quill Cr	eek		
Watershed C	ode: 400-313700	-00000-00000-00	00-0000-000-000	-000-000-000-00	0	ILP	Map #:	IL	P#:
				RE	ACH				
Reaci	n#: 4.0	IJ,	TM(Zone/East/No	orth): 9.533048.6	090230	Sample Type:	R		
Length (k		Gradient (%		US Elev (m):		Order:		Magnitude: 7	78
Confineme		Coupling	-	Open water:		BGC Zone:			
islan	ds: NV	Bars: N	SIDE DI	AG MID	SPAN BR	Riparian Veg.:	M	Landuse: N	0
				S	T/E				
Site #:			ne/East/North)	Date: 20		Agency: C172		Crew: EM/JD	
Site Lg (m):	300 [9 53390	1 6089701			Ref. Name:	***************************************		
	_				NNEL		-		
No Vis.Ch.:	intermittent:		Channel Width		lin Max #	5	Gadient %:	Avg % Min % N 4.75 4	
Dw: L	Tribs.:	□	Wetted Width				Pool Depth (m):		5 4
		1	Wb Depth		.4 2.7 3		ooi beptii (iii).[0.07 0.40 0	7.000
Stone 1 d	M H	Temp (C): 7		pH: 7.2		Cond.: 60	T 1		
Stage. Ly	, M	remp (C). /			OLOGY	Cond., 60	Turk	o.:	ı □ r ▲ c
Bed Material:				************	&*#**AEB###				
	Deminort D	C	.h.d O		D-		NDE DIAG		
Ded Waterian	Dominant: B		ubdom: C		Ва	rs: N V	SIDE DIAG	MID S	PAN BR
Ded Waterial.	Dominant: B D95: 106.0 Pattern: IR	10 0	ubdom: C D (cm): 60.00 slands: N			rs: N 📝 S O1 B1 B2	SIDE DIAG	MID SI	PAN BR
Bed Waterian	D95: 106.0	1 00	D (cm): 60.00	nie					PAN BR
Ded Waterial.	D95: 106.0 Pattern: IR	1 00	D (cm): 60.00 slands: N		TURBANCE	O1 B1 B2	B3 D1	D2 D3	
Ded Waterial.	D95: 106.0 Pattern: IR Coupling: CO	1 00	D (cm): 60.00 slands: N		TURBANCE				
Bed Waterial.	D95: 106.0 Pattern: IR Coupling: CO	1 00	D (cm): 60.00 slands: N	IN	TURBANCE DICATORS	O1 B1 B2	B3 D1	D2 D3	
Total	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	O (cm): 60.00 slands: N ement: CO	IN	TURBANCE	O1 B1 B2 C1 C2 C3	B3 D1 C4 C5	D2 D3	S4 S5
	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	O (cm): 60.00 slands: N ement: CO	IN CO	TURBANCE DICATORS	O1 B1 B2 C1 C2 C3 P OV	B3 D1	D2 D3	
	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	O (cm): 60.00 slands: N ement: CO	LWD B	TURBANCE DICATORS	O1 B1 B2 C1 C2 C3 P OV	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	O (cm): 60.00 slands: N ement: CO	LWD B	TURBANCE DICATORS	O1 B1 B2 C1 C2 C3 P OV	B3 D1 C4 C5	D2 D3 S1 S2 S3	S4 S5
Total	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	O (cm): 60.00 slands: N ement: CO	LWD B S D P STREAM VEG:	TURBANCE DICATORS VER U D T S	O1 B1 B2 C1 C2 C3 P OV S T	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	FSZ:
Total	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	O (cm): 60.00 slands: N ement: CO	LWD B S D P STREAM VEG:	TURBANCE DICATORS VER U D T S N V A	O1 B1 B2 C1 C2 C3 P OV B T M V ST	B3 D1 C4 C5	D2 D3 S1 S2 S3 CROWN	FSZ:
Total LWD: RB SHP	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	C) (cm): 60.00 slands: N ement: CO //pe: SWD unt: T S/O:	LWD B S D ETREAM VEG: B R B R	TURBANCE DICATORS FR. U D T S N A RIP: C	O1 B1 B2 C1 C2 C3 P OV B T M V ST	B3 D1	D2 D3 S1 S2 S3 CROWN	FSZ:
Total LWD: RB SHP LB SHP	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	C (cm): 60.00 slands: N ement: CO //pe: SWD unt: T S/O: C G G C	LWD B S D STREAM VEG: B R	TURBANCE DICATORS VER U D T S N A RIP: C	O1 B1 B2 C1 C2 C3 P OV S T	B3 D1 C4 C5 IV N G: MF G: PS	D2 D3 S1 S2 S3 CROWN 1	FSZ:
Total LWD: RB SHP	D95: 106.0 Pattern: IR Coupling: CO Morph: RP	Confin	C) (cm): 60.00 slands: N ement: CO //pe: SWD unt: T S/O:	LWD B S D ETREAM VEG: B R B R	TURBANCE DICATORS FR. U D T S N A RIP: C	O1 B1 B2 C1 C2 C3 P OV B T M V ST	B3 D1	D2 D3 S1 S2 S3 CROWN	FSZ:

ILP#

Site

Field UTM(Zone/East/North/Method) GIS UTM(Zone/East/North) Site Lg: 300 Method: HC Access: H 9 533901 6089701 Ref. Name: Agency: C172 Crew: EM/JD Fish Crd?:				P.F. (0.8)	ECT			
Caretted Name: Cull_L CREEK	Stream Name (g	az.): SKEENA F	RIVER		-000-000-000	Project Code	:	3476
Materiande Code: 400-313700-00000-0000-0000-0000-000-000-000-00				WATER	SHED			
LP Maps : LP Mr: NID Map 8: 1031/08 NID 8: 6010 Reach #: 4.0 Site x: 610	Gazetted Name: QUILL CRI	EEK		Lo	cal Name: Quill	Creek		
Field UTM/Zone/East/North/Method: Sist Lg: 300			000-0000-000-000	0-000-000-000				
Date: 2000/08/02 Time: 08:19 Agency: C172 Crew: EMJD Fish Crd?:	ILP Map#:	LP #:	NID Map #: 1031.09	8 NI	D#: 60010	Reach #:	4.0	Site #: 610
Date: 2000/08/02 Time: 08:19 Agency: C172 Crew: EMJD Fish Crd?:	Field UTM(Zone/East/No	orth/Method)	GIS UTM(Zone/	East/North)	Site Lg: 300	N	fethod: HC	Access: H
Mid width	1			Ref. Name:				
Mid width Date: 2000/08/02 Time	e: 08:19	Agency: C172	Crew: EM/J	ID	Fish Crd?:	✓	Incomplete:	
Channel Width (m): GE				CHAN	SEL			
Total: A Total: A	Channel Width (m): GE Wetted Width (m): T	45.00 35.00 14.60 15.10 0.50 0.65	40.00 50.00 55.0 16.80 14.30 12.1	0 40.00		44.17 14.13 0.57	Method II: 4.0 Method II: 6.0	5.0 AL 4.75 4.0 AL
Type: SWD	Wb Depth: 2.6	2.4 2.7	Avg: 2.57	Method: MS	Stage: L	✓ M H	Dw:	Tribs.:
Amount: T S D T S T N 1 1-20% Loc: P/S/C	COVER	Total: A						
LWD: F	Amount: T		T S		_			
LB SHP: S	Loc: P/S/O:				INSTREAM	VEG: N 🗸 A	MUV	
Texture:		DIST: E						
RIP: C STG: MF WATER EMS:								
STG: PS STG: MF	Texture:	G N C N	BRA		Texture	: F G	C M B	R A
EMS:								
EMS:				WATI	- R			
Temp: 7	EMS:							
Flood Signs: LG, FLOODPLAIN, Method: GE MORPHOLOGY	Temp: 7		Method: T3				Method: S	34
Flood Signs: LG, FLOODPLAIN, Method: GE MORPHOLOGY	pH: 7.2		Method: P2	Tur	rb.: TT	M F L Wa	Method: 0	3F
Bed Material: Dominant: B Subdom: C D95: 106.0 D (cm): 60.00 Morph: RP	Flood Signs: LG. FLOO	DDPLAIN,	Method: GE					-
D95: 106.0 D (cm): 60.00 Morph: RP Pattern: IR Islands: N Coupling: CO Confinement: CO FSZ Name Comments OverWinter Habitat Spawning Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments PHOTOS Photo Foc Lg Dir Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments PHOTOS Photo Foc Lg Dir Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments PHOTOS				MERRHO	E(8)(G)Y			
Pattern: IR Islands: N Coupling: CO Confinement: CO FSZ Name OverWinter Habitat Spawning Habitat Poor spawning habitat-Good BT/DV habitat. Abundant cover Photo Foc Lg Dir Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Photo Foc Lg Dir Comments Comments Comments Comments Photo Foc Lg Dir Comments Comments Comments Comments Comments Comments Comments Comments Photo Foc Lg Dir Comments Comments Comments Photo Foc Lg Dir Comments Comments Comments Comments Comments Photo Foc Lg Dir Comments Comments Comments Comments Comments Photo Foc Lg Dir Comments Comments Comments Comments Comments Comments Comments Comments Comments Comments Photo Foc Lg Dir Comments Comments	Red Meterial: Do	minent: B	Subdom: C		O1	B1 B2 B3	D1 D2 I	D3
Pattern: IR Islands: N Coupling: CO Confinement: CO FSZ Bars: N SIDE DIAG MID SPAN BR HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat present Spawning Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS								
Islands: N Coupling: CO Confinement: CO FSZ Bars: N SIDE DIAG MID SPAN BR HABITAT QUALITY Name		- (0,			ATOR	02 02 04	CE 54	02 02 04 05
Coupling: CO Confinement: CO FSZ Bars: N SIDE DIAG MID SPAN BR HABITAT QUALITY Name Comments OverWinter Habitat Spawning Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section Downstream photo of rapids above the canyon COMMENTS					CI	C2 C3 C4	C5 51 .	32 33 34 33
Confinement: CO FSZ Bars: N ✓ SIDE DIAG MID SPAN BR HABITAT QUALITY Name Comments OverWinter Habitat Overwintering habitat present Spawning Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS								
Name Comments OverWinter Habitat Overwintering habitat present Spawning Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS					_			
Name OverWinter Habitat Overwintering habitat present Spawning Habitat Rearing Habitat Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS	FSZ					SIDE DIAC	MID _	SPAN BR
OverWinter Habitat Spawning Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS			1	HABITAT G	UALITY			
Spawning Habitat Rearing Habitat Poor spawning habitat-large substrates, high water velocity, and a limited amount of gravels Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS					Comme	nts		
Rearing Habitat Moderate rearing habitat-Good BT/DV habitat. Abundant cover PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS				-t bi-bt	11611118			
PHOTOS Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS						eu amount of gravels		
Photo Foc Lg Dir Comments R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS	resumg Habitat	induciate 160	g nashar-3000 B1/					
R: 5 F: 1 STD U Upstream photo of a crew member shocking below a short rapid section R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS	Photo	Foola	Dir		_	6		
R: 5 F: 2 STD D Downstream photo of rapids above the canyon COMMENTS				Unstream photo of	a crew member		rt ranid section	
COMMENTS							apia soutoff	
Section Comments						,		
	Section				Commer	nts		

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Reach # ILF

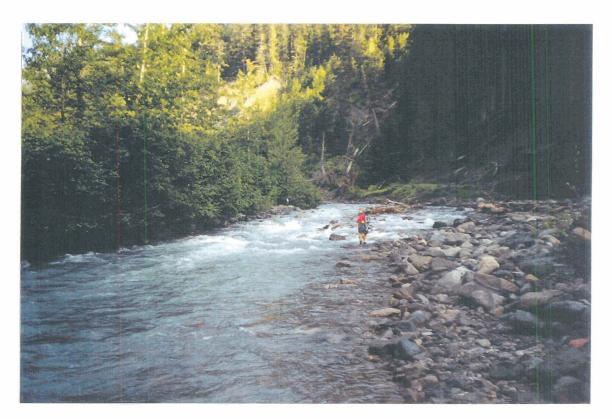
ILP Map# ILP#

Watershed Code:

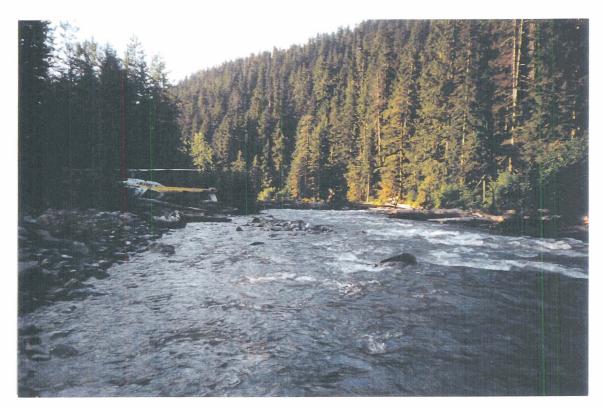
4.0

Gaze	etted N	ame:	QUILI	CREEK								Loca	I: Q	uill Creek				
Pr	oject (Code:	400-0	00000-00	0000-0000	0-000	0-0000-000-0	000-000	0-000	-000-	0							
	WS	ode:	400-3	13700-00	0000-0000	0-000	0-0000-000-0	000-000	0-000	-000-	000							
Wa	aterboo	y ID:						ILP I	Map #	# :				ILP#:		Re	ach #: 4	-
	Proje	ct ID:	3476								Lal	ce/Stre	eam:	S		Lake From	Date:	
Fis	sh Peri	nit #:	253	150K	Dat	e: 20	000/08/02	To	o: 20	000/08	3/02	Age	ncy:	C172	Cre	w: EM/JD	Resam	ple:
								SITE	1	ME	THO)						
Site#	NID	Мар	NID	# U	TM:Zone/	East/l	North/Mthd	MTI	D/NO	Te	mp C	ond	Turk	oid		Con	ment	
610	1031	_	6001	0				EF	1		7	60	С					
							Α.	GE.	AR	SE	TTIN	GS						
Site#	MTD	/NO	H/P	Date I	n Tim	e In	Date Out	Tim	e Out					(Comn	nent		
610	EF	1	1	2000/08	/02 08	:15	2000/08/02	08	3:45									
					С	E	LECTRO	FIS	HE	100	PEG	HF I		TIONS				
Site#	N	TD/N	0	H/P	Enc		Sec	Lnth		W	dth	Volt	age	Frequen	су	Pulse	Make	Mod
610	EF		1	1	0		284	300.0		1	4.0	50	00	60		6	SMITH ROOT	12B
								151	18		MAR.							
Site#	IV	TD/N	0	H/P	Species	S	tage A	ge	Tota	al#	Lgth (Min/M	ax)	FishAct		C	omment	
610	EF		1	1	NFC	T				0								

February 12, 2001 Page 43 of 96



Site #610, Upstream photo of a crew member shocking below a short rapid section Roll #5, Frame #1, Date: 2000/08/02



Site #610, Downstream photo of rapids above the canyon Roll #5, Frame #2, Date: 2000/08/02

Reach # IL

ILP Map #

ILP#

					{	TRE	AM RE	FERE	VCI	N G					
Gazetted Na	me: QUILL	CRE	EK						Loca	I Name: Quill C	reek				
Watershed C	ode: 400-31	13700	-00000	-00000-00	00-0000-000-00	0-000-00	00-000-000 ILP Map #:					•	ILP#:		
							RE	ACH							
Reac	1#:	2.0	000000000	וט	M(Zone/East/l	North): 9.	536895.6	087839	00000000	Sample Type	: В				
Length (km): 1.73												Magnitude: 9	98		
Confinement: CO Coupling: CO Open water: A BGC Zone: CWH															
islands: NV Bars: N SIDE DIAG MID SPAN BR Riparian Veg.: M Landuse: NO												10			
							000000000000000000000000000000000000000	TE							
Site #: Site Lg (m):			G	IS UTM(Zo 53724	ne/East/North) 2: 608756		Date: 200	00/08/02		Agency: C172 Ref. Name:	2		Crew: EM/J!		
Site Eg (III).	230	L		: 33724	2: 000730			NNEL		ter, Marire.					
No Vis.Ch.:	Intermitt	ent:					000000000000000000000000000000000000000	in Max	T #			Γ	Avg % Min % N	fax % #	
	_			Γ	Channel Widt			0.9 31.20	_		G	adient %:	6.00 5	7 4	
Dw:		bs.:		—— <u> </u>	Wetted Widt	th (m): 1	6.98 14	1.60 19.20	_	5	Pool D	epth (m):		1.100 6	
					Wb Dept	th (m): 2	2.60 2	2.4 2.8	3	3					
Stage: L	м_ н		Ter	mp (C): 7		р	H: 7.2			Cond.: 60		Turl	o.: 🗌 T 📗 N	/ _ L ✓ C	
MORPHOLOGY															
Bed Material:	Dominant:	В		Sı	ıbdom: C				Bar	rs: N	SIDE	DIAG	✓ MID S	PAN BR	
		140.0	0		O (cm): 80.00					O1 B1 B2	2 B3	D1	D2 D3		
	Pattern: Coupling:				slands: N ement: CO										
	Morph:			Commi	ement. CO			TURBANCE DICATORS		C1 C2 C3	3 C4	C5	S1 S2 S3	S S4 S5	
									П				51 52 53	34 33	
							(0(0)	Va≡R					0 0 1	-1-0-1-0-1	
Total	: A		Γ	Tv	pe: SWD	LWD	В	U	D	P OV	IV	\neg		FSZ:	
			İ	Amo		S	D	N	S	т .	N	\neg			
*				Loc: P/S	5/0:	V	V		V					N CLOSURE	
LWD	:F			DIS	T: E II	NSTREAM	VI VEG:	N 🗸 A		MUV]	_	1	1-20%	
RB SHP	: V	1	Textur		_ G √ C		R	A I	RIP: C	s s	TG: MF				
LB SHP	: V		Textur	e: F	☐ G ✓ C	В	√ R	A I	RIP: C	s s	TG: MF				
							FEAT	URES							
NID Map	NID Typ	e	Hgt	Method	Lg	Method	F	Photo		AirPhoto		UTM	(Zone/East/Nort	h/Method)	
	8004 F		8.0	AE	2	AE	R:	F:	L:	#:		9 53	7861 608757	4 GIS	
Comments:	ralls are a b	parrier	r to ups	stream fish	migration. Heli	survey.									
							Fil	SH							
Site Number	Captur			nber of vents	Total Length (m)		otal ime	Voltag	е	Species		Total Fish	Minimum	Maximum	
611	EF	_	-	1	250		sec	600		NFC	+	0	Length (mm)	Length (mm)	

ILP#

Site

Watershed Code: 400-313700-00000-00000-0000-0000-000-000-0000-000 2.0 611

			PROJ	ECT			
Project Nam Stream Name (gaz. Project Watershed Cod	.): SKEENA R		•	0-000-000-000	Project Code	2:	3476
				F 8 2 8 2 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5			
					0 1		
Gazetted Name: QUILL CREE		>>> >>>>		ocal Name: Quil	Creek		
Watershed Code: 400-313700-0				ID # 60044	Danah #	2.0	Cit - 4: C11
ILP Map#: ILP	· #:	NID Map #: 1031.098		ID#: 60011	Reach #:	2.0	Site #: 611
Field UTM(Zone/East/North	h/Method)	GIS UTM(Zone/E 9 537242	6087565	Site Lg: 250 Ref. Name:	ľ	Method: HC	Access: H
Date: 2000/08/02 Time:	09:00	Agency: C172	Crew: EM	JD	Fish Crd?		Incomplete:
			CHAN	NEL			
Mtd	width width	width width width	h width widtl	width width	width Avg	Ga	dient % Mtd Avg
Channel Width (m): T 2	8.60 25.40	31.20 23.60 21.40	0 20.90		25.18	Method I: 6.0	9
Wetted Width (m): T	17.50 16.90	14.60 19.20 18.30	0 15.40		16.98	Method II: 6.0	7.0 AL
Pool Depth (m): MS	1.10 0.82	0.61 0.56 0.93	0.87		0.82		
							Intermittent:
Wb Depth: 2.8	2.4 2.6	Avg: 2.60	Method: GE	Stage: L	✓ M H	Dw:	Tribs.:
COVER	Total: A						
Type: SWD LW	D B	U DP	OV IV	CROWN C	LOSURE		
Amount: T S	D	N S	TN	1	1-20%		
Loc: P/S/O:				INSTREAM	IVEG: N A	□ м □ v	
					11 22 11		
LWD: F	DIST: E						
LB SHP: ∨				RB SHF	P: V		
Texture: F	3 🕢 C 🗌	B 📝 R 🗌 A		Texture	:	Z C Z B	RMA
RIP: C				RIF): C		
STG: MF					: MF		
			WAT	ER			
EMS:			Re	q #:			
Temp: 7		Method: T3	Co	nd.: 60		Method:	S4
pH: 7.2		Method: P2	Tu	ırb.: 🗍 T 🗆	M L Z C	Method:	GE
Flood Signs: RAFTED DE	BRIS	Method: GE				***************************************	-
			MORPHO	LOGY			
Bed Material: Domin	nant: B	Subdom: C		01	B1 B2 B3	D1 D2	D3
	cm): 80.00	Morph: CP					
- A 44 - A 45 -	0111). 00.00	Morph. or		IRBANCE LATORS C1			
Pattern: IR			IIADI	C1	C2 C3 C4	C5 S1	S2 S3 S4 S5
Islands: N							
Coupling: CO							
Confinement: CO FSZ				Bars: N	SIDE DIA	G MID	SPAN BR
F3Z							, o. /
			DE ATU	RES			
NID Map NID Type	Hgt Meth	od Lg Met	hod Ph	oto	AirPhoto	UTM (Zone/	East/North/Method)
103I.098 88004 F	8.0 AE	2 AE		F: L:		537861	6087574 GIS
Comments: Falls are a barrie				1=-1			
		2	ABITAT (NE FARE BOX			
Nama	T				-4-		
Name OverWinter Habitat	Overvintori	habitat proces		Comme	nts		
Spawning Habitat	_	nabitat present g habitat-substrates a	re large and the	tream is high end	ray		
Rearing Habitat		igh quality rearing hab				itat along the ma	argins of thalweg
9.1		5 1, 1	91101		r reserve promy or man	and the	- gs of fileding
Photo E-	e l e	Die					
Photo Fo	c Lg	Dir			Comments		1

Reach # ILP Map # ILP # Site

611

Watershed Code:	400-313700-00000-00000-0000-0000-000-000-000-0	2.0
-----------------	--	-----

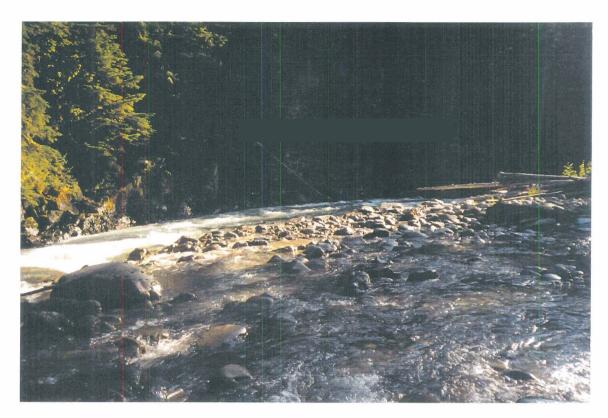
		Ph	oto		Comments									
R	::	5	F:	3	ST	TD U Upstream photo of a boulder filled rapid								
R	8	5	F:	4	ST	D Downstream photo of LWD on a mid channel bar								
	COMMENTS													
			Sec	tion				Comments						
			SITE	CARD		Fish form 3	0552							
	CHANNEL Falls located ~800 m downstream prevent upstream fish migration to this reach. Falls were surveyed out of the helicopter due to													
	CHANNEL S5 Stream													

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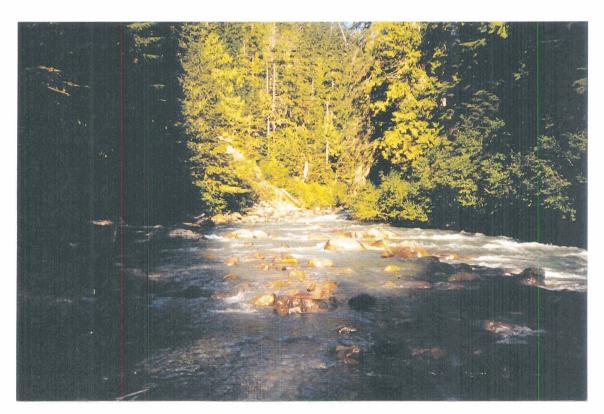
Reach # ILP Map # ILP #

						W A	111-11-1	(O,D	Υ							
Gaz	etted Name	QUIL	L CREEK						Loca	ıl: Qı	uill Creek					
P	roject Code:	400-0	400-00000-00000-0000-0000-0000-000-000-													
WS Code: 400-313700-00000-0000-0000-0000-000-000-000-00																
Wa	aterbody ID:		ILP Map #: ILP #: Reach #: 2 -													
	Project ID:															
Fi	sh Permit #:	25	350K	Date:	Тс	o: 2000/0	08/02	Agency: C172			Crew: EM/JD	Resan	nple:			
						SHIFE	ME	TH	0 D							
Site#	NID Map	NID	# UTI	1:Zone/Eas	t/North/Mthd	MT	D/NO T	emp	Cond	Turb	id	Co	mment			
611	1031.098	600	11			EF	1	7	60	С						
					A.	GE,	AR SE	ŦΤ	NGS							
Site#	MTD/NO	H/P	Date In	Time In	Date Out	Time	e Out				C	omment				
611	EF 1	1	2000/08/0	2 09:00	2000/08/0	2 09	:40									
				6	ELEGIR	0 5 1 5	BER	SPE	(0) F	• // 1	IONS					
Site#	MTD/N	10	H/P	Encl	Sec	Lnth	N	/dth	Volt	age	Frequenc	y Puise	Make	Model		
611	EF	1	1	0	478	250.0		15.0	600		60	6	SMITH ROOT	12B		
						FISH	SUM	M A	γY							
Site#	MTD/N	0	H/P S	Species	Stage /	\ge	Total #	Lgt	th (Min/Max) FishAc		FishAct	Comment				
611	EF	1	1	NFC			0									

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Site #611, Downstream photo of LWD on a mid channel bar Roll #5, Frame #4, Date: 2000/08/02



Site #611, Upstream photo of a boulder filled rapid Roll #5, Frame #3, Date: 2000/08/02

Gazetted Name: INSECT CREEK

Reach #:

Length (km): 3.15

Confinement: FC

Site #: 612

Dw:

Site Lg (m): 300

Islands: NV

No Vis.Ch.: Intermittent:

Stage: L ✓ M H

Bed Material: Dominant: C

Total: A

LWD: F

RB SHP: S

LB SHP: S

Tribs.:

D95: 80.00

Pattern: IR

Coupling: PC

Morph: RP

ILP Map # Reach #

7.0

ILP#

9 532927

Temp (C): 7

Subdom: B

Islands: N

Confinement: FC

Type:

Amount

Loc: P/S/O:

D (cm): 60.00

SWD

Texture: ☐ F ✓ G ✓ C ☐ B ☐ R ☐ A

Texture: F G G C B R A

SERVER AND COMPANY OF THE SERVICE OF THE COMPANY OF Local Name: Insect Creek ILP Map #: ILP#: REAGH UTM(Zone/East/North): 9.532820.6099575 Sample Type: R Gradient (%): 2.22 US Elev (m): 450 Order: 5 Magnitude: 196 Coupling: CO Open water: A BGC Zone: CWH Bars: N SIDE DIAG MID SPAN BR Landuse: NO Riparian Veg.: M SITE GIS UTM(Zone/East/North) Date: 2000/08/02 Agency: C172 Crew: EM/JD Ref. Name: CHANNEL Avg | Min | Max Avg % Min % Max % # # Channel Width (m): 40.83 30 50 Gadient %: 4.50 6 4 Wetted Width (m): 15.47 6 Pool Depth (m): 0.89 14.30 16.9 0.63 | 1.200 6 Wb Depth (m): 2.83 2.6 3 pH: 7.1 Cond : 60 Turb.: T M L V C

✓ SIDE

B3

C4

IV

N

STG: SHR

STG: MF

D1

C5

DIAG MID SPAN

52

\$5

FSZ:

CROWN CLOSURE 1-20%

S1

				FI	SH				
Site Number	Capture Method	Number of Events	Total Length (m)	Total Time	Voitage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
612	FF	3	300	1653 sec	500	DV	13	42	380

MOREHOLDS

DISTURBANCE

INDICATORS

U

0 0 V E R

В

D

LWD

INSTREAM VEG:

Bars:

01

C1

DP

S

RIP: D

RIP: C

OV

Т

ILP#

Site 612

		PROJECT									
Stream Name (gaz.):	Mill Area 1:20K Stream Inventor SKEENA RIVER 400-000000-00000-00000-0000	-0000-000-000-000-000-000	Project Code:	3476							
		WATERSHED									
Gazetted Name: INSECT CREEK		Local Name: Ins	ect Creek								
Watershed Code: 400-324400-000	00-0000-0000-0000-000-00	00-000-000									
ILP Map#: ILP #:	NID Map #: 103P.0	008 NID #: 60012	Reach #: 7.0	Site #: 612							
Field UTM(Zone/East/North/N	Method) GIS UTM(Zone	/East/North) Site Lg: 30	00 Method: He	C Access: H							
,	9 532927	6099518 Ref. Name:									
Ti 40	Agency: C172	Crew: EMJD	Fish Crd?:	Incomplete:							
Date: 2000/08/02 Time: 10:15											
		CHANNEL									
Mtd wid		tth width width width width		Gadient % Mtd Avg							
Channel Width (m): GE 45.0			40.83 Method I 15.47 Method II								
Wetted Width (m): T 16.			15.47 Method II	. 5.0 4.0 AL							
Pool Depth (m): MS 1.1	10 1.20 0.80 0.91 0.6	33 0.71		n.: Intermittent:							
Wb Depth: 2.6 2.	9 3.0 Avg: 2.83	Method: GE Stage:	L♥ M H Dv	w: Tribs.:							
COVER	Total: A										
Type: SWD LWD	B U DP	OV IV CROWN	CLOSURE								
Amount: T T	D N S	T N 1	1-20%								
Loc: P/\$/O:		INSTREA	MVEG: N A M	VII							
			Calling Sumper Call								
LWD: F	DIST: C										
LB SHP: S		RB SI	IP: S								
Texture: F G	C B R A	Textu	re: F G G C	B R A							
RIP: C		R	HP: D								
STG: MF		ST	G: SHR								
		WATER									
EMS:		Reg#:									
Temp: 7	Method: T3	Cond.: 60	Meti	hod: S4							
pH: 7.1	Method: P2	_		ned: CE							
Flood Signs: RAFTED LWD	ON Method: GE	Turb.:	■ M ■ L ✓ C Meti	hod: GE							
		MORPHOLOGY									
			01 B1 B2 B3 D1 [D2 D3							
Bed Material: Dominan											
D95: 80.0 D (cm	i): 60.00 Morph: RP	DISTURBANCE									
Pattern: IR		INDICATORS	C1 C2 C3 C4 C5 S	S1 S2 S3 S4 S5							
Islands: N											
Coupling: PC											
Confinement: FC		Bars:	N SIDE DIAG MID	SPAN BR							
FSZ											
		HABITAT QUALITY									
Name		Comr	nents								
OverWinter Habitat C	Overwintering habitat present										
	Poor spawning habitat-disturbed of										
Rearing Habitat H	ligh quality rearing habitat for DV		water, and good habitat complexit	у							
		PHOTOS									
Photo Foc L	_g Dir		Comments								
R: 5 F: 5 STD		Downstream photo of riffle pool h	abitat								
R: 5 F: 6 STD	U	Upstream photo of a section of ra	pids								
		COMMENTS									
Section		Comm	nents								

ILP Map #

ILP#

Site

Reach #

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Reach #

ILP Map #

ILP#

Watershed Code:

WATERBODY Gazetted Name: INSECT CREEK Local: Insect Creek Waterbody ID: ILP#: Reach #: 7 -Lake From Date: Project ID: 3476 Lake/Stream: S Fish Permit #: 25350K Date: 2000/08/02 To: 2000/08/02 Agency: C172 Crew: EM/JD Resample:
 UTM:Zone/East/North/Mthd
 MTD/NO
 Temp
 Cond
 Turbid

 EF
 1
 7
 60
 C
 NID Map NID# Comment 103P.008 60012 612 A. GEAR SETTINGS
 Time In
 Date Out
 Time Out

 10:15
 2000/08/02
 11:00
 MTD/NO H/P Date In Comment Site# 612 EF 1 1 2000/08/02 Wdth Site# MTD/NO H/P Encl Sec Lnth Voltage Frequency Pulse Make Model 612 1 0 551 300.0 15.0 500 60 6 SMITH 12B

	FISH SUMMARY																
Site#		MTD/N	10	H/P	Specie	s Stag	ge	Age	To	otal#	Lgth (Min/Max) FishAct		1	Comment			
Site#	MT	O/NO	H/P	Species	Length	Weight	Sex	Mat		Age		Vch#	Vch# Genetic Str/Smpl#		Roll#	Frame#	Comment
									Str/	Smpl#	Age						
612	EF	1	1	DV	380		U	U									
612	EF	1	1	DV	240		U	U									
612	EF	1	1	DV	116		U	U									
612	EF	1	1	DV	80		U	U									
612	EF	1	1	DV	96		U	U									
612	EF	1	1	DV	126		U	U							5	7	Photo taken
612	EF	1	1	DV	120		U	U									
612	EF	1	1	DV	60		U	U									
612	EF	1	1	DV	51		U	U									
612	EF	1	1	DV	42		U	U									
612	EF	1	1	DV	46		U	U									
612	EF	1	1	DV	49		U	U									
612	EF	1	1	DV	56		U	U									

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Site #612, Downstream photo of riffle pool habitat Roll #5, Frame #5, Date: 2000/08/02



Site #612, Upstream photo of a section of rapids Roll #5, Frame #6, Date: 2000/08/02



Site #612, Photo of a dolly varden on electrofisher ring Roll #5, Frame #7, Date: 2000/08/02