SM06-24177

2006 Stream Assessment
for Select Areas and Road Crossings within Nadina Forest District

Prepared for:
Ministry of Forests
British Columbia Timber Sales Office
Babine Business Area
185 Yellowhead Highway
Burns Lake, BC
V0J 1E0

Prepared by:
Mac Jedrzejczyk R.P.Bio.
FINS Consulting Ltd.
4809 Hamer Ave.
Terrace, BC
V8G 2E5

ASSOCIATION OF PROFESSIONAL BIOLOGISTS OF B.C.
Mac
Jedrzejczyk
R.P. Bio
#1550
APB

Mac

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1. Introduction

On May 11, 2006, FINS Consulting Ltd. was retained by the Burns Lake BCTS Office in the Nadina Forest District to conduct operational level stream assessments for several areas of interest undergoing and/or proposed multi-phase layout in the Babine Business Area.

This report summarizes the results of the field survey, which was completed between June 7 and October 7, 2006. Drainages located within or adjacent to 34 selected areas and 21 proposed and existing road crossings were assessed for fish habitat and were subsequently assigned riparian classifications.

1.1 Location and Access

The project area is located approximately 300km west of Prince George. All streams are within the Cheslatta Lake (CHES), Francois Lake (FRAN), Babine Lake (BABL), Bulkley River (BULK) and Morice River (MORR) high level watershed group in the Nadina Forest District. The location map (Figure 1) on the following page provides the general location of the study area. The specific areas were reached by 4x4 vehicle and individual streams were accessed on foot.

2. Historical Information

An abundance of historic fish information was generally available for the entire project area. Numerous operational and reconnaissance fish and fish habitat inventories had been conducted in the past ten years by various consultants within Cheslatta Lake tributaries, Francois Lake tributaries, upper Endako River, upper Bulkley River and Babine Lake tributaries.

All historic information has been included in the mapping portion of this project.

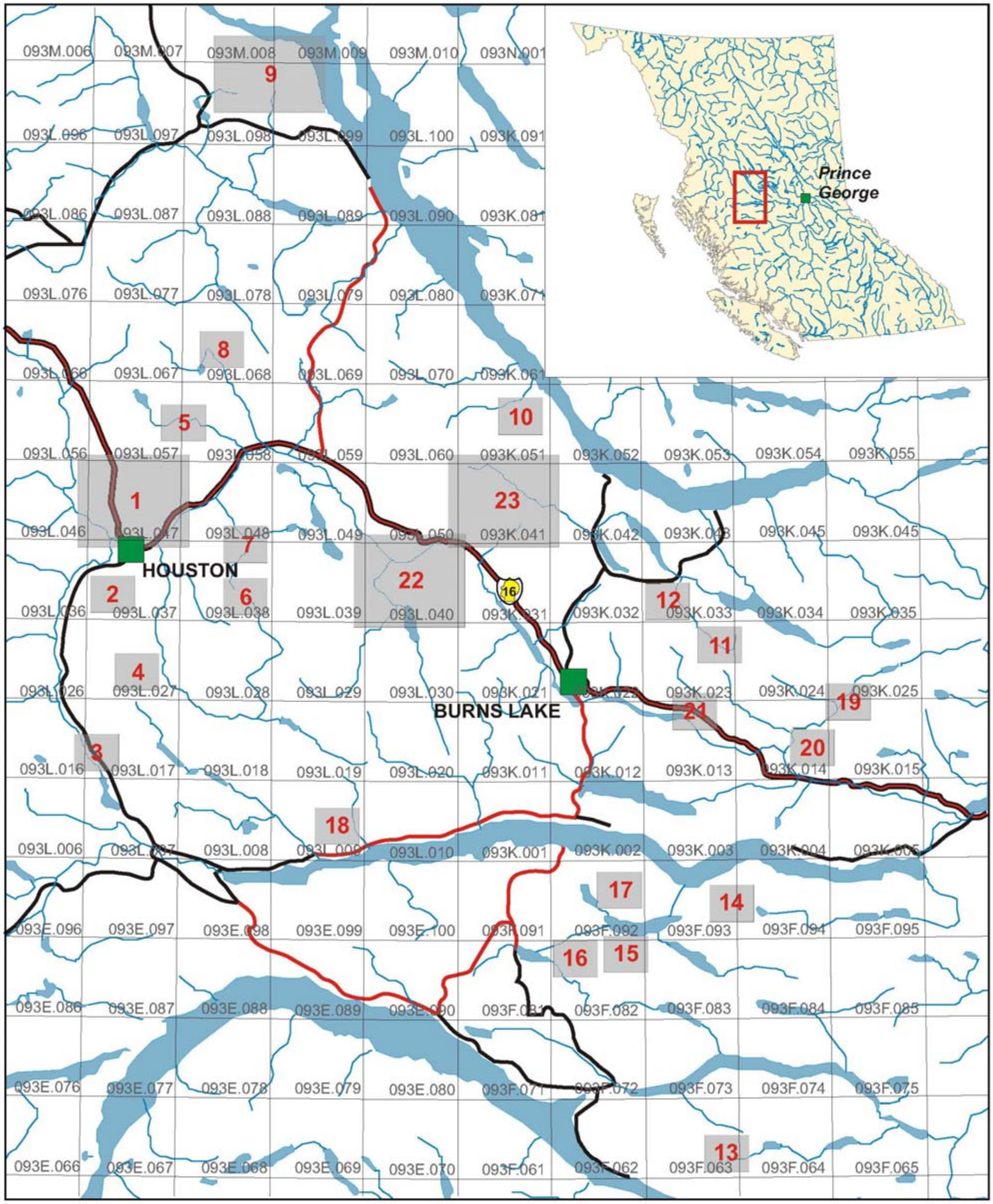

Figure 1: Location of Project Area.

3. Methods

Methodology used throughout this project was consistent with the standards and methods outlined in the following publications:

- Reconnaissance (1:20,000) Fish and Fish Habitat Inventory: Standards and Procedures. Version 2.0. (RIC, 2001)
- Fish-stream Identification Guidebook, Second Edition (FSID) (FPC, 1998)
- Riparian Management Area Guidebook (FPC, 1995)

Areas of interest requiring streams assessment were identified and named by BCTS personnel prior to the field trip and were marked on hard copy or digital maps.

On the request, cross drainages for the proposed roads withinin SFU Blocks (map 23) were identified and are also briefly described and included in that section of the report.

Streams were then sampled for fish using a Smith-Root Model 12B P.O.W. electrofisher. Fish-bearing status and corresponding riparian classification were determined based on the results of the sampling, habitat quality and historic information.

3.1 Air Photo Interpretation

Air photo interpretation was completed to:

- delineate stream reaches for all drainages where reaches were missing,
- identify relevant barriers to fish migration, which would be later verified in field,
- assess if potential overwintering habitat is present above these obstructions.

3.2 Field Data Collection

Field data were collected on Site Cards and Fish Collection Forms, which are the current accepted method of collecting data for fish sampling and stream classification. Supporting documentation regarding terminology and use of these forms is available in publications listed in the Bibliography section. Copies of all field cards are provided in Appendix I and are arranged by site number, with one page representing four pages of site and/or corresponding fish data form.

3.3 Fish Sampling

Electrofishing and visual observation were the methods used for fish sampling for this project.

3.4 Measurements

Stream channel and wetted widths were determined using a meter tape. A minimum of six channel width measurements were made along each site at a distance of approximately 15-20m apart. For proposed crossings additional channel measurements were taken on downstream and upstream site of the crossing. Residual pool and bankfull depth measurements were determined using a meter stick. Stream gradient was measured using Abney level along several sections of the site. Site lengths were determined by ground estimate, hip chain or by GPS unit. Stream water temperatures were measured using an alcohol thermometer while conductivity measurements were made using Oakton portable meter, which was calibrated using standardized solutions.

Measurements of falls were based on ground estimates or calculated using the following formula:

H=Ho * (gradient (%) to top of falls)/ (gradient (%) to bottom of falls) + Ho

H = Height of falls (in m)   Ho = Eye height of observer (in m)

The above formula is accurate provided the observer is at the same elevation as the base of the falls (i.e., standing at the edge of the plunge pool).

Cascade heights and lengths were determine using a hip chain and Abney level and then applying slope/distance tables to verify the vertical height of cascade.

3.5 Mapping

Mapping convention for this project follows the standards as recommended in the FSID Guidebook, Second Edition (FPC, 1998). Using GIS software 1:20,000 scale maps have been produced for this project, and are included in Appendix III at the end of this report.

Each map depicts the stream network; base coordinates from the UTM grid and mapping symbols, as recommended in the FSID Guidebook. The fish-bearing status of specific streams is represented on the maps using colour line work. Solid red lines indicate confirmed fish presence while dashed red lines indicate that fish presence is inferred, but has not been confirmed. Solid blue lines show confirmed fish absence and dashed blue lines indicate suspected fish absence in the system. Solid green lines indicate presence of non classified drainage reaches and dashed green lines depict the lack of any kind of drainage at the surveyed site and vicinity, and which were originally displayed on TRIM base layers. In addition examined and/or visited streams and wetlands have been labeled with designated riparian classification.

Coordinates of the site locations, riparian classification change points and the end of fish use locations (EFU's) were placed under the maps legend in a tabularized form.

Unmapped wetlands and streams, which were encountered during survey were also mapped, with the aid of air photos and GIS software.

3.6 Stream and Site Referencing

Site numbers for this project have been assigned in an ascending order based on the time of survey. Sites within proposed/currently developed areas have their relevant reach summary symbol (sampling results, gradient, channel width and riparian classification) on the map.
Road crossing sites have a modified reach summary symbol to include stream bankfull depth and habitat value rating in addition to sampling results, gradient, channel width and riparian classification.

Historic sites information are indicated by a red site symbol and information by whom and when the stream was visited in addition to reach summary symbol.

Drainages without a gazetted name were assigned unique Interim Location Points (ILP's) for each proposed development area to provide simplicity and ease of reference for other forest consultants working within the same area; otherwise gazetted or local names were used. Also, where available, watershed codes were attached to the relevant stream.

3.7 Photographs

Representative photographs of sites and any significant features are presented in AppendixII. Photos have been reduced in size so that multiple photos can be presented on one page. Each photo is labeled with the site number, and direction in which the photo was taken.

Some sites do not have any photographs as they would not have provided any useful information due to the lack of good visibility (dense vegetation) or because there was no drainage present at all.

3.8 Field Equipment

All sampling equipment specifications are listed below:

- 1 Smith-Root model 12B P.O.W. Backpack Electrofisher
- 1 Oakton TDSTestr3 conductivity meter (with 1413μS/cm solution)
- 1 Abney level, alcohol thermometer, Silva compass
- 1 Pentax Optio WP digital camera
- 1 Garmin GPS 12 unit
- assorted other equipment including meter tape, hip chain, magnifying lens, meter stick and dip net, boating safety equipment, and oil spill kit
- Quicksilver inflatable boat with 25 HP motor
- 1 personal First Aid kit, as per WCB requirements

4. Determining Fish-bearing Status

The following section summarizes the information collected and conclusions reached for each sample site within the general project area. This has been based both on interpretations and conclusions from the synthesis of data collected during previous inventories (Lakes/Nadina Forest District 1996 through 2006 Reconnaissance and Operational Inventories) and from new information collected as part of this project.

Determining whether or not any fish use occurs in a specific reach is a complex process, involving much more than applying fish sampling results on a site-specific basis. Specifically, in applying a non fish-bearing status to a reach when fish are not captured in a sampling event, a more systematic process is required in order to provide an adequate rationale to support a conclusion of fish absence. Biological evaluation is used which factors in such considerations as historical sampling information, known fish distributions and behavior, barriers, gradients, invertebrate presence, habitat quality, and presence/absence of headwater lakes.

As a general rule, two conditions must usually exist in order for fish to inhabit a specific stream reach; 1) presence of fish habitat and 2) accessibility to that habitat. There are exceptions to this, such as presence of resident or adfluvial populations above barriers which otherwise block access, but these situations are considered on an individual basis when appropriate sampling can be undertaken to accurately determine fish presence under these circumstances.

Determining presence of fish habitat requires biological judgment that is based on many tangible factors. A “snapshot” method is used to determine presence of fish habitat at the time of sampling, but this is not sufficient when lack of water limits available habitat. Under these circumstances, a temporal approach is required which factors in the potential for fish habitat presence during a different flow period. In this manner, different habitat requirements for suspected fish species are also considered, such as potential seasonal use for rearing (i.e., higher flow rearing or refuge habitat) or spawning (i.e. suitable gravels, gradient and potential flow). Again, biological judgment is required to recognize this potential habitat, bearing in mind how the different flow regimes may affect the availability of this habitat. Moreover, the presence of potential overwintering or perennial habitat upstream in the watershed (i.e. lakes, wetlands, pools >0.5m deep) is also taken into account and has influence on the fish-bearing status of a specific reach. Existence of habitat or potential habitat, if present, is noted and described in the comments on the site cards.

Once presence of fish habitat has been established, it must be determined whether fish are capable of accessing this habitat. The presence of obstructions to fish in the form of falls, cascades, impassable gradients and lack of connectivity within a watershed may limit fish distribution within a watershed and must be evaluated. When questionable obstructions or soft barriers (i.e., beaver dams, wetlands, and NVC reaches) are present, the process for determining the presence of fish habitat upstream must be undertaken and combined with adequate sampling in order to determine fish use.

The fish-bearing status of a specific reach is dependent on the presence of fish habitat, the accessibility to that habitat and is supported by the results of fish sampling. The above process for determining fish presence is an overview of the variables evaluated before fish-bearing status can be accurately ascertained. This entire process is always supplemented by existing fisheries information and interpretations from map and air photo analysis.

Once a non-fish bearing conclusion has been established for a sampled reach, all reaches located upstream from that location are considered to be non fish-bearing and no further sampling is required to confirm this conclusion. This is inherent in the process used to determine the non fish-bearing status. An overview of the process used in determining fish-bearing status is presented in a flowchart in Figure on the following page. Accordingly, only those reaches that were sampled and confirmed to be non fish-bearing are included in this section.

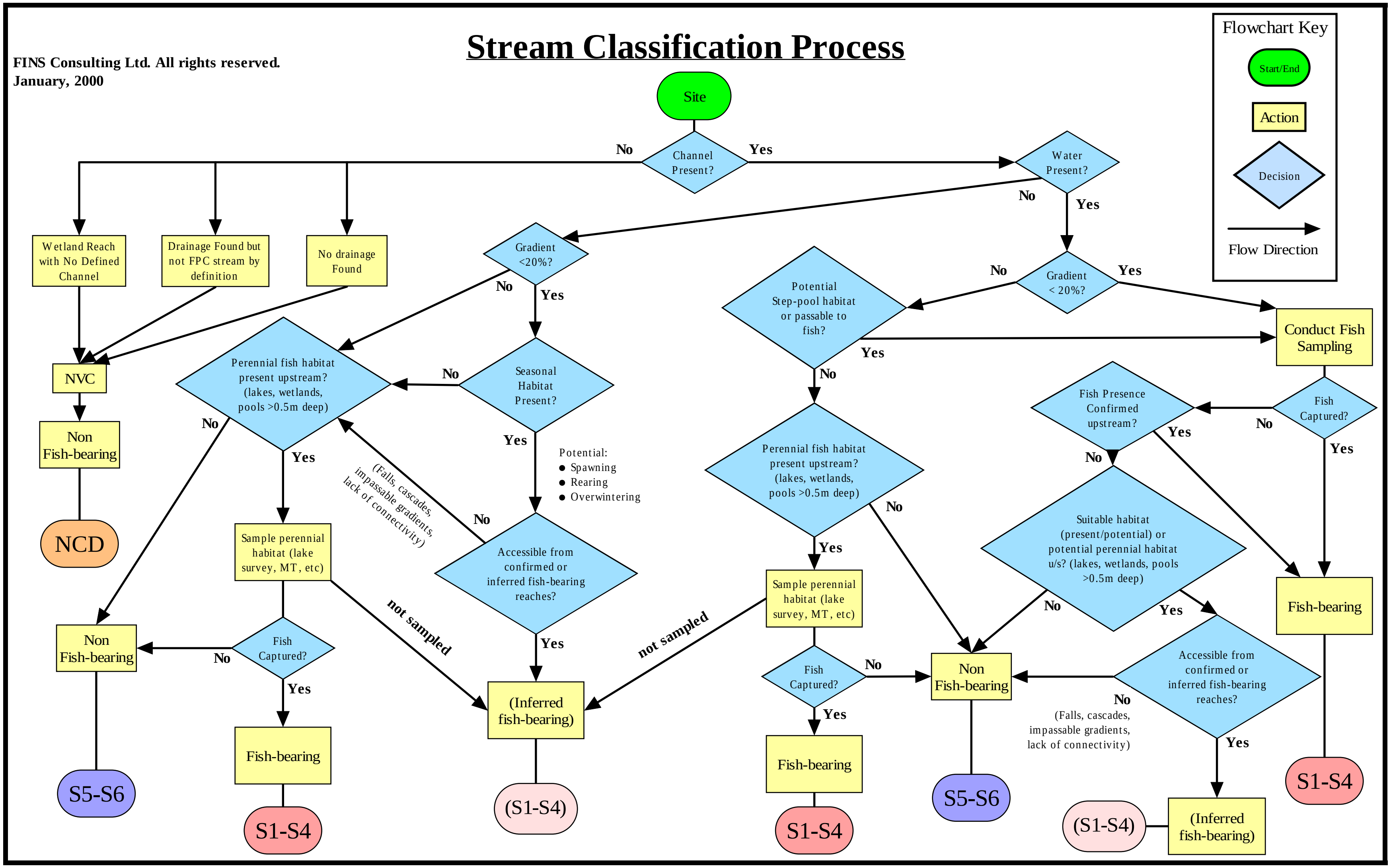

Figure 2: Flowchart of the stream classification process used in determining fish-bearing status

5. Results

The following sections summarize the fish-bearing status for all surveyed reaches within each geographic area. The first section summarizes all surveyed reaches; the second section presents information for all non fish-bearing reaches and the third section identifies reaches where follow-up sampling should be conducted. It includes relevant site-specific data, some historical information and comments that provide a rationale to support the classification.

Abbreviation used in all tables are located at the end of report.

5.1 Summary of all Surveyed Reaches

Table 1: Summary of data of all surveyed drainages in Project Area

Area or Crossing	Project Map	Stream ID	Reach #	Site #	Site UTM (Z.E.N.)	FPC	Habitat Value Rating	Grad (%)	Avg CW (m)	Wb (m)	Sampling Results	Follow-up Sampling	Comments
SFU III	Map 23	00100	1	1	10.307513.6036154	**NCD**	NA	8	*	*	NS	N	Not a FPC stream.
SFU III	Map 23	00003	1	2	10.307655.6036548	**NCD**	NA	11	*	*	NS	N	Not a FPC stream.
SFU VI	Map 23	00002	5	3	10.307722.6035602	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU I	Map 23	00012	2	4	10.310998.6036584	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU I	Map 23	00013	2	5	10.310994.6036468	**S6**	NA	2	2.2	0.42	NFC	N	Confirmed non fish-bearing. **Drainage pattern differs from that on TRIM coverage.**
SFU I	Map 23	00019	1	6	10.312170.6036799	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU I	Map 23	41024	1	7	10.312346.6037920	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU I	Map 23	00102	1	8	10.312692.6038078	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU I	Map 23	00014	1	9	10.312896.6037959	**NCD**	NA	4	*	*	NS	N	Not a FPC stream.
SFU II	Map 23	41018	1	10	10.313208.6039409	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU II	Map 23	41013	5	11	10.313175.6039435	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU II	Map 23	00015	1	12	10.312634.6038750	**NA**	NA	*	*	*	NS	N	No drainage.
SFU II	Map 23	00018	2	13	10.313167.6040132	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU IV	Map 23	00007	1	14	10.310225.6034768	**S6**	NA	11	0.7	0.18	NS	N	Confirmed non fish-bearing.
SFU IV	Map 23	00009	1	15	10.310844.6034524	**S6**	NA	2	0.9	0.2	NS	N	Confirmed non fish-bearing. **Stream becomes NCD at UTM 10.310971.6034552.**
SFU IV	Map 23	00008	1	16	10.310518.6034263	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU IV	Map 23	00101	1	17	10.311170.6034042	**S6**	NA	7	0.6	0.28	NS	N	Confirmed non fish-bearing.
SFU IV	Map 23	00010	1	18	10.311040.6033515	**NA**	NA	*	*	*	NS	N	No drainage.

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SFU IV	Map 23	180-374000-95200-01900-9560-3060	2.1	19	10.310443.6032405	**S3**	MG	6	2.1	0.5	NFC (RB)	N	Assumed RB use. Overall poor RB habitat. No spawning or overwintering, some seasonal rearing available in rare pools. Stream easily accessible to RB. Fish distribution blocked by 1m high falls without plunge pool preceeded by 50m flow under rock rubble. **S6 from falls at UTM 10.310576.6032478.**
SFU IV	Map 23	180-374000-95200-01900-9560-3060	3	20	10.310627.6032514	**S6**	NA	5	2.3	0.48	NFC	N	Confirmed non fish-bearing.
SFU IV	Map 23	00004	1	21	10.309840.6033575	**NCD**	NA	19	*	*	NS	N	Not a FPC stream.
SFU IV	Map 23	00005	1.1	22	10.310123.6034357	**S4**	MG	4	1.5	0.3	NFC (RB)	N	Assumed RB use. Not preferable RB habitat in lower 150m of reach, however, provides passage to some seasonal rearing and available and usable spawning habitat in upper section of reach. No overwintering habitat.
SFU IV	Map 23	00005	2	23	10.310303.6034288	**S6**	NA	1	1.1	0.3	NFC	N	Confirmed non fish-bearing.
SFU IV	Map 23	00006	1	24	10.310251.6034343	**S6**	NA	2	1.3	0.35	NS	N	Confirmed non fish-bearing.
SFU III	Map 23	00011	1	25	10.308051.6037106	**S3**	MG	11	1.7	0.47	RB	N	Confirmed fish-bearing. Very stable stream with good rearing habitat for RB. Spawning habitat fair d/t not frequent and small patches of gravel in pool crests. No overwintering habitat present - pools too shallow.
SFU VI	Map 23	00002	4	26	10.306997.6035369	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU III	Map 23	00020	1	27	10.307383.6036103	**S6**	NA	3	1.1	0.37	NFC	N	Confirmed non fish-bearing.
SFU I	Map 23	480-927700-85400	2	28	10.312388.6038093	**S5**	NA	0	3	*	LKC	N	Confirmed non fish-bearing.
SFU I	Map 23	480-927700-85400	2	29	10.314714.6038525	**S5**	NA	0	3.5	*	LKC	N	Confirmed non fish-bearing.
SFU II	Map 23	41013	3	30	10.314194.6039247	**S6**	NA	1	0.8	0.29	LKC	N	Confirmed non fish-bearing.
SFU II	Map 23	00016	1	31	10.313135.6039699	**S6**	NA	4	1	0.18	NS	N	Confirmed non fish-bearing.
SFU II	Map 23	00017	1	32	10.313100.6039710	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU II	Map 23	41032	4	33	10.313439.6040162	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.

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SFU VI	Map 23	00001	4	34	10.306466.6034059	**NCD**	NA	*	*	*	NS	N	Not a FPC stream. **Drainage pattern differs from that on TRIM coverage.**
SFU VI	Map 23	00103	1	35	10.306216.6034059	**NCD**	NA	*	*	*	NS	N	Not a FPC stream.
SFU VI	Map 23	41019	1	No site	10.314240.6038457	**NCD**	NA	*	*	*	NS	N	Not a FPC stream. **Historic Site.**
SFU VI	Map 23	41020	3	No site	10.313877.6038977	**NCD**	NA	*	*	*	NFC	N	Not a FPC stream. **Historic Site.**
SFU VI	Map 23	41023	2	No site	10.313179.6038343	**S6**	NA	2	0.8	0.17	NS	N	Confirmed non fish-bearing. **Historic Site.**
SFU VI	Map 23	480-927700-85400-48400	1	No site	10.313731.6038343	**S6**	NA	0	2.7	0.7	LKC	N	Confirmed non fish-bearing. **Historic Site.**
A80578	Map 9	480-595100	1	36	9.670983.6100328	**S3**	**CR/ MG**	3.5	2.15	0.33	CAS CO	N	Confirmed fish-bearing. **Critical habitat for CO within ~ 200m from mouth. CO in 0+ age group very abundant.**
A80578	Map 9	480-595100	2	37	9.670233.6099492	**S3**	**MG**	4.25	1.82	0.47	NFC (DV)	N	Assumed DV use. Moderate rearing habitat available, however availabilty affected by low flows. Poor spawning habitat - small gravel patches mixed with 80% of fines - habitat may be utilized by DV later in the fall when water levels will rise. No overwintering habitat observed. Walked stream from mouth - no fish distribution limits were determined. Stream likely contain low density of DV population.
A80580	Map 9	480-568000-14200	2	38	9.664817.6100220	**NCD**	**NA**	*	*	*	NS	N	Not a FPC stream.
A80528	Map 9	480-568000-60200	2	39	9.663844.6097560	**S6**	**NA**	26.3	1.87	0.66	NS	N	Confirmed non fish-bearing.
A80528	Map 9	480-568000	2	40	9.663622.6097268	**S6**	**NA**	6	1.55	0.34	NFC	N	Confirmed non fish-bearing.
A80577	Map 9	11067	1	41	9.664153.6101782	**S5/S6**	**NA**	16	3.38	0.71	NS	N	Confirmed non fish-bearing. **Stream changes classification from S5 to S6 at UTM 9.663940.6101495.**
A80577	Map 9	11068	1	42	9.663120.6100065	**S6**	**NA**	2.7	1.8	0.37	NS	N	Confirmed non fish-bearing.
A80582	Map 9	11068	1	43	9.663771.6101208	**S6**	**NA**	3.5	1.78	*	NS	N	Confirmed non fish-bearing.

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A80583	Map 9	480-558800	1	44	9.661496.6101530	**S3**	**IM**	1.5	2.52	0.27	RB	N	Confirmed fish-bearing. Stream with perennial habitat, however quality affected by low flows. Small gravel patches observed and utilized by spawning RB. Encountered 3 redds and captured female spawner RB. Size of adult fish indicate local RB population.
A77766-1	Map 9	Stream 1 crossing (ILP 00104)	2	45	9.656108.6047796	**S3**	**MG**	4	2.33	0.42	RB	N	Confirmed fish-bearing. Sparse RB population present, particularly u/s of proposed crossing up to the old road crossing. Stream habitat progressively deteriorates towards wetland in reach 3 in terms of increased decaying matter in channel bed, slow flow and signs of dewatering.
A77766-1	Map 9	Stream 1 (ILP 00104)	3	46	9.656172.6041540	**S6**	**NA**	1.3	1.9	0.53	NFC	N	Confirmed non fish-bearing.
A77775-1	Map 1	00105 (BB R1)	1	47	9.647270.6037952	**S3**	MG	6	1.55	0.31	RB	N	Confirmed fish-bearing. Overall poor RB habitat. Stream with fair rearing habitat during higher flow conditions only. Spawning poor - streams dewaters before eggs can hatch. No overwintering habitat present. Stream easily accessible to fish at higher flow. RB present in lower 100m of stream. **Stream changes classification from S3 to S4 @ UTM 9.648133.6037910.**
A77774	Map 1	00106 (CC R1)	5	48	9.648064.6036143	**S6**	NA	10	1.18	0.26	NS	N	Confirmed non fish-bearing. **This stream is a continuation of stream BB R2.**
A77774	Map 1	00107 (EE R1)	1	49	9.648071.6036111	**NCD**	NA	15.5	NA	NA	NS	N	Not a FPC stream.
A77774	Map 1	00106 (BB R2)	3	50	9.645851.6033178	**S6**	NA	3.3	1.50	0.28	NS	N	Confirmed non fish-bearing.
A77774	Map 1	00108 (DD R1)	1	51	9.647982.6036063	**NCD**	NA	10	NA	NA	NS	N	Not a FPC stream.
77773-1	Map 8	00109 (CC R1) northernmost	1	52	9.660137.6058770	**S6**	NA	4	1.25	0.32	NS	N	Confirmed non fish-bearing.
77773-1	Map 8	00110 (CC R1) westernmost	1	53	9.660011.6058267	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream. **This a separate drainage from upper stream CC R1.**
77773-1	Map 8	00111 (BB R1)	1	54	9.660370.6058159	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
77773-1	Map 8	00112 (AA R1)	1	55	9.660288.6057927	**S6**	NA	4.25	1.53	0.3	NS	N	Confirmed non fish-bearing.
A77748-1	Map 3	00113 (BB R1)	1	56	9.644357.6001071	**NCD**	NA	11	NA	NA	NA	N	Not a FPC stream.

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A53848	Map 2	00114 (BB R1)	2	57	9.646853.6022138	**NCD**	NA	4	NA	NA	NS	N	Not a FPC stream.
Carrier FSR Br 05	Map 4	00115	1	58	9.649915.6014180	**NCD**	NA	5	NA	NA	NS	N	Not a FPC stream.
A61318-1	Map 18	00116 (AA R1)	2	59	9.678708.5991153	**S6**	NA	3	0.80	0.31	NFC	N	Confirmed non fish-bearing.
A77770-1	Map 6	00117 (AA R1)	1	60	9.66141.6024805	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
A77770-1	Map 6	00118 (BB R1)	1	61	9.680117.6032709	**S6**	NA	2	0.68	0.35	NS	N	Confirmed non fish-bearing.
A77745-1	Map 7	00119 (CC R1)	1	62	9.666625.6031891	**S3**	MG	0.67	2.62	0.56	LKC RB	N	Confirmed fish-bearing. Overall poor RB habitat. Stream affected by extensive beaver activity. No spawning habitat observed due to the presence of organic fines. Some pools may be suitable for overwintering. Rearing quality decreases during low flow conditions as water may have oxygen deficiency during hot summer days.
Stearns FSR Crossing @ STN=1+000	Map 21	00121	2	63	10.338083.6007613	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Lord Creek FSR BR 01 Crossing @ STN=0+150	Map 11	480-927700-41700-71300	2	no site		**S3**	IM	3.00	2.90	*	RB	N	Confirmed fish-bearing. **Stream surveyed in 1996 and RB presence was documented.**
Lord Creek FSR BR 01 Crossing @ STN=1+850	Map 11	00122	1	64	10.340927.6017183	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Lord Creek FSR BR 02 Crossing @ STN=0+500	Map 11	480-927700-41700-71300	6	no site		**S3**	IM	3.00	3.50	*	RB	N	Confirmed fish-bearing. **Stream surveyed in 1996 and RB presence was documented.**
R10070 Crossing @ STN=0+260		480-927700-66700-80800	5	no site		**S6**	NA	NA	NA	NA	NA	N	Confirmed non fish-bearing. **Historic Site.**
R09807 Crossing @ STN=0+700	Map 10	00123	1	65	10.314265.6048332	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.

Table 1: Summary of data of all surveyed drainages in Project Area

Area or Crossing	Project Map	Stream ID	Reach #	Site #	Site UTM (Z.E.N.)	FPC	Habitat Value Rating	Grad (%)	Avg CW (m)	Wb (m)	Sampling Results	Follow-up Sampling	Comments
A75003-1	Map 18	00120 (BB R1)	5	66	9.680827.5992183	**NCD**	NA	7	NA	NA	NS	N	Not a FPC stream.
Bomberger FSR BR 18 Crossing @ STN=4+500	Map 20	180-374000-95200-01900-2720-3880-129	2	no site		**S6**	NA	2.00	1.20	*	NFC	N	Confirmed non fish-bearing.
Bomberger FSR BR 18 Crossing @ STN=4+500	Map 20	180-374000-95200-01900-2720-3880-129	1	67	10.355287.6000216	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Bomberger FSR BR 24 Crossing @ STN=0+100	Map 20	180-374000-95200-01900-2720-3880-129-670	2	68	10.353855.5999857	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Bomberger FSR BR 10 Crossing @ STN=0+150	Map 19	00124	1	69	10.359775.6007725	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Uncha Mtn FSR BR 04 Crossing @ STN=0+400	Map 17	00125	1	70	10.327597.5984932	**NCD**	NA	6.00	NA	NA	NS	N	Not a FPC stream.
R13377 Crossing @ STN=2+800		180-374000-95200-41400-2870-5840-309	1	no site		**S3**	MG	4.00	1.90	*	NFC (RB)	N	Assumed RB use. Stream originally visited in 2000. Usable fish habitat was identified, however temporarily inaccessible to RB due to sediment wedge/debris obstruction located ~ 500m upstream from mouth. Stream was revisited in 2004 and no fish was captured upstream of obstruction, but wedge exhibited signs of being slowly eroded. RB is expected to move into the upper reaches within few years.
Davidson East FSR Crossing @ STN=1+360	Map 13	180-545300-11600	1	71	10.340799.5945584	**S3**	IM	2.50	1.60	0.43	RB	N	Confirmed fish-bearing stream with good rearing habitat available and opportunistic spawning potential.
Recce 11 B	Map 22	180-374000-95200-01900-9570	1, 2	72	9.308027.6028344	**S3**	MG	5.25	1.87	0.37	LKC (RB)	N	Assumed RB use.
Recce 12 A	Map 22	00126	1.1, 2	73	9.694646.6027708	**NCD**	NA	NA	NA	NA	NA	N	Not a FPC stream.

Table 1: Summary of data of all surveyed drainages in Project Area

Area or Crossing	Project Map	Stream ID	Reach #	Site #	Site UTM (Z.E.N.)	FPC	Habitat Value Rating	Grad (%)	Avg CW (m)	Wb (m)	Sampling Results	Follow-up Sampling	Comments
	Map 22					**S6**	NA	4.3	1.07	0.25	NS (LKC)	N	Confirmed non fish-bearing.
Recce 12 A	Map 22	00127	1	74	9.694570.6027538	**NCD**	NA	8.00	NA	NA	NS	N	Not a FPC stream.
Recce 12 A	Map 22	00128	2	75	9.694612.6028518	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Recce 12 A	Map 22	180-374000-95200-01900-9570	11	76	9.694515.6028314	**S6**	NA	2.5	1.47	0.3	NFC	N	Confirmed non fish-bearing.
A81186-1	Map 22	00130	3	77	9.691920.6027638	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
A81186-1	Map 22	00131	1	78	9.690529.6027064	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
A81186-1	Map 22	180-374000-95200-01900-9330-7250	6	No site	9.660370.6058159	**S6**	NA	1	1.60	0.4	NFC	N	Confirmed non fish-bearing. **Historic Site.** Stream sampled in 1996 by RJA in reach 3 and resampled by FINS in 1999 in reaches 3 and 6. Confirmed non-fish bearing.
A81187-1 & A81188-1	Map 22	460-930688-37002	1	79	9.689117.6027914	**NA**	NA	NA	NA	NA	NS	N	No drainage.
A81187-1 & A81188-1	Map 22	460-930688	2	80	9.689229.6028220	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
A81187-1 & A81188-1	Map 22	460-930688	2	80		**S6**	NA	5	0.83	0.21	NS	N	Confirmed non fish-bearing.
Recce F	Map 16	00132	1	81	10.319523.5975335	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Recce B	Map 15	180-374000-95200-41400-4320-4026	1	82	10.326224.5974142	**NA**	NA	NA	NA	NA	NS	N	No drainage.
Recce B	Map 15	180-374000-95200-41400-4320-4026	1	83	10.326874.5974470	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
A78780-1	Map 15	180-374000-95200-41400-4320-4026	3	84	10.324415.5974359	**NCD**	NA	8.00	NA	NA	NS	N	Not a FPC stream.
Recce A	Map 15	180-374000-95200-41400-4320	3	85	10.327283.5975573	**S3**	IM	4.00	3.22	0.41	RB	N	Confirmed fish-bearing. Overall good perennial RB habitat present with excellent rearing habitat and good potential spawning and overwintering habitat available.

Table 1: Summary of data of all surveyed drainages in Project Area

Area or Crossing	Project Map	Stream ID	Reach #	Site #	Site UTM (Z.E.N.)	FPC	Habitat Value Rating	Grad (%)	Avg CW (m)	Wb (m)	Sampling Results	Follow-up Sampling	Comments
Branch 7495-1000 of Blackpoint FSR	Map 14	00133 (EA R1 S4)	2	86	10.344709.5981416	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00134	1	87	10.333874.6022483	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00135 (Stream #2)	1	88	0.334219.6022462	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00136 (Stream #3)	1	89	10.334604.6022614	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00137	1	90	10.335265.6022849	**NCD**	NA	NA	NA	NA	NS	N	Not a FPC stream.

5.2 Non-fish Bearing Reaches

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
SFU III	Map 23	00100	1	1	8-Jun-06	NCD	8	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Unmapped right bank tributary draining into stream 00020 near the proposed road crossing. Seapage flowing through gentle swale. Sections of fluvial deposits, but not exceeding 20m in length and mostly present within lower 75m of drainage. Otherwise water percolates through forest floor with some puddling in places.
SFU III	Map 23	00003	1	2	8-Jun-06	NCD	11	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. No continuous channel, drainage disperses ~20m from "mouth", inaccessible for seasonal use. Channelized and fluvium present for 50m from dispersion point with subterrainean sections, than no continuity; drainage either percolates through the forest floor or flows overland without scour.
SFU VI	Map 23	00002	5	3	8-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Overland runoff with some discontinuous scour and fluvium shorter than 100m, no banks, some puddling up. Flows through gentle swale.
SFU I	Map 23	00012	2	4	8-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Swampy forest, isolated puddles, soggy ground with no channel or fluvium present. Transition between bog and forest.
SFU I	Map 23	00013	2	5	8-Jun-06	S6	2	2.2	0.42	M	13	60	C	EF	NFC	368/250	500/80/6	Unsuitable RB habitat within short section between bogs. Lack of gravels, organic fines in bed substreate, dense instream vegetation matts, no overwintering habitat; stream likely reaches leathal temperatures during summer due to exposure to sun in reaches 1 and 3, and has oxygen deficiency through other seasons due to thick and decaying organic matter. Impassable to fish through both bogs. **Drainage pattern differs from that on TRIM coverage. Stream flows along proposed eastern and southern block boundary.**
SFU I	Map 23	00019	1	6	8-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 00013. Seepage through ~20m wide swampy valley with puddles between hummocks, no flow, no continuous channel or fluvium.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
SFU I	Map 23	41024	1	7	9-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 480-927700-85400. Seepage through ~50m wide swampy valley with puddles between hummocks, no flow, no continuous channel or fluvium.
SFU I	Map 23	00102	1	8	9-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Unmapped right bank NCD draining into non-fish bearing stream 480-927700-85400. Isolated mucky puddles with no connection to the parent stream. Percolates through 29% slope near"mouth" with no signs of seepage.
SFU I	Map 23	00014	1	9	9-Jun-06	NCD	4	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 480-927700-85400. Seepage through gully with puddles, no flow, no continuous channel, banks or fluvium.
SFU II	Map 23	41018	1	10	10-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 41013. Seepage with no channel through narrow wetland.
SFU II	Map 23	41013	5	11	10-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Wetland with undefined channel, water either is puddling up or percolating through.
SFU II	Map 23	00015	1	12	10-Jun-06	NA	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Not any kind of drainage found within 100 m radius of proposed crossing or of mapped mouth.
SFU II	Map 23	00018	2	13	10-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage through small gully with puddles, no discernible flow, no continuous channel, banks or fluvium.
SFU IV	Map 23	00007	1	14	11-Jun-06	S6	11	0.7	0.18	M	8	NA	C	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 00006. Shallow and seasonal stream with subterrainean flow near mouth, discontinuous scour and fluvium mixed with overland flow within 60m from mouth. Channel becomes pronounced as gradient rises further u/s .
SFU IV	Map 23	00009	1	15	11-Jun-06	S6	2	0.9	0.2	L	9	NA	C	NA	NS	NA	NA	No fish habitat. Tiny, seasonal and very shallow stream which drains to non-fish bearing stream 00005. **Stream becomes NCD at UTM 10.310971.6034552.**
SFU IV	Map 23	00008	1	16	11-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage - squishy forest floor in valley bottom with sporadic puddles, no fluvium, no continuous scour.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
SFU IV	Map 23	00101	1	17	11-Jun-06	S6	7	0.6	0.28	L	9	NA	C	NA	NS	NA	NA	No fish habitat. Tiny, seasonal and very shallow stream which drains to non-fish bearing stream 180-374000-95200-01900-9560-3060. Stream too shallow to sample.
SFU IV	Map 23	00010	1	18	11-Jun-06	NA	*	*	*	NA	NA	NA		NA	NS	NA	NA	No fish habitat. Not any kind of drainage found within 100 m radius of mapped mouth.
SFU IV	Map 23	180-374000-95200-01900-9560-3060	3	20	15-Jun-06	S6	5	2.3	0.48	L	8	30	C	EF	NFC	244/150	700/80/6	No fish habitat. Second sampling event u/s of falls obstruction with no fish capture. Stream lacks perennial habitat to support hypothtical isolated fish population.
SFU IV	Map 23	00004	1	21	14-Jun-06	NCD	19	*	*	NA	NA	NA	NA	NA	NS	NA	NA	Drainage channelized for 40m from mouth within steep slope, but is too steep to support fish refuge use. Beyond drains through swale with no continuous fluvium, scour or banks. NCD in reach 2 at proposed crossing as well.
SFU IV	Map 23	00005	2	23	14-Jun-06	S6	1	1.1	0.3	L	11	40	C	EF	NFC	21/100	700/80/6	No suitable RB habitat. Stream flows through wetland with shallow and mucky channel. Water likely contains too low oxygen levels for RB and reaches lethal temperatures during summer. No spawning or overwintering habitat observed in reach 2.1. Stream becomes NCD at UTM 10.310841.6034546.
SFU IV	Map 23	00006	1	24	14-Jun-06	S6	2	1.3	0.35	L	9	40	C	NA	NS	NA	NA	No RB habitat. Shallow and seasonal stream, already too shallow to sample. No overwintering, rearing or spawning habitat available, abundant organics in channel bed. No fish in parent stream in much better habitat.
SFU VI	Map 23	00002	4	26	15-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	Discontinuous channel and fluvium throughout reach. Swampy in lower section. Stream confirmed in 2002 to be non-fish bearing.
SFU III	Map 23	00020	1	27	15-Jun-06	S6	3	1.1	0.37	L	10	30	C	EF	NFC	62/200	700/80/6	Stream unutilized by RB. Second sampling event. Stream lacks perennial habitat as well does not contain conducive seasonal habitat for RB. Substrate composed of fines and organics. No spawning or overwintering habitat. Stream watered for too short period of time to be utilized by RB.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
SFU I	Map 23	480-927700-85400	2	28	15-Jun-06	S5	0	3	*	NA	16	40	C	EF	LKC	220/200	700/80/6	No RB habitat. Watershed extensively sampled in 2001 reconnaissance inventory. Only LKC captured then and during this year sampling. No spawning habitat observed and overwintering is unsuitable due to likely oxygen deficiency caused by decaying organic matter. Stream may be utilized near mouth as a refuge habitat from Pinkut Creek.
SFU I	Map 23	480-927700-85400	2	29	15-Jun-06	S5	0	3.5	*	NA	16	30	C	EF	LKC	122/100	700/80/6	No RB habitat. Watershed extensively sampled in 2001 reconnaissance inventory. Only LKC captured then and during this year sampling. No spawning habitat observed and overwintering is unsuitable due to likely oxygen deficiency caused by decaying organic matter. Stream may be utilized near mouth as a refuge habitat from Pinkut Creek.
SFU II	Map 23	41013	3	30	16-Jun-06	S6	1	0.8	0.29	M	11	30	C	EF	LKC	53/200	700/80/6	No RB habitat. Shallow and mucky channel exposed to sun. Likely reaches leathal temperatures during summer and has oxygen deficiency throughout year. Sampled in the past in reaches 2 and 4 with no fish capture.
SFU II	Map 23	00016	1	31	16-Jun-06	S6	4	1	0.18	L	10	20	C	NA	NS	NA	NA	No fish habitat. Stream drains to non-fish bearing stream 41013. Seasonal stream, already intermittent flow, scaly dry algae from last year indicate only seasonal flow.
SFU II	Map 23	00017	1	32	16-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Barely a drainage, twinberry, sphagnum and mnium indicates ground flow location only.
SFU II	Map 23	41032	4	33	16-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Morphology of drainage altered by past road construction. Water from seepage directed to ditch drainage and than to forest.
SFU VI	Map 23	00001	4	34	15-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff with no continuous scour or fluvium. Drainage pattern differs from that on TRIM coverage.
SFU VI	Map 23	00103	1	35	15-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage through valley, no continuous scour and fluvium present, disconnected puddles.
A80580	Map 9	480-568000-14200	2	38	30-Jun-06	NCD	*	*	*	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Swampy, about 30m wide valley with no channel or fluvium, some isolated puddles present.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
A80528	Map 9	480-568000-60200	2	39	29-Jun-06	S6	26.3	1.87	0.66	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Stream too steep for fish use.
A80528	Map 9	480-568000	2	40	29-Jun-06	S6	6	1.55	0.34	L	6	20	C	EF	NFC	214/200	700/80/6	No fish present. Seasonal habitat is isolated above steep gradient obstruction near existing road. No isolated fish population present u/s of obstruction.
A80577	Map 9	11067	1	41	30-Jun-06	S5/S6	16	3.38	0.71	L	8	90	C	EF	NS	103/200	600/80/6	No fish habitat. Steep stream with seasonal flow. No in-stream cover at moderate and high flows. Theoretically accessible but dewaters too quickly to provide any seasonal fish use. Abundant presence of invertebae in isolated shallow pools indicate fish absence. **Stream changes classification from S5 to S6 at UTM 9.663940.6101495.**
A80577	Map 9	11068	1	42	30-Jun-06	S6	2.7	1.8	0.37	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 11067. Seasonal stream - confirmed no fish use in the entire watershed. Stream already too shallow to sample.
A80582	Map 9	11068	1	43	29-Jun-06	S6	3.5	1.78	*	L	9	90	C	NA	NS	NA	NA	No fish habitat, drains to non-fish bearing stream 11067. Seasonal stream - confirmed no fish use in the entire watershed. Stream already too shallow to sample.
A77766-1	Map 9	Stream 1 (00104)	3	46	4-Jul-06	S6	1.3	1.9	0.53	L	12	70	C	EF	NFC	150/150	600/80/6	No RB habitat. Swampy, stagnant creek with dense instream vegetation matts and thick organic matter in channel bed. Flow indescernible with filmy surface. Likely oxygen deficiency throughout the year.
A77774	Map 1	00106 (CC R1)	5	48	30-Jul-06	S6	10	1.18	0.26	DRY	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Stream watered only during runoff only. Watered for too short period of time and too far from mouth (~4km) for seasonal fish use. No fish habitat in lower reach near mouth as well. **This stream is a continuation of stream BB R2.**
A77774	Map 1	00107 (EE R1)	1	49	30-Jul-06	NCD	15.5	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Occasionally scoured channel with discontinuous fluvium. Meltwater runoff through gully.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
A77774	Map 1	00106(BB R2)	3	50	25-Aug-06	S6	3.3	1.50	0.28	DRY	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seasonal small stream draining to open water wetland, which was almost dry as well. Dewaters to quickly to provide any seasonal use for RB from Bulkley R. Local resident informed that stream is watered only during spring freshet for last 40 years and rarely during very wet fall.
A77774	Map 1	00108 (DD R1)	1	51	25-Aug-06	NCD	10	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff. No continuous scoured channel bed, banks or fluvial material, occasionally exposed cobbles.
77773-1	Map 8	00109 (CC R1) northernmost	1	52	25-Aug-06	S6	4	1.25	0.32	DRY	NA	NA	NA	NA	NS	NA	NA	No usable fish habitat. Small and seasonal stream, watered only for ~2 months; flows to non-fish bearing section of Bayman C. and is inaccessible to non-FPC species due to subterrainean flow obstruction located at the start of site. **This stream is a continuation of stream DD R1.**
77773-1	Map 8	00110 (CC R1) westernmost	1	53	25-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Drainage with discontinuous scoured channel and fluvium. Signs of surface flow alternates with channelized 20-50m long sections. **This a separate drainage from upper stream CC R1.**
77773-1	Map 8	00111 (BB R1)	1	54	25-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Drainage channelized for 40m d/s and for 25m u/s of crossing. Beyond this section drainage has isolated mudholes and no continuous channel, scour or banks.
77773-1	Map 8	00112 (AA R1)	1	55	25-Aug-06	S6	4.25	1.53	0.3	DRY	NA	NA	NA	NA	NS	NA	NA	No fish habitat - seasonal stream inaccessible to fish due to dispersion in wetland.
A77748-1	Map3	00113 (BB R1)	1	56	25-Aug-06	NCD	11	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Dry drainage with discontinuous scoured channel. Fluvium visible only in steeper gradient section, otherwise organic material; signs of overland flow mixed with channelized sections, channel does not exceeds 100m.
A53848	Map 2	00114 (BB R1)	2	57	25-Aug-06	NCD	4	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff; drainage has no continuous fluvium, scoured banks or channel. Some isoleted scoured holes with fluvial material noted , but mainly overland flow when watered.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
Carrier FSR Br 05	Map 4	00115	1	58	25-Aug-06	NCD	5	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff, no continuous scoured channel, fluvium or banks. Frequent overland flow when watered; discontinuous scour is more pronounced within steeper sections of drainage.
A61318-1	Map 18	00116 (AA R1)	2	59	26-Aug-06	S6	3	0.80	0.31	L	16	130	L	EF	NFC	79/200	400/80/6	No fish habitat. Tiny and seasonal stream, watered only in lower 200m however water stagnant, filmy and shallow. No suitable habitat for salmonids and no other species present. Stream drains to open water wetland Cordella Pond which is not suitable for salmonids as well.
A77770-1	Map 6	0011 (AA R1)	1	60	27-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Headwaters of drainage. Channel scoured for less than 100m; several mucky trickles joining together in places, many isolated muddy puddles. Discontinuities for 10m or drainage floods areas over 2m wide. Drainage entirely dissipates in wetland approximately 70m downstream from proposed crossing. Second visit to the site.
A77770-1	Map 6	00118 (BB R1)	1	61	27-Aug-06	S6	2	0.68	0.35	DRY	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seasonal stream with mucky channel draining towards Klo C. Gravel is present only within 60m long section between wetlands, where crossing is proposed. Stream drains wetland located just south of Poison L. and is one of the channels draining this wetland. Other channel drains this wetland to Poison L. and occasionally becomes an overflow channel from Poison L to Klo C. watershed.
Stearns FSR Crossing @ Stn=1+000	Map 21	00121	2	63	28-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage through valley on upstream side of road. No continuous scoured channel or fluvium observed and water is ponding up at the crossing (~10x6m) during spring runoff. On the downstream side 30m off crossing drainage descends to Sheraton C over a slope with 50% gradient and although the scour is more pronounced the drainage still lacks continuity to be called a stream.
Lord Creek FSR BR 01 Crossing @ Stn=1+850	Map 11	00122	1	64	28-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage through gentle and wide swale through wet area. No distinct channel on upstream side of crossing; on downstream side channelized for 60m due to road runoff, then disperses among sedges and hardhack.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
R09807 Crossing @ Stn=0+700	Map 10	00123	1	65	28-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Watercourse drains small wetland located 100m upstream of crossing through discontinuous and mucky channel. Water is puddling up in mudholes, no scoured and continuous channel, banks or fluvium. Drainage disperses 100m downstream off crossing.
A75003-1	Map 18	00120 (BB R1)	5	66	28-Aug-06	NCD	7	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Discontinuous channel and fluvium through gully which disperses 70m downstream from proposed crossing.
Bomberger FSR BR 18 Crossing @ Stn=4+500	Map 20	180-374000-95200-01900-2720-3880-129	1	67	29-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Drainage is a meltwater runoff. Water disperses in ~100m wide swampy area. No channel, scour or fluvium. No connectivity and passage to RB from Cheskwa C. to upper reaches.
Bomberger FSR BR 24 Crossing @ Stn=0+100	Map 20	180-374000-95200-01900-2720-3880-129-670	2	68	29-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff on upstream side of crossing with barely any signs of flow through gully. On downstream side watered trickle without a channel, scour or fluvium.
Bomberger FSR BR 10 Crossing @ Stn=0+150	Map 19	00124	1	69	29-Aug-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff, surface flow when watered through ferns; some dried up puddles, but no scoured channel, fluvium or banks.
Uncha Mtn FSR BR 04 Crossing @ Stn=0+400	Map 17	00125	1	70	30-Aug-06	NCD	6.00	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Meltwater runoff with discontinuously scoured channel upstream and downstream of crossing. No banks or continuous fluvial deposits.
Recce 12 A	Map 22	00126	1	73	26-Sep-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	**Stream becomes NCD at UTM 9.694620.6027551** approximately 30 m upstream from confluence with tributary ILP 00127.
Recce 12 A	Map 22	00126				S6	4.3	1.07	0.25	INT	8	110	C	NA	NS (LKC)	NA	NA	No RB habitat. Tiny and seasonal trickle. Barely a stream, fluvium discontinuous, but scoured channel present throughout. No overwintering or spawning habitat present, rearing habitat may be occasionally utilized by LKC present in the system.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
Recce 12 A	Map 22	00127	1	74	26-Sep-06	NCD	8.00	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Tiny seepage with some scour present near the mouth. Otherwise meltwater runoff past 60 m from mouth; no scour, fluvium or banks observed.
Recce 12 A	Map 22	00128	2	75	26-Sep-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seasonal seepage with no continuity, scour, fluvium or banks present. Only isolated dry muddy puddles observed.
Recce 12 A	Map 22	180-374000-95200-01900-9570	11	76	26-Sep-06	S6	2.5	1.47	0.3	L	8	110	C	EF	NFC	138/300	400/80/6	No FPC fish habitat. Stream is isolated upstream of wetland in reach 10 where no channel was observed. No rising fish observed in lake in reach 13. Although usable rearing habitat and spawning habitat was available, sampling revealed no presence of isolated RB/CT population upstream of wetland obstruction.
A81186-1	Map 22	00130	3	77	26-Sep-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No usable fish habitat. Headwaters of stream, which flows through ~10 m wide valley. Channel is occasionally scoured, has no continuous fluvium or banks. Frequently puddles up and has no FPC stream characteristics. Drains to confirmed non-fish bearing parent stream.
A81186-1	Map 22	00131	1	78	26-Sep-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Swampy area with no distinct channel; no fluvium or banks; water percolates through horsetail patch.
A81187-1 & A81188-1	Map 22	460-930688-37002	1	79	26-Sep-06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Dry gully with no signs of any kind of flow. No drainage present within 100 m radius from site location.
A81187-1 & A81188-1	Map 22	460-930688	2	80	26-Sep-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Nothing but runoff at site location with discontinuously scoured channel, occasional banks and fluvium.
A81187-1 & A81188-1	Map 22	460-930688	2.1	80	26-Sep-06	S6	5	0.83	0.21	L	NA	NA	NA	NA	NS	NA	NA	**Drainage becomes an FPC stream at UTM 9.689292.6028211**, however it does not contain fish habitat. Stream sampled in the past by RJA in reaches 2 and 3 in 1998 and resampled by FINS in reach 2 in 2000.
Recce F	Map 16	00132	1	81	06-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Signs of seepage with no scour, fluvium or banks within 50 m from road crossing. Water collected at the road due to the presence of an old berm blocking flow. Nothing noted beyond 50 m.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
Recce B	Map 15	180-374000-95200-41400-4320-4026	1	82	06-Oct-06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	Reach 1 of stream is mismapped on TRIM. Only small and dry gully noted at mapped location. Drainage follows east along the proposed block boundary.
Recce B	Map 15	180-374000-95200-41400-4320-4026	1	83	06-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Runoff drainage with occasionally scoured channel, no continuous fluvium or banks in the entire and over 700 m assessed length from mouth.
A78780-1	Map 15	180-374000-95200-41400-4320-4026	3	84	06-Oct-06	NCD	8	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage with no continuity, scour, fluvium or banks present. Only isolated muddy puddles observed.
Branch 7495-1000 of Blackpoint FSR Crossing3	Map 14	00133 (EA R1 S4)	2	86	06-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Seepage no continuous fluvim, scoured channel bed and banks. Mostly percolates through forest floor on downstream of the crossing or exhibit mixed surface flow with percolation on upstream side. Drains to confirmed in 1997 non-fish bearing waters.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00134	1	87	07-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Nothing but moist gully. No scour, fluvium or channel; no signs of surface flow.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00135 (Stream #2)	1	88	07-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Signs of meltwater runoff with occasionally scoured forest floor. No continuous fluvium, scour or banks.
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00136 (Stream #3)	1	89	07-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Drainage flows through swampy area with no distinct channel, fluvium or banks; water puddles up frequently.

Table 2: Summary of data of non-fish bearing drainages.

Area/Crossing	Project Map	Stream ID/WSC	Reach #	Site #	Date	FPC	Gradient (%)	Avg Channel Width(m)	Avg. Bankfull Depth (m)	Flow Stage	WaterTemp. (°C)	Cond. (µS/cm)	Turbidity	Method	Sampling Results	Effort (EF - sec/dist, MT traps/hours)	EF Specs (V/Hz/µs)	Comments
Branch 10288-01 of Augier FSR (~23 km) Crossings	Map 12	00137	1	90	07-Oct-06	NCD	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	No fish habitat. Disturbed drainage by the past logging (~20 years ago). Channel intermittent and frequently vegetated by shrubs and grassess. Scoured channel bed and fluvial deposits are discontinuous.

5.3 Follow-up sampling

No reaches for follow-up sampling were identified.

5.4 Cross Drainages for Proposed Roads (SFU Blocks only)

Identification of these drainages was based on the combination of terrain relief and the presence of moist loving plants with the comparison to the surrounding area. These drainages were then assessed for general flow direction and their location was stored in GPS unit.

Table 3: Drainages at Proposed Roads In Blocks SFU (Map 23)

Area	ID	Branch	Description	Flow Direction	UTM Zone	UTM East	UTM North
SFU VI	1	A	Ground flow	255	10	306453	6034782
SFU VI	2	A	Ground flow	179	10	306775	6034579
SFU VI	3	A	Ground flow	216	10	306828	6034542
SFU VI	4	A	Ground flow	208	10	306869	6034513
SFU VI	5	A	Ground flow	186	10	306989	6034439
SFU VI	6	A	NCD	160	10	307078	6034369
SFU VI	7	A	NCD	214	10	307109	6034341
SFU VI	8	A	NCD	245	10	307163	6034316

Table 3: Drainages at Proposed Roads In Blocks SFU (Map 23)

Area	ID	Branch	Description	Flow Direction	UTM Zone	UTM East	UTM North
SFU VI	9	A	Ground flow	232	10	307228	6034274
SFU VI	10	A	Ground flow	279	10	307240	6034264
SFU VI	11	A	Ground flow	263	10	307337	6034199
SFU VI	12	B	Ground flow	200	10	307521	6034341
SFU VI	13	B	NCD	232	10	307371	6034298
SFU III	14	E	Ground flow	247	10	307400	6036043
SFU III	15	E	NCD (Stream 00003)	262	10	307813	6036553
SFU III	16	E	Ground flow	237	10	308224	6036936
SFU III	17	F	NCD	243	10	307724	6036332
SFU I	18	G	Ground flow	90	10	312082	6037739
SFU I	19	G	Ground flow	160	10	311980	6037845
SFU I	20	H	Ground flow	246	10	312590	6037862
SFU I	21	H	NCD	294	10	312592	6037898
SFU I	22	H	NCD	80	10	312591	6037934
SFU I	23	H	NCD	63	10	312587	6038000
SFU I	24	I	Depression (BRG=080-260 (50x25m))		10	312936	6037679
SFU I	25	I	NCD	262	10	312915	6037637
SFU I	26	K	Ground flow	319	10	315018	6038660
SFU I	27	K	Ground flow	349	10	314997	6038638
SFU I	28	K	Ground flow	300	10	314878	6038534
SFU I	29	K	Ground flow	341	10	314835	6038487
SFU I	30	K	Ground flow	333	10	314827	6038476
SFU I	31		Ground flow (between Br. L and Br. K)	245	10	315012	6038403
SFU I	32	L	Ground flow	269	10	314750	6038344
SFU I	33	L	Ground flow	250	10	314778	6038305
SFU I	34	L	NCD	268	10	314784	6038278
SFU I	35	L	Ground flow	249	10	314847	6038146
SFU I	36	L	NCD	253	10	314875	6038133
SFU I	37	M	Ground flow	77	10	315309	6038249
SFU I	38	M	Ground flow	71	10	315334	6038193
SFU I	39	M	Ground flow	60	10	315390	6038100
SFU I	40	M	Ground flow	78	10	315403	6038079

Table 3: Drainages at Proposed Roads In Blocks SFU (Map 23)

Area	ID	Branch	Description	Flow Direction	UTM Zone	UTM East	UTM North
SFU I	41	M	Ground flow	59	10	315458	6037996
SFU I	42	N	NCD	44	10	314516	6037910
SFU I	43	N	Ground flow	242	10	314166	6037987
SFU I	44	N	Ground flow	217	10	313738	6037991
SFU I	45	N	Ground flow	245	10	313726	6038004
SFU I	46	N	Ground flow	318	10	313958	6038362
SFU I	47	N	Depression (BRG=316-134 (15X25m))		10	313975	6038380
SFU I	48	N	Ground flow	287	10	314036	6038410
SFU I	49	O	Ground flow	287	10	314036	6038410
SFU II	50	P	Depression (BRG=233-053 (20X10m))		10	313352	6038449
SFU II	51	P	Ground flow	142	10	313327	6038528
SFU II	52	P	NCD	168	10	313144	6038674
SFU II	53	P	Ground flow	69	10	313020	6038834
SFU II	54	Q	Depression 15X7m		10	312035	6038956
SFU II	55	Q	Ground flow	341	10	312811	6038870
SFU II	56	T	Ground flow	26	10	313171	6040132
SFU II	57	T	NCD	98	10	313167	6040171
SFU IV	58	U	Ground flow	320	10	310336	6034799
SFU IV	59	U	Ground flow	342	10	310343	6034766
SFU IV	60	U	Ground flow	279	10	310356	6034714
SFU IV	61	U	Depression (BRG=160-340 (10X30m))		10	310387	6034641
SFU IV	62	U	Ground flow	106	10	310521	6034568
SFU IV	63	U	Ground flow	120	10	310721	6034632
SFU IV	64	U	Ground flow	162	10	310738	6034648
SFU IV	65	U	Ground flow	216	10	310780	6034583
SFU IV	66	U	NCD	256	10	310868	6034353
SFU IV	67	U	Ground flow	237	10	310968	6034157
SFU IV	68	U	NCD	169	10	310764	6033850
SFU IV	69	U	Ground flow	234	10	310433	6033725
SFU IV	70	U	Ground flow	152	10	310411	6033724
SFU IV	71	U	NCD (Stream 00004)	256	10	310397	6033659
SFU IV	72	W	Ground flow	168	10	310284	6033873

Table 3: Drainages at Proposed Roads In Blocks SFU (Map 23)

Area	ID	Branch	Description	Flow Direction	UTM Zone	UTM East	UTM North
SFU IV	73	V	Ground flow	250	10	310708	6033675
SFU IV	74	V	Ground flow	240	10	310757	6033646
SFU IV	75	V	Ground flow	72	10	310942	6033526
SFU IV	76	V	Ground flow	196	10	310949	6033507
SFU IV	77	X	Ground flow	248	10	310735	6034218
SFU IV	78	X	NCD (Stream 00008)	300	10	310626	6034245
SFU IV	79	Y	Ground flow	219	10	310868	6034377

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7. List of Abbreviations

Avg	Average	L.	Lake
BB	Burbot (*Lota lota*)	LKC	Lake chub (*Couesius plumbeus*)
BCTS	British Columbia Timber Sales	LSU	Longnose sucker (*Catostomus catostomus*)
C	Clear (not turbid)	LW	Lake whitefish (*Coregonus clupesformis*)
C.	Creek	m	Meter
CH	Chinook salmon (*O. tshawytscha*)	M	Moderate flow or moderate turbid
Cm	Centimeter	mm	Millimeter
CO	Coho salmon (*O. kisutch*)	MG	Marginal (habitat value rating)
Confl.	Confluence	MT	Minnow trap
CR	Critical (habitat value rating)	N	No
CSU	Coarsescale sucker (*Catostomus macrocheilus*)	NA	Not applicable
CT	Cutthroat trout (*Oncorhynchus clarki*)	NCD	Not classified drainage
Cw	Channel width	ND	No drainage present
DFO	Department of Fisheries and Oceans	NFC	No fish captured
d/s	Downstream	NS	Not sampled
DV	Dolly Varden char (*Salvelinus malma*)	NTS	National Topographic Survey
EF	Electrofishing	NVC	No visible channel
EFU	End of Fish Use	R.	River
FB	Fish-bearing	Rd	Road
FINS	FINS Consulting Ltd.	RIC	Resource Information Committee
FISS	Fisheries Information Summary System	RSC	Redside shiner (*Richardsonius balteatus*)
FPC	Forest Practices Code	sec	Seconds
FSID	Fish-stream Identification Guidebook	S1 - S6	Riparian classes (streams)
FSZ	Fisheries Sensitive Zone	T	Turbid
GF	Ground flow	Temp	Temperature
Grad	Slope gradient	TRIM	Terrain Resource Information Management
GPS	Global Positioning System	u/s	Upstream
H	High flow	UTM	Universal Transverse Mercator coordinates
HP	Horsepower	V	Volt
Hz	Hertz	Wb	Bankfull depth
HIST	Historic	WCB	Workers Compensation Board
ID	Identifier	WSC	Watershed code
IM	Important (habitat value rating)	W1 - W5	Riparian classes (wetlands)
infer	Inferred	x-ing	Crossing
INT	Intermittent	Y	Yes
IS	Incidental sampling	µsec	Microseconds
km	Kilometer	µS	Microsiemens
L	Low flow or lightly turbid	°C	Temperature
		%	Slope gradient

8. List of Appendices

Appendix I:	**Field Cards Copies**
Appendix II:	**Photographs**
Appendix III:	**Hardcopy Maps**

Appendix I: Field Cards Copies

SITE CARD

STREAM NAME (gaz.) (local) SFU 11)

WATERSHED CODE

ILP MAP # 093K041 ILP # 00100 NID MAP # 93K041 NID #

REACH # 1 D SITE # 1 FIELD UTM 10 307513 6036154 GP3 SITE LG 200 GE ACCESS FT

DATE 2006 06 08 TIME 0630 AGENCY C016 CREW MJ CS FISH FORM Y [✓ N]

CHANNEL mthd

CHANNEL WIDTH (m)

WETTED WIDTH (m)

RES. POOL DEPTH (m)

W_b Dp (m) STAGE L M H [✓ No Vis. Ch] DW Dry/Int. Tribs.

GRADIENT % AL 9 7

WATER EMS TEMP C REQ. # COND. S/cm pH TURB. T M L C

MORPHOLOGY FLD SNS

BED MATERIAL Dominant Subdom.

D95 (cm) D (cm) Morph.

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR SI ST

ISLANDS N O I F S AN

BARS N SIDE DIAG MID SPAN BR

COUPLING DC PC CO

CONFINEMENT EN CO FC OC UN N/A

COVER Total

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE 0 1 2 3 4 5

LWD FNC N F A DIST C E INSTREAM VEG N A M V

LB SHP U V S O RB SHP U V S O

TEXTURE F G C B R A TEXTURE F G C B R A

RIP. VEG. N G S C D M W RIP. VEG. N G S C D M W

STAGE INIT SHR PS YF MF NA STAGE INIT SHR PS YF MF NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__	Unmapped RB trib	
						R__ F__	to End 3A	
						R__ F__		
						R__ F__		

1

HABITAT QUALITY

NFH – seepage flows through gentle swale, sections of fluvial deposits not exceeding 20 m, generally in lower 75m Otherwise percolates through forest floor, puddling in places. Will dry in next 3-4 weeks.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	758	STD	U	
DIG	759	– " –	D	

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Points 001 – 020

C NCD

2

SITE CARD

STREAM NAME (gaz.) (local) SFU 11)

WATERSHED CODE

ILP MAP # 093K041 ILP # 00003 NID MAP # 93K041 NID #

REACH # 1 D SITE # 2 FIELD UTM 10 307655 6036548 GP3 SITE LG 150 GE ACCESS FT

DATE 2006 06 08 TIME 0700 AGENCY C016 CREW MJ CS FISH FORM Y [✓ N]

CHANNEL mthd

CHANNEL WIDTH (m)

WETTED WIDTH (m)

RES. POOL DEPTH (m)

W_b Dp (m) STAGE L M H [✓ No Vis. Ch] DW Dry/Int. Tribs.

GRADIENT % AL 13 8

WATER EMS TEMP C REQ. # COND. S/cm pH TURB. T M L C

MORPHOLOGY FLD SNS

BED MATERIAL Dominant Subdom.

D95 (cm) D (cm) Morph.

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR SI ST

ISLANDS N O I F S AN

BARS N SIDE DIAG MID SPAN BR

COUPLING DC PC CO

CONFINEMENT EN CO FC OC UN N/A

COVER Total

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE 0 1 2 3 4 5

LWD FNC N F A DIST C E INSTREAM VEG N A M V

LB SHP U V S O RB SHP U V S O

TEXTURE F G C B R A TEXTURE F G C B R A

RIP. VEG. N G S C D M W RIP. VEG. N G S C D M W

STAGE INIT SHR PS YF MF NA STAGE INIT SHR PS YF MF NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

3

HABITAT QUALITY

NFH – lack of continuous channel, ~~entire~~ disperses ~ 20 m u/s from mouth, inaccessible for seasonal use, shallow, w/n lower 50 m subter, HOU, then channelized for 50 m and beyond discontinuous again with sections of percolation or overland runoff.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	760	35	X	AL

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C @ UTM 10, 307667, 6036536.
Entirely disperses into the ground before reaching End 3.
P

C 1 reach only
NCD

4

SITE CARD

STREAM NAME (gaz.) (local) Fy II Faith

WATERSHED CODE

ILP MAP # 93K041 ILP # 00013 NID MAP # 93K041 NID #

REACH # 2 D SITE # 5 FIELD UTM 10 3109946036468 GP3 SITE LG 150 GE ACCESS FT

DATE 20060608 TIME 1245 AGENCY C016 CREW MJ CS FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	2,2	2,0	2,1	2.4	2.1	2.3	(2.2)	AL	
WETTED WIDTH (m)	T	1,6	2,0	2,1	2.4	2.0	2.0		2	2
RES. POOL DEPTH (m)	MS	0.21	0.33						3	1

W_b Dp (m) 0.5 0.35 0.4 MS STAGE L [✓ M] H No Vis. Ch. DW Dry/Int. Tribs.

WATER			
EMS		REQ. #	
TEMP	13 C T3	COND.	60 S/cm SE
pH		TURB.	T M L [✓ C]

MORPHOLOGY					
FLD SNS	N				
BED MATERIAL	Dominant	F	Subdom.	G	
D95 (cm)	10	D (cm)	2	Morph.	RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	T	S	S	T	D
LOC	P	P	A	A	P	P	P

CROWN CLOSURE 0 [✓ 1] 2 3 4 5

LWD FNC N [✓ F] A DIST C [✓ D] INSTREAM VEG N A [✓ M] [✓ V]

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A

RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ M] STAGE INIT SHR PS YF MF [✓ M]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
			FSB			R__ F__	No channel in W	10 311380 6036409 GP
						R__ F__	for 180 m	10 311563 6036375 GP
						R__ F__		5
						R__ F__		

HABITAT QUALITY

poor R/B hab, short section b/w bogs, lack of suitable gravel for S, lots of organics in channel bed, No O → too shallow, usable R, however inaccessible through bog in R1 & R3.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	765	STD	U	back
DIG	766	STD	D	- 1 -

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C		C	
	Flow pattern different than TRIM Exposed to sun in R3, lack of defined channel dense ISV matt, No RB hab (from point 036 → NCD)		S6 6

7880001315

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE

WATERBODY ID ILP MAP # 93K041 ILP # 00013 SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 2 FISH PERMIT # SM06-24177

DATE 20060608 to AGENCY C016 CREW MS CS ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
5			10 310994 6036468 GP3	EF 1	13	60	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
5	EF 1		NFC			0				

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.
													7

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	5	EF 1	1	1245	1310	368	250	1.5	0	500	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

8

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 93K041 | ILP # 00007 | NID MAP # | NID #

REACH # 1 D | SITE # 14 | FIELD UTM 10 310225 6034768 GP3 | SITE LG 300 GP7 | ACCESS FT

DATE 2006 06 11 | TIME 0746 | AGENCY C016 | CREW MJ CS | FISH FORM Y [✓ N]

CHANNEL	mthd								GRADIENT %	
CHANNEL WIDTH (m)	T	0.8	0.6	0.9	0.4				AL	
WETTED WIDTH (m)	T	0.6	0.5	0.9	0.4				8	11
RES. POOL DEPTH (m)	MS	0.33	0.27						15	

W, Dp (m) 0.15 0.2 MS | STAGE L [✓ M] H | No Vis. Ch. DW | Dry/Int. Tribs.

EMS | TEMP 8 C T3 | REQ. # | COND. S/cm | pH | TURB. T M L [✓ C] BE

FLD SNS N

BED MATERIAL Dominant G | Subdom. C

D95 (cm) 400 | D (cm) 6 | Morph. SP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 / C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING DC PC [✓ CD]

CONFINEMENT EN [✓ CO] FC OC UN N/A

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	T	S	D	T	N
LOC	P	P	P	P	P	P	

CROWN CLOSURE 0 1 2 3 4 5

LWD FNC N [✓ F] A | DIST C [✓ E] | INSTREAM VEG N A M V

LB SHP U [✓ V] S O | RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A | TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A

RIP. VEG. N G S [✓ C] D M W | RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA | STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		9
						R__ F__		

HABITAT QUALITY

NFH - shallow, subter flow, seasonal.
Tiny creek with inaccessible section @ mouth.
No O hab beyond, usable R & S if RB could access.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DG	775	STD	U	Book
-"-	776	-"-	D	-"-

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C site from mouth.

Channel with discontinuous scour & alluvium, freq subter sections mixed with overland flow & scoured pools in lower 60m. As you go ↗ channel is

C pronounced.

~~NCD~~

S6

10

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 93K041 | ILP # 00009 | NID MAP # | NID #

REACH # 1 D | SITE # 15 | FIELD UTM 10 310844 6034524 GP3 | SITE LG 200 GE | ACCESS FT

DATE 2006 06 11 | TIME 0925 | AGENCY C016 | CREW MJ CS | FISH FORM Y [✓ N]

CHANNEL	mthd								GRADIENT %	
CHANNEL WIDTH (m)	T	0.6	0.6	1.0	0.9	1.1	1.2	0.9	AL	
WETTED WIDTH (m)	T	0.6	0.3	0.6	0.3	0.6	0.9		3	1
RES. POOL DEPTH (m)	MS	0	0	0	0	0	0			

W, Dp (m) 0.2 0.25 0.15 MS | STAGE [✓ L] M H | No Vis. Ch. DW | Dry/Int. Tribs.

EMS | TEMP 9 C T3 | REQ. # | COND. S/cm | pH | TURB. T M L [✓ C] GE

FLD SNS N

BED MATERIAL Dominant F | Subdom. G

D95 (cm) 4 | D (cm) 0.1 | Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 / C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM [✓ IR] SI ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING DC [✓ PC] CD

CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	N	D	N	S	N
LOC	P	P		P	P	P	

CROWN CLOSURE 0 1 2 [✓ 3] 4 5

LWD FNC N [✓ F] A | DIST C [✓ E] | INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] S O | RB SHP U [✓ V] S O

TEXTURE [✓ F] G C B R A | TEXTURE [✓ F] G C B R A

RIP. VEG. N G [✓ S] C D M W | RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ NA] | STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		11
						R__ F__		

HABITAT QUALITY

NFH - small, v. shallow stream (3cm - already -> middle of spring runoff), seasonal. Too shallow for RB rearing, No S & O. Substr with lots of organic material.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DG	779	STD	U	book -
-"-	780	-"-	U	book - NCD section
-"-	781	-"-	U	book - near mouth

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

Becomes NCD @ UTM 10.310971.6034552.
water collected in small swampy area percolates under, no alluvium present just disconnected mucky puddles

C Too shallow for sampling.

S6/NCD

12

SITE CARD

STREAM NAME (gaz.) | (local)

WATERSHED CODE

ILP MAP # 93K041 | ILP # 00101 | NID MAP # | NID #

REACH # 1 D | SITE # 17 | FIELD UTM 10 311170 6034042 GP3 | SITE LG 150 GE | ACCESS FT

DATE 20060611 | TIME 1240 | AGENCY C06 | CREW MJ, CL | FISH FORM Y [✓ N]

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	0.7	0.4	0.7	0.6	0.5	0.5 (0.6)	AL	
WETTED WIDTH (m)	T	0.6	0.3	0.3	0.3	0.3	0.2	7	8
RES. POOL DEPTH (m)	MD	0.08	0.11	0.07				4	9

W_b Dp (m) 0.15 0.3 0.4 MD | STAGE [✓ L] M H | No Vis. Ch. DW | Dry/Int. Tribs.

WATER

EMS | REQ. #

TEMP 9 C T3 | COND. S/cm

pH | TURB. T M L [✓ C] GE

MORPHOLOGY

FLD SNS N

BED MATERIAL Dominant F | Subdom. C

D95 (cm) 14 | D (cm) 2 | Morph. CP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 / C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS N SIDE DIAG MID SPAN BR

COUPLING DC PC [✓ CO]

CONFINEMENT EN [✓ CO] FC OC UN N/A

COVER

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	N	D	T	S	N
LOC	P	P	N	P	C	C	N

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A | DIST C [✓ E] | INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O | RB SHP [✓ U] V S O

TEXTURE [✓ F] G [✓ C] B R A | TEXTURE [✓ F] G [✓ C] B R A

RIP. VEG. N G S [✓ C] D M W | RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA | STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		
						R___ F___		
						R___ F___		13

HABITAT QUALITY

Tiny, shallow, too small to support seasonal use, No R,S,O hab for RB

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
Dig	784	ST	U	Bank
-"-	785	-"-	D	-"-

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C site from mouth

subter. flow becomes predominant 100m u/s from mouth

Too shallow to sample

C

56

14

SITE CARD

STREAM NAME (gaz.) | (local)

WATERSHED CODE 1803740009520000190995603060

ILP MAP # | ILP # [illegible] | NID MAP # 93K041 | NID #

REACH # 3 D 2.1 | SITE # 19 | FIELD UTM 10 0310448 6032405 GP3 | SITE LG 110 OT | ACCESS FT

DATE 20060614 | TIME 0700 | AGENCY C06 | CREW MJ, CL | FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	2.3	2.2	2.3	1.6	2.0	1.9 (2.1)	CL	
WETTED WIDTH (m)	T	1.5	2.0	1.1	1.4	1.3	1.4	6	7
RES. POOL DEPTH (m)	MS	0.12	0.34	0.18	0.			4	

W_b Dp (m) 0.5 0.5 0.5 MS | STAGE [✓ L] M H | No Vis. Ch. DW | Dry/Int. Tribs.

WATER

EMS | REQ. #

TEMP 8 C T3 | COND. 30 S/cm S4

pH | TURB. T M L [✓ C]

MORPHOLOGY

FLD SNS Debris piles

BED MATERIAL Dominant G | Subdom. C

D95 (cm) 22 | D (cm) 15 | Morph. CP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 [✓ D2] D3 / C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS N [✓ SIDE] [✓ DIAG] [✓ MID] SPAN BR

COUPLING DC PC [✓ CO]

CONFINEMENT EN CO [✓ FC] OC UN N/A

COVER

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	T	S	D	S	N
LOC	M	M	M	M	M	M	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A | DIST C [✓ E] | INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] S O | RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] B R A | TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G [✓ S] C D M W | RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ NA] | STAGE INIT SHR PS YF MF NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
			F	1	HC	R___ F___	Impassable preceded	10 310576 6032478 GP3
						R___ F___	by 50m long rock	
						R___ F___	rubble covering channel	15
						R___ F___		

HABITAT QUALITY

Overall poor habitat for fish, no spawning no O some R in rare pools. Stream easily accessible to RB. Likely dries during summer. Suitable for seasonal use.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
Dig.	786	ST	U	Probe used for Scale
Dig	787	ST	D	Scale = probe

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

C

53

16

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE 1,8,0,3,7,4,0,0,0,9,5,2,0,0,0,1,9,0,0,9,5,6,0,3,0,6,0

WATERBODY ID | ILP MAP # | ILP # | SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID | REACH # 2,1 | FISH PERMIT # SM06-24177

DATE 2006 06 14 to | AGENCY C016 | CREW MJ CL | ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
19	93L041		10 310443 6032405 GPS	EF 1	8	30	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
19	EF 1	1	NFc			0				

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.
	~~19~~												

17

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	19	EF 1	1	0600	0700	255	500	1.5	0	700	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

18

SITE CARD

STREAM NAME (gaz.) | (local)

WATERSHED CODE 1,8,0,3,7,4,0,0,0,9,5,2,0,0,0,1,9,0,0,9,5,6,0,3,0,6,0

ILP MAP # | ILP # | NID MAP # 93L041 | NID #

REACH # 3 D | SITE # 20 | FIELD UTM 10 0310627 6032514 GPS | SITE LG 100GE | ACCESS Ft

DATE 2006 06 14 | TIME 08 15 | AGENCY C016 | CREW MJ CL | FISH FORM [✓ Y] N

CHANNEL

	mthd								GRADIENT %	
CHANNEL WIDTH (m)	6E	2.7	2.8	1.7	2.4	2.1	2.2	(2.3)	CL	
WETTED WIDTH (m)	6E	2.2	2.6	1.3	1.6	1.7	1.7		5	6
RES. POOL DEPTH (m)	M>	0.20	0.30	0.35					5	4

Wb Dp (m) 0.4 0.6 0.6 0.3 | STAGE [✓ L] M H | No Vis. Ch. DW | Dry/Int. Tribs.

WATER

EMS | REQ. #

TEMP 8 C T3 | COND. 30 S/cm 3>

pH | TURB. T M L [✓ C] 6E

MORPHOLOGY

FLD SNS No

BED MATERIAL Dominant C | Subdom. G

D95 (cm) 35 | D (cm) 10 | Morph. CPB

DISTURBANCE INDICATORS: O1 B1 B2 B3 D1 [✓ D2] D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS N [✓ SIDE] DIAG MID SPAN BR

COUPLING DC PC [✓ CO]

CONFINEMENT EN CD [✓ FC] OC UN N/A

COVER

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	S	T	D	T	N
LOC							

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A | DIST C [✓ E] | INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] S O | RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A | TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A

RIP. VEG. N G S [✓ C] D M W | RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA | STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

19

HABITAT QUALITY

Slightly better habitat available, more pools, Good potential R, fair S - gravel patches in pools, No - O -> too shallow.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	788	ST	U	probe
DIG	789	ST	D	glove

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C | C

S6

20

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE 180374999952000190095603060

WATERBODY ID | ILP MAP # | ILP # | SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID | REACH # 3 – | FISH PERMIT # SM06-24177

DATE 20060614 to | AGENCY C016 | CREW MJ CL | ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	COND	TURB	COMMENTS
20	93K041		10 310627 6032514 GPS	EF 1	8	30	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
20	EF 1	1	NFC			0				

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

21

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	20	EF 1	1	0815	0830	244	150	1.7	0	700	60	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

22

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 93K041 | ILP # 00004 | NID MAP # | NID #

REACH # 1 D | SITE # 21 | FIELD UTM 10 301840 6033575 GPS | SITE LG 200 GE | ACCESS F

DATE 20060614 | TIME 1055 | AGENCY C016 | CREW MJ CL | FISH FORM Y [✓ N]

CHANNEL mthd

CHANNEL WIDTH (m)

WETTED WIDTH (m)

RES. POOL DEPTH (m)

W_b Dp (m)

GRADIENT % cl 20 17

STAGE L M H | [✓ No Vis. Ch.] DW | Dry/Int. | Tribs.

WATER

EMS | REQ. #

TEMP C | COND. S/cm

pH | TURB. T M L C

COVER

COVER Total

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE 0 1 2 3 4 5

LWD FNC N F A | DIST C E | INSTREAM VEG N A M V

LB SHP U V S O | RB SHP U V S O

TEXTURE F G C B R A | TEXTURE F G C B R A

RIP. VEG N G S C D M W | RIP. VEG. N G S C D M W

STAGE INIT SHR PS YF MF NA | STAGE INIT SHR PS YF MF NA

MORPHOLOGY

FLD SNS

BED MATERIAL Dominant | Subdom.

D95 (cm) | D (cm) | Morph

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR SI ST

ISLANDS N O I F S AN

BARS N SIDE DIAG MID SPAN BR

COUPLING DC PC CO

CONFINEMENT EN CO FC OC UN N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

23

HABITAT QUALITY

NFH – seepage

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	791	ST	up	x Book = Scale.

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Mark from point 65 – 83

Channelized for ~ 40 m from mouth but too steep for fish use. Beyond drains through swale with no thalweg or scour, or banks

C NCD

24

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 93K04) ILP # 00005 NID MAP # NID #

REACH # 1.1 0 SITE # 22 FIELD UTM 10 310123 6034357 GPS SITE LG 300 GE ACCESS FT

DATE 2006 06 14 TIME 1211 AGENCY C016 CREW MJ CL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	MT	1.5	1.4	1.6	1.3	1.6	1.3	CL	
WETTED WIDTH (m)	MT	1.0	1.2	1.0	1.1	1.3	1.0	3	4
RES. POOL DEPTH (m)	MT	0.11	0.18					5	

Ws Dp (m) 0.35 0.25 0.30 T STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER

EMS REQ. #

TEMP 9 C T3 COND. 40 S/cm SA

pH TURB. T M L [✓ C] SE

MORPHOLOGY

FLD SNS N

BED MATERIAL Dominant F Subdom. G

D95 (cm) 6 D (cm) 2 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR SI ST

ISLANDS N O I F S AN

BARS N SIDE DIAG MID SPAN BR

COUPLING DC PC CO

CONFINEMENT EN CO FC OC UN N/A

COVER

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	N	S	T	D	N
LOC	P	P		P	P	P	

CROWN CLOSURE 0 1 2 [✓ 3] 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A

RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ MA] STAGE INIT SHR PS YF MF [✓ MA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
			C	0.7 1.5		R DIG F 794		10 310280 6034293 GPS
						R__ F__		
						R__ F__		
						R__ F__		

25

HABITAT QUALITY

R- usable, accessible for RB from mouth, however lower section of reach consists of unpreferable RB hab for ~150 m

O- none

S- usable habitat up to the pond.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
Dig	792	ST	U	used book for scale.
Dig	793	ST	D	" "

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C ~~stream impassable d/t small C obstruction~~

C (S4)

26

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE

WATERBODY ID ILP MAP # 093K04) ILP # 00005 SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 1.1 - FISH PERMIT # SM06-24177

DATE 2006 06 14 to AGENCY C016 CREW MJ CL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	STREAM CONDITION CON	STREAM CONDITION TURB	COMMENTS
22			10 310123 6034357 GPS	EF 1	9	40	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
22	EF 1	1	NFC			0				

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

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C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	22	EF 1	1	1211	1240	143	300	1.5	0	600	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

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SITE CARD

STREAM NAME (gaz.) (local)
WATERSHED CODE
ILP MAP # 093K041 ILP # 00005 NID MAP # NID #
REACH # 2 D SITE # 23 FIELD UTM 10 310303 6034288 GP3 SITE LG 100 GE ACCESS FT
DATE 2000 06 14 TIME 13 00 AGENCY C016 CREW MJ CL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %		
CHANNEL WIDTH (m)	MT	1.2	0.95	1.3	1.1	1.1	0.8	CL		
WETTED WIDTH (m)	MT	0.8	0.6	0.8	0.8	0.9	0.7	to	1	*
RES. POOL DEPTH (m)	MT	0.11	0.2							

W_b Dp (m) 0.34 0.33 0.23 MT STAGE L M H No Vis. Ch. DW Dry/Int. Tribs.

WATER
EMS REQ. #
TEMP 11 C T3 COND. 40 S/cm >4
pH TURB. T M L O SE

MORPHOLOGY
FLD SNS N
BED MATERIAL Dominant F Subdom. N
D95 (cm) 0.1 D (cm) 0.1 Morph. LC
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM [✓ IR] SI ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING [✓ DC] PC CO
CONFINEMENT EN CO FC OC [✓ UN] N/A

COVER
COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	N	N	S	T	D	N
LOC	P	C	C	P	P	C	P

CROWN CLOSURE 0 1 2 3 [✓ 4] 5
LWD FNC [✓ N] F A DIST C E INSTREAM VEG [✓ N] A M V
LB SHP [✓ U] V S O RB SHP [✓ U] V S O
TEXTURE [✓ F] G [✓ C] B R A TEXTURE [✓ F] G [✓ C] B R A
RIP. VEG. N G [✓ S] C D M [✓ W] RIP. VEG. N G S C D M [✓ W]
STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

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HABITAT QUALITY

Unsuitable RB hab, Stream flows through W with shallows & mucky channel. Not preferable hab for RB
No O, S, R

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	795	ST	U	Glove
-"-	796	ST	D	-"-

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C C

S6

30

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND
WATERSHED CODE
WATERBODY ID ILP MAP # 093K041 ILP # 00005 SITE/LAKE CARD ATTACHED ☒ Y ☐ N
PROJECT ID REACH # 2 - FISH PERMIT # SM06-24177
DATE 2000 06 14 to AGENCY C016 CREW MJ CL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
23			10 310303 6034288 GP3	EF 1	11	40	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
23	EF 1	1	NFC			0				

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

31

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	23	EF 1	1	1300	1315	21	170	0.7	0	700	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

32

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 093K047 | ILP # 00006 | NID MAP # | NID #

REACH # 1 D | SITE # 24 | FIELD UTM 10 310251 6034348 GP3 | SITE LG 150 GE | ACCESS FT

DATE 2006 06 14 | TIME 1333 | AGENCY C016 | CREW MJ CL | FISH FORM Y [✓ N]

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	MT	1.8	1.2	1.1	1.3	1.1	1.3 (1.3)	CL	
WETTED WIDTH (m)	MT	0.8	0.9	0.8	0.7	0.9	1.0	1	2
RES. POOL DEPTH (m)	MT	0	0						

W$_b$ Dp (m) 0.25 0.4 0.4 MS | STAGE [✓ L] M H | No Vis. Ch. DW | Dry/Int. Tribs.

WATER
EMS | REQ. #
TEMP 9 C T7 | COND. 40 S/cm S4
pH | TURB. T M L [✓ C] GE
FLD SNS N

MORPHOLOGY
BED MATERIAL Dominant F | Subdom. N
D95 (cm) 0.1 | D (cm) 0.1 | Morph. RC
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3
C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM IR [✓ SI] ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING DC [✓ PC] CO
CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER
COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	N	N	D	N	S	N
LOC							

CROWN CLOSURE 0 1 2 [✓ 3] 4 5
LWD FNC [✓ N] F A | DIST C E | INSTREAM VEG [✓ N] A M V
LB SHP [✓ U] V S O | RB SHP [✓ U] V S O
TEXTURE [✓ F] G C B R A | TEXTURE [✓ F] G C B R A
RIP. VEG. N G [✓ S] C D M W | RIP. VEG. N G [✓ S] C D M W
STAGE INIT SHR PS YF MF [✓ NA] | STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		33
						R___ F___		
						R___ F___		

HABITAT QUALITY
No RB habitat, shallow stream, likely seasonal
already too shallow to sample. No D, S R hab.
lot's of organics in channel bed

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	797	SS	U	Probe
DIG	798	SS	D	Glove

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS
C | C
S6
34

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 093K047 | ILP # 00011 | NID MAP # | NID #

REACH # 1 D | SITE # 25 | FIELD UTM 10 308051 6037106 GP3 | SITE LG 100 GE | ACCESS FT

DATE 2006 06 14 | TIME 1500 | AGENCY C016 | CREW MJ CL | FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	MT	1.8	1.7	1.6	1.8	1.8	1.5 (1.7)	CL	
WETTED WIDTH (m)	MT	1.6	1.4	1.3	1.7	1.6	1.2	9	12
RES. POOL DEPTH (m)	MT	0.17							

W$_b$ Dp (m) 0.4 0.5 0.5 MS | STAGE [✓ L] M H | No Vis. Ch. DW | Dry/Int. Tribs.

WATER
EMS | REQ. #
TEMP 12 C T3 | COND. 20 S/cm S4
pH | TURB. T M L [✓ C] GE
FLD SNS N

MORPHOLOGY
BED MATERIAL Dominant G | Subdom. B
D95 (cm) 60 | D (cm) 7 | Morph. CPB
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3
C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM IR [✓ SI] ST
ISLANDS [✓ N] O I F S AN
BARS N SIDE [✓ DIAG] MID SPAN BR
COUPLING DC PC [✓ CO]
CONFINEMENT EN [✓ CO] FC OC UN N/A

COVER
COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	N	T	S	D	T	T	N
LOC	C	C	P	P	C	P	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5
LWD FNC N [✓ F] A | DIST C [✓ E] | INSTREAM VEG [✓ N] A M V
LB SHP [✓ U] V S O | RB SHP [✓ U] V S O
TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A | TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A
RIP. VEG. N G S [✓ C] D M W | RIP. VEG. N G S [✓ C] D M W
STAGE INIT SHR PS YF [✓ MF] NA | STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		
						R___ F___		35

HABITAT QUALITY
Good R hab in abundant B/CB type cover
S – F→G – gravel patches present @ small pools works
good holding areas
D – none – too shallow

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	799	SS	U	Glove
DIG	800	–"–	D	–"–

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS
C site from mouth
V. stable stream
C
S3
36

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND
WATERSHED CODE
WATERBODY ID ILP MAP # 93K041 ILP # 00011 SITE/LAKE CARD ATTACHED ☒ Y ☐ N
PROJECT ID REACH # 1 FISH PERMIT # SM06-24177
DATE 2006 06 14 to AGENCY C016 CREW MJ CL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB.	COMMENTS
25			10 308051 6037106 GP3	EF 1	12	20	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
25	EF 1	1	RB	J		1	110	110	R	

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

37

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	25	EF 1	1	1500	1501	10	2	1,5	0	700	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

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SITE CARD

STREAM NAME (gaz.) (local)
WATERSHED CODE
ILP MAP # 93K041 ILP # 00020 NID MAP # NID #
REACH # 1 D SITE # 27 FIELD UTM 10 306883 6036103 GP3 SITE LG 120 GE ACCESS TR
DATE 2006 06 15 TIME 1130 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL

	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	0,9	1,1	1,01	1,14	1,1	1,12	AL	
WETTED WIDTH (m)	T	0,6	0.6	0,69	0.75	0,6	0,9	2	Z
RES. POOL DEPTH (m)	MS	0,18	0.24					4	

W_b Dp (m) 0,3 0,37 0,44 M STAGE [✓ L] M H — No Vis. Ch. DW — Dry/Int. Tribs.

WATER

EMS REQ. #
TEMP 10 C T3 COND. 30 S/cm S3
pH TURB. T M L [✓ C] GE

MORPHOLOGY

FLD SNS No
BED MATERIAL Dominant F Subdom. C
D95 (cm) 20 D (cm) 2 Morph RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM [✓ IR] SI ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING [✓ DC] PC CO
CONFINEMENT EN CO FC OC [✓ UN] N/A

COVER

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	N	D	T	S	N
LOC	P	P	P	C	P	P	P

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C [✓ D] INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O — RB SHP [✓ U] V S O
TEXTURE [✓ F] G C B R A — TEXTURE [✓ F] G C B R A
RIP. VEG. N G [✓ S] C D M W — RIP. VEG. N G [✓ S] C D M W
STAGE INIT SHR PS YF MF [✓ NA] — STAGE INIT SHR PS YF MF NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		

39

HABITAT QUALITY

NFH — seasonal stream, unutilized by RB (second samp) → spring → NFP — No R, No S, D Substrate fines + organics — non conducive hab for RB. Stream expected to dry within next two weeks.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	802	ST	UD	Low gradient section
DIG	803	ST	U	glove

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

C

40

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☑ STREAM ☐ WETLAND

WATERSHED CODE

WATERBODY ID ILP MAP # 93K041 ILP # 00020 SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 1 - FISH PERMIT # SM06-24177

DATE 20060615 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
27			306883 6036103 GPS	EF 1	10	30	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
27	EF 1	1	NFC			0				

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

41

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	27	EF 1	1	1130	1145	62	200	0.7	0	700	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

42

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☐ STREAM ☐ WETLAND

WATERSHED CODE 480927700085400

WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☐ Y ☒ N

PROJECT ID REACH # 2 - FISH PERMIT # SM06-24177

DATE 20060615 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
28	93K041		10 312388 6038093 MHS	EF 1	16	40	C	
29	93K041		10 314714 6038525 GP3	EF 1	16	30	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
28	EF 1	1	LKC	J		9	60	110	R	
29	EF 1	1	LKC	J		3	60	120	R	

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

43

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
1	28	EF 1	1	1500	1525	220	200	2	0	700	80	6	SR	12B
	29	EF 1	1	1600	1613	122	100	2.5		700	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

1 Anode Range

44

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 93K041 ILP # 41013 NID MAP # NID #

REACH # 3 D SITE # 30 FIELD UTM 10 314194 6039247 GP3 SITE LG 200 DT ACCESS FT

DATE 2006 06 16 TIME 0651 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	07	1.2	10	04		(0.8)	A	L
WETTED WIDTH (m)	T	07	1.2	08	04			1	1
RES. POOL DEPTH (m)	?	0.20							

W_b Dp (m) 0.5 0.2 0.15 STAGE L [✓ M] H No Vis. Ch. DW Dry/Int. Tribs.

EMS			REQ. #		
TEMP	11 C	T3	COND.	30 S/cm	S4
pH			TURB.	T M L [✓ C]	GE

FLD SNS N

BED MATERIAL Dominant F Subdom. NA

D95 (cm) 0.01 D (cm) 0.01 Morph. LC

COVER

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	N	N	S	S	D	T
LOC	P			P	P	P	P

CROWN CLOSURE 0 1 2 3 [✓ 4] 5

LWD FNC [✓ N] F A DIST C E INSTREAM VEG N A [✓ M] [✓ V]

LB SHP U V [✓ S] O RB SHP U V [✓ S] O

TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A

RIP. VEG. N G S C D M [✓ W] RIP. VEG. N G S C D M [✓ W]

STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

MORPHOLOGY

DISTURBANCE INDICATORS O1 B1 B2 B3 [✓ D1] D2 D3

C1 C2 C3 [✓ C4] C5 S1 S2 S3 S4 S5

PATTERN TM ME [✓ IM] IR SI ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC OC [✓ UN] N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

45

HABITAT QUALITY

NFH - no RB hab, shallow, mucky channel, organics in channel bed, high water temps during summer, No R, S, O hab

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	804	ST	X	No scale, - General view of lower section of reach
DIG	805	ST	U/S	Upstream, scale = T,
DIG	806	ST	D/S	D/S,

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C site = UTM

C 56 / W

46

COMBINED FISH COLLECTION

GAZETTED NAME (local) ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE

WATERBODY ID ILP MAP # 93K041 ILP # 41013 SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 3 - FISH PERMIT # SM06-24177

DATE 2006 06 16 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
30			10 314194 6039247 GP3	EF 1	11	30	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
30	EF 1	1	LKC		J	3	50	90	R	

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

47

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
1	30	EF 1	1	0651	0720	55	200	1	O	700	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

1 Very shallow, mucky stream F, organic bottom

48

SITE CARD

STREAM NAME (gaz.) (local)

WATERSHED CODE

ILP MAP # 93K041 ILP # 00016 NID MAP # NID #

REACH # 1 D SITE # 31 FIELD UTM 10 313135 6039699 GP3 SITE LG 100 GE ACCESS T

DATE 20080616 TIME 0820 AGENCY C016 CREW MJ JL FISH FORM Y [✓ N]

CHANNEL	mthd								GRADIENT %	
CHANNEL WIDTH (m)	1.1	1.3	1.1	1.0	0.9	0.8			AL	
WETTED WIDTH (m)	0.7	0.55	0.95	0.25	0.6	0			4	4
RES. POOL DEPTH (m)	0.20	0.24	0.16							

W_b Dp (m) 0.30, 0.10, 0.15, T STAGE [✓ L] M H No Vis. Ch. DW Dry/[✓ Int.] Tribs.

EMS TEMP 10 C T3 REQ. # COND. 20 S/cm S4

pH TURB. T M L [✓ C] GE

FLD SNS Fluvial m on banks

BED MATERIAL Dominant F Subdom. C

D95 (cm) 20 D (cm) 0.1 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM [✓ IR] SI ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	S	T	D	S	N
LOC	P	P	P	P	P	P	

CROWN CLOSURE 0 1 2 [✓ 3] 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP U V [✓ S] O RB SHP U V [✓ S] O

TEXTURE [✓ F] G [✓ C] B R A TEXTURE [✓ F] G [✓ C] B R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		49
						R__ F__		

HABITAT QUALITY

NFH - stream drains to confirmed NFB stream. Seasonal creek, already intermittent flow, - only dry algae from last year indicate only seasonal flow.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	807	ST	U	Scale = Tape
DIG	808	ST	D	Scale = Tape

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Site = UTM

1 Boulder Cover - Cobbles

C

56

50

SITE CARD

STREAM NAME (gaz.) (local) A80578

WATERSHED CODE 480595100

ILP MAP # ILP # NID MAP # NID #

REACH # 1 D SITE # 36 FIELD UTM 9 670983 6100328 GP3 SITE LG 120 GE ACCESS 3

DATE 20060703 TIME 1358 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL	mthd								GRADIENT %	
CHANNEL WIDTH (m)	T	2.3	2.2	2.2	2.0	1.8	2.4	2.15	AL	
WETTED WIDTH (m)	T	0.8	1.5	1.2	1	0.8	0.5		4	3
RES. POOL DEPTH (m)	T	0.3							5	2

W_b Dp (m) 0.4, 0.3, 0.3, T STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

EMS TEMP 11 C T3 REQ. # COND. 70 S/cm S4

pH 7 P4 TURB. T M L [✓ C]

FLD SNS None

BED MATERIAL Dominant G Subdom. ~~G~~ F

D95 (cm) 8 D (cm) 8 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 [✓ D1] D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS N [✓ O] I F S AN

BARS N [✓ SIDE] [✓ DIAG] MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	N	D	T	T	N
LOC	P	P		P	P	P	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] C B R A TEXTURE [✓ F] [✓ G] C B R A

RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__	~~S4/S5 = 20m D/S side~~	~~9 1670786 16100029 GP3~~
						R__ F__	~~END~~	
						R__ F__		51
						R__ F__		

HABITAT QUALITY

R • Mod • shallow creek cover under cutbanks mostly, but few shallow pools; S • Fair - abundant Gravel & Good Holding places but H_2O levels compromises quality (low H_2O levels). O • None observed in this reach

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	874	STD	V	Tape
DIG	875	STD	D	Tape

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Stream used by CO

&

Critical habitat for CO in lower ~200 m

C

53

52

COMBINED FISH COLLECTION

GAZETTED NAME (local) ~~A80~~ A80575 ☐ LAKE ☑ STREAM ☐ WETLAND

WATERSHED CODE 480595199

WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☑ Y ☐ N

PROJECT ID REACH # 1 FISH PERMIT # SM06-24177

DATE 20060703 to AGENCY C016 CREW MJ JC ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
36			9 670983 6100328 GP3	EF 1	11	70	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
36	EF 1	1	CO		0+	7	43	53	R	abundant CO
36	EF 1	1	CAS			5	42	64	R	

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

53

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
		EF 1	1	1358	2:03	61	100	1	O	400	90	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
		EF 1	1	CO												R__ F__
		EF 1		CO												R__ F__
				CAS												R__ F__
				CO												R__ F__
				CAS												R__ F__
				CO												R__ F__
				CO												R__ F__
				CAS												R__ F__
				CAS												R__ F__
				CO												R__ F__
				CO												R__ F__
				CAS												R__ F__

CO abundant smolting process observed, found only within 60m from mouth

54

SITE CARD

STREAM NAME (gaz.) (local) A80578

WATERSHED CODE 480595100

ILP MAP # 093K.009 ILP # NID MAP # 093K.041 NID #

REACH # 2 D SITE # 37 FIELD UTM 9 670233 6099492 GP3 SITE LG 200 GE ACCESS V4

DATE 20060629 TIME 0830 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	2.20	2.0	1.9	1.7	2.2	0.9	AL	
WETTED WIDTH (m)	T	0.70	1.25	1.1	1.2	1.3	0.9	3	5
RES. POOL DEPTH (m)	MS	0.19	0.10	0.13	0.43	0.37		4	5

W_b Dp (m) 0.44 0.45 0.52 ND STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER

EMS REQ. #

TEMP 7 C T3 COND. 100 S/cm S4

pH 6.5 P2 TURB. T M L [✓ C] 6

FLD SNS No

MORPHOLOGY

BED MATERIAL Dominant F Subdom. G

D95 (cm) 15 D (cm) 4 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM [✓ IR] SI ST

ISLANDS N [✓ O] I F S AN

BARS N [✓ SIDE] DIAG MID SPAN BR

COUPLING DC [✓ PC] CO

CONFINEMENT EN CO [✓ FC] OC UN N/A

COVER

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	T	T	D	S	N
LOC	P	P	P	P	P	P	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ E] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] B R A TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		

55

HABITAT QUALITY

R·M/G-lots of Cover, but water level drops Fast. Stream likely dry or intermit. later in season

S·N/F Very few sml gravel patches but mixed c̄ fines (Fines ~ 80%)

O·N-Likely too shallow even if few DPs during winter

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	826	ST	U	Probe (photo 827 messed up.)
DIG	828	S1	D	Probe

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C C

(53)

56

COMBINED FISH COLLECTION

GAZETTED NAME (local) A80578 ☐ LAKE ☑ STREAM ☐ WETLAND
WATERSHED CODE 480 595100
WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☑ Y ☐ N
PROJECT ID REACH # FISH PERMIT # SM06-24177
DATE 2006 06 29 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
37			9 670233 6099492 GPS	EF 1	7	100	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
37	EF 1	1	NFC			0				

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

57

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	37	EF 1	1	0830	0900	173	200	1	0	500	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

58

SITE CARD

STREAM NAME (gaz.) (local) A 80528
WATERSHED CODE 480 568000 060 200
ILP MAP # ILP # NID MAP # 93L098 NID #
REACH # 2 0 SITE # 39 FIELD UTM 9 663844 6097560 MAP SITE LG 200 GE ACCESS FT
DATE 2006 06 29 TIME 11 20 AGENCY C016 CREW MJ JL FISH FORM Y [✓ N]

CHANNEL

	mthd							
CHANNEL WIDTH (m)	T	2.3	2.27	2.13	1.52	1.6	1.4	1.87
WETTED WIDTH (m)	T	1.1	1.8	1.1	0.6	0.2	0.3	
RES. POOL DEPTH (m)	T	0.16	0.13	0.14	0.2			

GRADIENT %: CL; 24, 26; 29

W_b Dp (m) 0.5 0.5 1.0 F STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER

EMS REQ. #
TEMP 6 C T3 COND. 30 S/cm SG
pH TURB. T M L [✓ O] GE

COVER

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	N	N	S	N	D	T	N
LOC			P		D		

CROWN CLOSURE 0 [✓ 1] 2 3 4 5

LWD FNC [✓ N] F A DIST C E INSTREAM VEG [✓ N] A M V
LB SHP U [✓ V] S O RB SHP U [✓ V] S O
TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A
RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W
STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

MORPHOLOGY

FLD SNS N
BED MATERIAL Dominant C Subdom. B
D95 (cm) 400 D (cm) 30 Morph.
DISTURBANCE INDICATORS O1 B1 [✓ B2] B3 D1 [✓ D2] D3
C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM IR [✓ S] ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING DC PC [✓ CO]
CONFINEMENT [✓ EN] CO FC OC UN N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
	93L098		FSB			R DG F 833	stream fans out @	9 663806 6097739 GPS
						R__ F__		
						R__ F__		59
						R__ F__		

HABITAT QUALITY

NFH → stream too steep for fish use

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DG	831	SP	U	Person
-11-	832	-11-	D	Person
-11-	833	-11-	U	FSB - back

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

u/s point

St stream dry ~ 200 m d/s from upper point

C

56

60

SITE CARD

STREAM NAME (gaz.) (local) -A80528
WATERSHED CODE 480568000
ILP MAP # ILP # NID MAP # NID #
REACH # 2 D SITE # 40 FIELD UTM 9 663622 6097268 GP3 SITE LG 200 ACCESS FT
DATE 2006 06 29 TIME 1035 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL	mthd								GRADIENT %	
CHANNEL WIDTH (m)	T	1,43	1.88	1,30	1,45	1,7	1,52	1,55	AL	
WETTED WIDTH (m)	T	1,05	1,80	1,1	1,1	,63	1,4		4	8
RES. POOL DEPTH (m)	PS	0,14	0,22	0,11	0,18					

W_b Dp (m) 0.36 0.31 0.35 MS STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

EMS		REQ. #
TEMP	6 C T3	COND. 20 S/cm S4
pH		TURB. T M L [✓ C] GC
FLD SNS	N	
BED MATERIAL Dominant	G	Subdom. C
D95 (cm) 25	D (cm) 6	Morph. CP

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	S	S	T	D	T	N
LOC	P	P	P	P	P	P	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N F [✓ A] DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

DISTURBANCE INDICATORS O1 B1 B2 B3 [✓ D1] D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST
ISLANDS N [✓ O] I F S AN
BARS N [✓ SIDE] [✓ DIAG] MID SPAN BR
COUPLING DC PC [✓ CO]
CONFINEMENT EN [✓ CO] FC OC UN N/A

WATER MORPHOLOGY COVER

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
	93L098		VB	140	O	R__ F__	Dry, steep gradient (28%)	9 663502 6097601 GP3
						R__ F__	@ present, impassable	
						R__ F__	to fish @ any flow	61
						R__ F__		

HABITAT QUALITY

R-M-G - abundant & diverse cover, stream seems perennial
u/s of steep %
S-M- usable gravel & holding pr
O-N- too shallow,
Stream inaccessible from parent stream d/t
steep ~~%~~% just above xing (28% for 140m)

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	829	STD	U	Perron
DIG	830	STD	D	Perron

WILDLIFE

GROUP	#	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C C

S6

62

GAZETTED NAME (local) A80528 ☐ LAKE ☒ STREAM ☐ WETLAND
WATERSHED CODE 480568000
WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☒ Y ☐ N
PROJECT ID REACH # 2 FISH PERMIT # SM06-24177
DATE 2006 06 29 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
40	93L098		9 663622 6097268 GP3	EF 1	6	20	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
40	EF 1	1	NFC			0				

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.
													63

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	40	EF 1	1	1035	1045	214	200	1.3	O	700	60	6	LR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

64

SITE CARD

STREAM NAME (gaz.) (local) A80577 & A80580
WATERSHED CODE
ILP MAP # 93M008 ILP # 11067 NID MAP # NID #
REACH # 1 D SITE # 41 FIELD UTM 9 664153 6101782 GP3 SITE LG 200 GE ACCESS B
DATE 2006 06 30 TIME 1020 AGENCY C016 CREW MS JC FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	3.2	2.3	4.1	3.9	4.2	2.6	AL	
WETTED WIDTH (m)	T	1.5	1.2	1	0.5	1.2	0.5	10	22
RES. POOL DEPTH (m)	MS	0.2	0.2						

W_b Dp (m) 0.5 0.7 0.9 MS STAGE [✓ L] M H No Vis. Ch. DW Dry/[✓ Int] Tribs.

WATER					
EMS			REQ. #		
TEMP	8 C	T3	COND.	90 S/cm	34
pH			TURB.	T M L [✓ C]	GF

FLD SNS Debris Jams, suspended mud

MORPHOLOGY					
BED MATERIAL	Dominant	B	Subdom.	C	
D95 (cm)	400	D (cm)	40	Morph.	CP

DISTURBANCE INDICATORS: O1 B1 B2 B3 [✓ D1] [✓ D2] D3 [✓ C1] C2 [✓ C3] [✓ C4] C5 S1 S2 S3 S4 S5
PATTERN: TM ME IM IR SI [✓ ST]
ISLANDS: [✓ N] O I F S AN
BARS: N SIDE [✓ DIAG] [✓ MID] SPAN BR
COUPLING: DC PC [✓ CO]
CONFINEMENT: [✓ EN] CO FC OC UN N/A

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	N	N	D	N	S	T	N
LOC			P		P	P	

CROWN CLOSURE: 0 [✓ 1] 2 3 4 5

LWD FNC N [✓ F] A DIST [✓ C] E INSTREAM VEG [✓ N] A M V
LB SHP U V S [✓ O] RB SHP U V S [✓ O]
TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A
RIP. VEG [✓ N] G S C D M W RIP. VEG. N G [✓ S] C D M W
STAGE [✓ INIT] SHR PS YF MF NA STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
	93M008		SMA			R__ F__	Real Mouth Location	9 664253 6102014 GP3
	93M008		DW			R D6 F 840	ENDS @ 664141, 6101824	9 664255 6102014 1985
						R__ F__	664153, 6101782	
						R__ F__		

65

HABITAT QUALITY

No FH - steep stream, no ISC @ MF or H F, stream doesn't provide protection for fish although theoretically accessable DW for most of length. Abundant INV indicates fish absense. Stream impossible to fish @ any Flow conditions

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	838	~~STD~~	U	Person
DIG	839	STD	D	Person
DIG	840	STD	U	— " —

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS
			-

COMMENTS

C C

55

66

COMBINED FISH COLLECTION

GAZETTED NAME (local) A80577 ☐ LAKE ☒ STREAM ☐ WETLAND
WATERSHED CODE
WATERBODY ID ILP MAP # 93006 ILP # 11067 SITE/LAKE CARD ATTACHED ☑ Y ☐ N
PROJECT ID REACH # 1 - FISH PERMIT # SM06-24177
DATE 2006 06 30 to AGENCY C016 CREW MS JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB.	COMMENTS
41			9 664153 6101782 GP3	EF 1	8	90	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
41	EF 1 1	1	NFC			0				

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

67

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	41	EF 1	1	10:20	10:50	103	200	0.5	0	600	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

68

SITE CARD

STREAM NAME (gaz.) (local) A 80582

WATERSHED CODE

ILP MAP # 93M008 ILP # 11068 NID MAP # NID #

REACH # 1 D SITE # 43 FIELD UTM 9 663120 6100065 G3 SITE LG 150 GE ACCESS FT

DATE 2006 06 29 TIME 1600 AGENCY C016 CREW MJ JL FISH FORM Y [✓ N]

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.70	1.6	1.7	1.7	20	21	AC	
WETTED WIDTH (m)	T	1.0	0.55	0.8	1.0	0	0.5	3	3
RES. POOL DEPTH (m)	Ms	0	0					2	

W_b Dp (m) 0.4 0.4 0.3 Ms STAGE [✓ L] M H No Vis. Ch. DW Dry/[✓ Int.] Tribs.

WATER			
EMS		REQ. #	
TEMP	9 C T3	COND.	90 S/cm SH
pH		TURB.	T M L [✓ C] GE

FLD SNS N

BED MATERIAL Dominant C Subdom. F

D95 (cm) 20 D (cm) 3 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 [✓ D1] D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER I Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	D	T	N	S	N
LOC	P	P	P	P		P	P

CROWN CLOSURE 0 1 2 [✓ 3] 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O RB SHP [✓ U] V S O

TEXTURE [✓ F] G [✓ C] B R A TEXTURE [✓ F] G [✓ C] B R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		
						R___ F___		69
						R___ F___		

HABITAT QUALITY

O&S N - shallow intermittent will dry in 2 weeks no gravels,
R - still some useable habitat available for R where water is present but deteriates by day.

FSZ

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	886	ST	U	Tape
DIG	837	ST	D	Tape

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C ~~@ UTM 9.663120.6100065 stream flows into NCD~~

I Boulders cover = cobbles

Not sampled due to shallow water (S6?)

S6

70

SITE CARD

STREAM NAME (gaz.) (local) A 80583

WATERSHED CODE 480558809

ILP MAP # ILP # NID MAP # 93M008 NID #

REACH # 3 D SITE # 44 FIELD UTM 9 661496 6101530 G3 SITE LG 100 GE ACCESS V4

DATE 2006 06 29 TIME 1340 AGENCY C0 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	20	295	265	28	23	2.4	AC	
WETTED WIDTH (m)	T	17	0.84	1.30	17	1.3	1.5	2	1
RES. POOL DEPTH (m)	MS	0.5	0.2	0.29	0.14				

W_b Dp (m) 0.3, 0.2, 0.3, Ms STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER			
EMS		REQ. #	
TEMP	10 C 73	COND.	60 S/cm S4
pH		TURB.	T M L [✓ C]

FLD SNS N

BED MATERIAL Dominant C Subdom. G

D95 (cm) 15 D (cm) 3 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 [✓ D1] D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS N [✓ O] I F S AN

BARS N [✓ SIDE] [✓ DIAG] MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	N	T	D	S	T
LOC	P	P		P	P	P	P

CROWN CLOSURE 0 1 2 [✓ 3] 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG N A [✓ M] [✓ V]

LB SHP U V [✓ S] O RB SHP U V [✓ S] O

TEXTURE [✓ F] [✓ G] [✓ C] B R A TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		
						R___ F___		71
						R___ F___		

HABITAT QUALITY

R - F-M - affected by low flows → mainly in DP
S - P-F - v. few patches, all utilized of SP RB, good holding
O - F → few good pools, apparently suitable - SP fish observed → too small size to be from Babine L.

FSZ

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	834	SSD	U	Person
DIG	835	SSD	D	Probe

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

S3

72

COMBINED FISH COLLECTION

GAZETTED NAME (local) A80583 ☐ LAKE ☒ STREAM ☐ WETLAND
WATERSHED CODE 480 558800
WATERBODY ID ILP MAP # – ILP # SITE/LAKE CARD ATTACHED ☒ Y ☐ N
PROJECT ID REACH # 3 – FISH PERMIT # SM06-24177
DATE 20060629 to AGENCY C06 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
44			9 664406 6015306 GP3	EF 1	10	60	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
44	EF 1	1	RB			1	230	230	S	3 redds noted

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

73

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	44	EF 1	1	14:40	14:50	90	50	1.5	0	600	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R_ F_
														–		R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_

74

SITE CARD

STREAM NAME (gaz.) (local) North Road 51km
WATERSHED CODE
ILP MAP # 093L058 ILP # 00104 NID MAP # NID #
REACH # 3 0 SITE # 46 FIELD UTM 9 656172 6041540 GPS SITE LG 100 GE ACCESS FT
DATE 20060704 TIME 07155 AGENCY C06 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	2.3	1.8	1.7	2.1	1.9	1.6	AL	
WETTED WIDTH (m)	T	0.9	0.6	1.5	1.1	0.8	1	1	2
RES. POOL DEPTH (m)	MS	0.18	0.6	0.5				1	

W_b Dp (m) 0.5 0.6 0.5 MS STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER

EMS REQ. #
TEMP 12 C T3 COND. 70 S/cm SM
pH 6.4 P4 TURB. T M L [✓ C] SE
FLD SNS N

MORPHOLOGY

BED MATERIAL Dominant F Subdom. NA
D95 (cm) 1cm D (cm) 0.01 Morph. LC
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM [✓ IR] SI ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING [✓ DC] PC CO
CONFINEMENT EN CO FC OC [✓ UN] N/A

COVER

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	N	N	S	T	D
LOC	P	P			P	P	P

CROWN CLOSURE 0 [✓ 1] 2 3 4 5
LWD FNC N [✓ P] A DIST C [✓ E] INSTREAM VEG N A [✓ M] V
LB SHP U [✓ V] S O RB SHP U [✓ V] S O
TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A
RIP. VEG. N G S C D M [✓ W] RIP. VEG. N G S C D M [✓ W]
STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
			BR	4		R DIG F 876	Bridge = Barrier	9 656172 6041540
						R__ F__		
						R__ F__		
						R__ F__		

75

HABITAT QUALITY

No RB hab. Stagnant swampy creek with dense ISV matts. ~~A0 S~~, Likely O_2 deficiency d/t thick organic layer in stream bed and no flow.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	876	STD	D	Feature Bridge (Person)
DIG	878	STD	D	Probe
DIG	877	STD	U	Probe

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Very Sparse Fish Population below Bridge.

C 53/56

76

COMBINED FISH COLLECTION

GAZETTED NAME (local) North Rd. ☐ LAKE ☑ STREAM ☐ WETLAND
WATERSHED CODE
WATERBODY ID ILP MAP # 093L058 ILP # 00104 SITE/LAKE CARD ATTACHED ☑ Y ☐ N
PROJECT ID REACH # 3 - FISH PERMIT # SM06-24177
DATE 20060714 to AGENCY C016 CREW MJ JY ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
45		EF1	9 656108 6047796 GP3	EF1 1	12	70	C	samp @ xing
46		EF2	9 656172 6047540 GP3	EF1 2	12	70	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
45	EF1 1	1	RB	A		1	155	155	R	@ xing
46	EF1 1	2	NFC			0				

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	45	EF1 1	1	8:05	8:50	324	200	1.2	O	700	80	6	SR	12B
	46	EF1 1	2	8:55	9:09	150	150	0.9	O	600	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
	45	EF1 1	1	RB	155											R__ F__
		E														R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

C Below Bridge 324

SITE CARD

STREAM NAME (gaz.) (local) A77775-1
WATERSHED CODE
ILP MAP # 093L047 ILP # 00105 NID MAP # NID #
REACH # 1 B SITE # 47 FIELD UTM 9 647270 6037952 GP3 SITE LG 200 GE ACCESS FT
DATE 20060730 TIME 1130 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL

	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.6	1.2	1.7	1.7	1.4	1.7	AL	
WETTED WIDTH (m)	T	0	0	0	1.0	0	0	10	2
RES. POOL DEPTH (m)	MS	0.32							

W_b Dp (m) 0.4 0.2 0.4 MS STAGE [✓ L] M H
No Vis. Ch. DW [✓ Dry/Int.] Tribs.

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	D	T	T	S	N
LOC	C	C	P	P	C	P	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5
LWD FNC N [✓ F] A DIST C/[✓ E] INSTREAM VEG [✓ N] A M V
LB SHP U [✓ V] S O RB SHP U [✓ V] S O
TEXTURE [✓ F] G [✓ C] [✓ B] R A TEXTURE [✓ F] G [✓ C] [✓ B] R A
RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W
STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

WATER

EMS REQ. #
TEMP 12 C TJ COND. 120 S/cm Su
pH TURB. T M L [✓ C] Gu
FLD SNS N

MORPHOLOGY

BED MATERIAL Dominant C Subdom. G
D95 (cm) 30 D (cm) 5 Morph. CP B
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM IR [✓ SI] ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING DC PC [✓ CD]
CONFINEMENT EN [✓ CO] FC OC UN N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

HABITAT QUALITY

R - P - v. little cover at LoF
S - P - gravels abundant but likely too dry for fish to hatch
O - ~~M~~ - move to prevent stream or to the lake pools are too shallow & stream likely dries up in August

FSZ 0

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	944	TE	X	RB Photo
↓	945	35	U	book
↓	947	ST	D	book

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Stream dry at the mouth for 50m
CWDS ; 1.58; 1.24; 1.71; 1.65; 1.41; 1.70 (1.55)
WB DS ; 0.39; 0.23; 0.17; 0.31; 0.37; 0.37

CW US 1.43; 1.22; 1.82; 1.44; 1.42; 1.31 (1.44)
WB US 0.48; 0.32; 0.31; 0.30; 0.29; 0.45 (0.36)
Wetted width 0.25; 0.45; 0.60; 0.95; 0.60; 0.20

C UTM 9 648133 6037910 subtract 80m for S3/S4
Stream easily accessible to fish. RB capt d/s
S3/S4

COMBINED FISH COLLECTION

GAZETTED NAME (local) A77775-1 ☐ LAKE ✓ STREAM ☐ WETLAND

WATERSHED CODE

WATERBODY ID ILP MAP # 93L047 ILP # 00105 SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 1 FISH PERMIT # SM06-24177

DATE 2006 07 30 to AGENCY C016 CREW MJ RD ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
47			9 647270 6037952 GP3	EF 1	12	120	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
47	EF 1	1	RB	J		1	87	87	R	

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

81

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	47	EF 1	1	1135	1135	15	3	1	0	400	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
	47	EF 1	1	RB	87											R DIG F 945
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

82

SITE CARD

STREAM NAME (gaz.) (local) Stv 1 BK77774

WATERSHED CODE

ILP MAP # 093L047 ILP # 00106 NID MAP # NID #

REACH # 5 0 SITE # 48 FIELD UTM 9 648064 6036143 GP3 SITE LG 100 GE ACCESS FT

DATE 2006 07 30 TIME 1455 AGENCY C06 CREW MS SL FISH FORM Y [✓ N]

CHANNEL

	mthd						
CHANNEL WIDTH (m)	T	1.25	1.19	1.21	1.18	1.19	1.06
WETTED WIDTH (m)	T	0	0	0	0	0	0
RES. POOL DEPTH (m)	T	0					

GRADIENT % AL 9 11

W_b Dp (m) 0.30 0.24 0.26 MS STAGE [✓ L] M H No Vis. Ch. DW [✓ Dry/Int.] Tribs.

WATER

EMS REQ. #

TEMP — C COND — S/cm

pH — TURB. T M L C

FLD SNS N

MORPHOLOGY

BED MATERIAL Dominant G Subdom. F

D95 (cm) 10 D (cm) 6 Morph. CP

DISTURBANCE INDICATORS D1 B1 B2 B3 D1 D2 D3 / C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING DC PC [✓ CD]

CONFINEMENT EN [✓ CO] FC OC UN N/A

COVER

COVER Total N

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C E

INSTREAM VEG [✓ N] A M V

LB SHP U [✓ V] [✓ S] O — RB SHP U [✓ V] [✓ S] O

TEXTURE [✓ F] [✓ G] [✓ C] B R A — TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G S C D [✓ M] W — RIP. VEG. N G S C D [✓ M] W

STAGE INIT SHR PS YF [✓ MF] NA — STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

83

HABITAT QUALITY

NFH - small stream watered during runoff only
Watered for too short period of time for
seasonal fish use

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	948	ST	U	Tape
DIG	949	ST	D	Tape

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C W_bDp(m) con'd; 0.2; 0.25; 0.27

C

SG

84

SITE CARD

STREAM NAME (gaz.) A77774 (local) Matthieu C. - str 1

WATERSHED CODE

ILP MAP # 093L047 ILP # 00106 NID MAP # NID #

REACH # 3 D SITE # 50 FIELD UTM 9 645851 6033178 GP3 SITE LG 150 GE ACCESS VZ

DATE 20060825 TIME 0850 AGENCY C016 CREW MJ JL FISH FORM Y [✓ N]

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1,4	1,5	1,6	1,4	1.5	1.6	AL	
WETTED WIDTH (m)	GE	0	0	0	0	0	0	3	2
RES. POOL DEPTH (m)	GE	0						5	

W_b Dp (m) 0.2 0.35 0.3 MJ STAGE [✓ L] M H No Vis. Ch. DW [✓ Dry/Int.] Tribs.

COVER

COVER Total N

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N F A DIST C E INSTREAM VEG N A M [✓ V]

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] B R A TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W

STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

WATER

EMS REQ. #

TEMP — C COND. — S/cm

pH — TURB. ~~I M L C~~

MORPHOLOGY

FLD SNS None

BED MATERIAL Dominant F Subdom. G

D95 (cm) 15 D (cm) 12 Morph. RP

DISTURBANCE INDICATORS O1 B1 [✓ B2] B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC OC [✓ UN] N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R F		
						R F		
						R F		85
						R F		

HABITAT QUALITY

NFH - seasonal small stream, drains to DW which is almost dry. Local resident confirms that stream was watered only during spring freshet over last 40 yrs. No seasonal fish use

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1088	ST	U	
DIG	1089	ST	D	
DIG	1090	ST	X	view of DW

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

C

56

86

SITE CARD

STREAM NAME (gaz.) (local) 77773-1 str D

WATERSHED CODE

ILP MAP # 093L068 ILP # 00109 NID MAP # NID #

REACH # 2 D SITE # 52 FIELD UTM 9 660137 6058770 GP3 SITE LG 400 GE ACCESS F

DATE 20060825 TIME 1550 AGENCY C016 CREW MJ JL FISH FORM Y [✓ N]

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.3	1.2	1.4	1.0	1.2	1.4	AL	
WETTED WIDTH (m)	GE	0	0	0	0	0	0	4	5
RES. POOL DEPTH (m)	GE	0						3	

W_b Dp (m) 0.28 0.31 0.3 MS STAGE [✓ L] M H No Vis. Ch. DW [✓ Dry/Int.] Tribs.

COVER

COVER Total N

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O RB SHP [✓ U] V S O

TEXTURE [✓ F] [✓ G] [✓ C] B R A TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] [✓ NA]

WATER

EMS REQ. #

TEMP — C COND. — S/cm

pH — TURB. ~~I M L~~ C

MORPHOLOGY

FLD SNS N

BED MATERIAL Dominant C Subdom. G

D95 (cm) 20 D (cm) 5 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM [✓ IR] SI ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
	93L068		SP			R DIG F 1097	Small spring (4°C)	9 660137 6058770 GP3
	93L068		FSB	25	HC	R F	Discontinuous channel for	9 660137 6058770 GP3
						R F	2K - definite obstr. in addition	87
						R F	to runoff flow u/s of SP	

HABITAT QUALITY

Small & seasonal stream, watered for ~ 2 months, sections of overland flow, inaccessible to fish d/t subterranean flow just u/s of small spring.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1095	ST	U	
DIG	1096	ST	D	

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C xing UTM 9,660202.6058940

WB:=0.32, 0.28, 0.35, 0.31, 0.34, 0.3

Within 30m ~~[illegible]~~ xing stream has surface flow for 2 short distances 10m & 5m. Otherwise continuous u/s & d/s

C

56

88

SITE CARD

STREAM NAME (gaz.) (local) 77773-1 str ~~A~~

WATERSHED CODE

ILP MAP # 093L068 ILP # 00112 NID MAP # NID #

REACH # 3 D SITE # 55 FIELD UTM 9 660288 6057927 GP3 SITE LG 300 GE ACCESS FT

DATE 2006 08 25 TIME 18 30 AGENCY C016 CREW MJ JL FISH FORM Y ~~N~~

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.6	1.3	1.8	1.6	1.6	1.3	AL	
WETTED WIDTH (m)	GE	0	0	0	0	0	0	5	7
RES. POOL DEPTH (m)	~~GE~~	0						2	3

W_b Dp (m) 0.32 0.21 0.31 MS STAGE [✓ L] M H No Vis. Ch. DW [✓ Dry] Int. Tribs.

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

COVER Total N

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O RB SHP [✓ U] V S O

TEXTURE [✓ F] [✓ G] [✓ C] B R A TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

EMS REQ. #

TEMP — C COND. ~~S/cm~~

pH — TURB. T ~~M L C~~

FLD SNS N

BED MATERIAL Dominant G Subdom. C

D95 (cm) 30 D (cm) 10 Morph.

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING DC [✓ PC] CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

WATER MORPHOLOGY COVER

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
			FSB			R__ F 1105	Stream disperses in W	9 660288 6057927 GP3
						R__ F__		
						R__ F__		
						R__ F__		

89

HABITAT QUALITY

seasonal stream inaccessible from any FB waters. Stream disperses in wetland.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1103	JT	U	
DIG	1104	JT	D	

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

Xing UTM 9 660445 6058062
WB = 0.39, 0.32, 0.36, 0.21, 0.23, 0.31

C

S6

90

SITE CARD

STREAM NAME (gaz.) (local) A 61318-1

WATERSHED CODE

ILP MAP # 93L009 ILP # 00116 NID MAP # NID #

REACH # 1 D SITE # 59 FIELD UTM 9 678714 5991166 GP3 SITE LG 400 GE ACCESS FT

DATE 2006 08 26 TIME 13 30 AGENCY C016 CREW MJ LJL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %
CHANNEL WIDTH (m)	T	0.8	1.0	0.8	0.6	0.8	0.8	AL
WETTED WIDTH (m)	T	0.6	1.0	0.4	0	0	0	3
RES. POOL DEPTH (m)	M	>0.1	0.07					

W_b Dp (m) 0.34 0.35 0.25 MS STAGE [✓ L] M H No Vis. Ch. DW Dry [✓ Int.] Tribs.

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	N	T	S	D	N
LOC	C	C		C	C	C	

COVER Total T

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V

LB SHP [✓ U] V S O RB SHP [✓ U] V S O

TEXTURE [✓ F] [✓ G] C B R A TEXTURE [✓ F] [✓ G] C B R A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

EMS REQ. #

TEMP 16 C T3 COND. 130 S/cm S4

pH — TURB. T M [✓ L] C

FLD SNS N

BED MATERIAL Dominant F Subdom. G

D95 (cm) 8 D (cm) 3 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM [✓ IR] SI ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING DC [✓ PC] CO

CONFINEMENT EN CO FC [✓ OC] UN N/A

WATER MORPHOLOGY COVER

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

91

HABITAT QUALITY

NFH - tiny & seasonal stream, watered in lower 200 m, water shallow, filmy & stagnant. No O hab or S.
R potentially useable if fish in Cordelle Pond.
Not suitable hab for salmonids, no other species

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1111	JT	X	
DIG	1112	JT	U	
DIG	1113	JT	D	

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS
INV	Gammaridae		

COMMENTS

C

1 Watered in lower 200 m dry u/s.
& Stream drains to v. shallow Cordelle Pond (OW)
no suitable hab for salmonids in pond
(shallow, likely winter/summer kill)
Abundance of invertebrae indicates fish absence

C

S6

92

COMBINED FISH COLLECTION

GAZETTED NAME (local) A61318 ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE

WATERBODY ID ILP MAP # 093L009 ILP # 00116 SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 1 FISH PERMIT # SM06-24177

DATE 2006 08 26 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
59			9 678714 5991166 GP3	EF 1	16	130	L	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT	COMMENTS
59	EF 1	1	NFC			0				

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

93

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	59	EF 1	1	1330	1345	79	200	0.7	0	400	8	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

94

SITE CARD

STREAM NAME (gaz.) (local) A77770 (Poison L)

WATERSHED CODE

ILP MAP # 93L038 ILP # 00118 NID MAP # NID #

REACH # 1 D SITE # 61 FIELD UTM 9 665733 6023619 GP3 SITE LG 250 GE ACCESS FJ

DATE 2006 08 27 TIME 09 40 AGENCY C016 CREW MJ JL FISH FORM Y [✓ N]

CHANNEL

	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	0.7	0.7	0.5	0.9	0.7	0.6	AL	
WETTED WIDTH (m)	GE	0	0	0	0	0	0	0	3
RES. POOL DEPTH (m)	GE	0						1	

W_b Dp (m) 0.35 0.3 0.34 NS STAGE [✓ L] M H No Vis. Ch. DW [✓ Dry Int.] Tribs.

WATER

EMS ____ REG. # ____

TEMP ———— C COND. ———— S/cm

pH ———— TURB. ~~T M L~~ C

FLD SNS None

MORPHOLOGY

BED MATERIAL Dominant F Subdom. G

D95 (cm) 6 D (cm) 1 Morph. RP

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

1 PATTERN TM ME [✓ IM] IR [✓ SI] ST

ISLANDS [✓ N] O I F S AN

BARS [✓ N] SIDE DIAG MID SPAN BR

COUPLING [✓ DC] PC CO

CONFINEMENT EN CO FC OC [✓ UN] N/A

COVER

COVER Total N

Type	SWD	LWD	B	U	DP	OV	IV
AMT							
LOC							

CROWN CLOSURE [✓ 0] 1 2 3 4 5

LWD FNC [✓ N] F A DIST C E INSTREAM VEG N A M [✓ V]

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A

RIP. VEG. N G S C D M [✓ W] RIP. VEG. N G S C D M [✓ W]

STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

95

HABITAT QUALITY

NFH - Seasonal mucky channel with some gravels exposed w/in 60 m long section b/w wetlands.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1131	ST		Channel in W d/s of xing
DIG	1132	ST		— " — near xing

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Xing UTM 9.665534, 6023703

WB 0.40 0.35 0.37 0.30 0.34 0.34

1 Channel S1 b/h W 1

Stream drains W located just S of Poison L. 2 channels 1 going to Poison L other towards Kle C. Occasionally this channel becomes an outflow from Poison L.

C HW mark ~ 1 m above current lake level.

S6

96

SITE CARD

STREAM NAME (gaz.) Beaver Pelt C (local) Off 7 km Heading
WATERSHED CODE
ILP MAP # 93L.048 ILP # 00119 NID MAP # NID #
REACH # D SITE # 62 FIELD UTM 9 666625 6031891 GP3 SITE LG 200 66 ACCESS 1/4
DATE 2006 08 27 TIME 1150 AGENCY C016 CREW MJ, JL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	2.7	2.4	2.9	2.6	2.6	2.5	AL	
WETTED WIDTH (m)	T	1.2	1.4	1.0	1.3	1.4	0.8	0	1
RES. POOL DEPTH (m)	MS	0.52	0.27	0.63	0.48			1	
W_b Dp (m)	0.6	0.6	0.6	MS					

STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER			
EMS		REQ. #	
TEMP	12 C T3	COND.	140 S/cm 54
pH	—	TURB.	T M [✓ L] C FE

FLD SNS None
BED MATERIAL Dominant F Subdom. G
D95 (cm) 1 D (cm) 1 Morph. LC

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	N	N	D	T	S
LOC	P	P			A	A	A

CROWN CLOSURE 0 1 2 3 4 5

DISTURBANCE INDICATORS X B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

LWD FNC N [✓ F] A DIST C [✓ E]
INSTREAM VEG N A M [✓ V]
LB SHP U [✓ V] S O
RB SHP U [✓ V] S O
TEXTURE [✓ F] G C B R A
TEXTURE [✓ F] G C B R A
RIP. VEG. N G [✓ S] C D M W
RIP. VEG. N G [✓ S] C D M W
STAGE INIT SHR PS YF MF [✓ NA]
STAGE INIT SHR PS YF MF [✓ NA]

MORPHOLOGY
PATTERN TM ME IM [✓ IR] SI ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING [✓ DC] PC CO
CONFINEMENT EN CO FC OC [✓ UN] N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

97

HABITAT QUALITY

R-F - stream has overall poor hab for RB at present d/t extensive Beaver activity in area. Channel is full of organics and slow flow. RB resides in more turbulent pools @ breached BDs
S - None - all fines
O - some pools seems to be suitable however lots of org material may cause O_2 deficiency during winter

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1133	STD	X	probe
DIG	1134	STD	D	book

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C Wb 0.6, 0.53, 0.58, 0.47, 0.61, 0.57

53

98

COMBINED FISH COLLECTION

GAZETTED NAME (local) Off 7km Heading ☐ LAKE ☑ STREAM ☐ WETLAND
WATERSHED CODE
WATERBODY ID ILP MAP # 93L048 ILP # 00119 SITE/LAKE CARD ATTACHED ☒ Y ☐ N
PROJECT ID REACH # 1 - FISH PERMIT # SM06-24177
DATE 2006 08 27 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB.	COMMENTS
62			9 666625 6031891 GP3	EF 1	12	140	L	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
62	EF 1	1	LKC	J		3	43	47	R	
↓	↓	1	RB	J		2	109	121	R	
↓	↓	2	LKC	J		10	41	59	R	
↓	↓	2	RB	J		2	43	103	R	

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

99

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
				1155	1200	47	10							
				1205	1218	128								

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
				LKC	46										d/s of xing	R__ F__
				LKC	46										↓	R__ F__
				LKC	41											R__ F__
				RB	43											R__ F__
				LKC	47											R__ F__
				LKC	59											R__ F__
				RB	103											R__ F__
				LKC	42											R__ F__
				LKC	41										u/s of xing	R__ F__
				LKC	47										↓	R__ F__
				LKC	42											R__ F__
				LKC	40											R__ F__

47 sec below Xing
RB 109, LKC 47, LKC 43, RB 121, LKC 46 u/p

100

SITE CARD

STREAM NAME (gaz.) (local) Dahdsow E Δ=1+360
WATERSHED CODE 18054539911699
ILP MAP # ILP # NID MAP # 93F063 NID #
REACH # 15 D SITE # 71 FIELD UTM 10 340799 5945584 GP3 SITE LG 100 GE ACCESS V4
DATE 20060830 TIME 1330 AGENCY C016 CREW MJ JL FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.8	1.5	1.6	1.8	1.4	1.5	AL	
WETTED WIDTH (m)	T	1.3	1.4	1.1	1.2	1.4	1.1	2	3
RES. POOL DEPTH (m)	MJ	0.06	0.21						

W_b Dp (m) 0.3 0.5 0.5 MJ STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

EMS REQ. #
TEMP 11 C T3 COND. 60 S/cm S4
pH TURB. T M L [✓ C] GE
FLD SNS None
BED MATERIAL Dominant G Subdom. F
D95 (cm) 30 D (cm) 4 Morph. RP

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	T	D	S	S	N
LOC	P	C	P	C	P		

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5 ✓

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG [✓ N] A M V
LB SHP [✓ R] V S O RB SHP [✓ R] V S O
TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] R A
RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W
STAGE INIT SHR PS YF [✓ M] NA STAGE INIT SHR PS YF [✓ M] NA

PATTERN TM ME IM IR [✓ S] ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING DC [✓ PC] CO
CONFINEMENT EN [✓ CO] FC OC UN N/A

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

101

HABITAT QUALITY

R - G - good cover mainly under CB & small pools
S - P - mixed C/G/F, schmiergeler, holding good, rather opportunistic use
O - N - migrate to lake, pools are too shallow

FSZ

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1164	5	U	
DIG	1165	5	D	

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

C

102

COMBINED FISH COLLECTION

GAZETTED NAME (local) Δ=1+360 ☐ LAKE ☒ STREAM ☐ WETLAND
WATERSHED CODE 180545300011600
WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☒ Y ☐ N
PROJECT ID REACH # 15 - FISH PERMIT # SM06-24177
DATE 20060830 to AGENCY C016 CREW MJ JL ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
71			10 340799 594584 GP3	EF 1	11	60	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
71	EF 1	1	RB	J		2	45	72	R	

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

103

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	71	EF 1	1	1345	1345	6	2	2	0	600	80	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
	71	EF 1	1	RB	72											R__ F__
	71	EF 1	1	RB	45											R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

104

SITE CARD

STREAM NAME (gaz.) (local) Rocce 11 B

WATERSHED CODE 1803740009520001900957 0

ILP MAP # ILP # NID MAP # NID #

REACH # 2 0 SITE # 72 FIELD UTM 9 308027 6028344 GP3 SITE LG 700 GE ACCESS FT

DATE 20060925 TIME 1145 AGENCY C016 CREW MJ BJ FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.8	1.8	1.9	1.6	1.8	2.3	AL	
WETTED WIDTH (m)	T	0.3	1.2	0.5	0.4	1.0	0.9	6	3
RES. POOL DEPTH (m)	MS	0.27	0.12	0.21				7	5

W_b Dp (m) 0.35 0.41 0.36 MS STAGE [✓ L] M H No Vis. Ch. DW Dry [✓ Int] Tribs.

EMS REQ. #

TEMP 7 C T3 COND. 130 S/cm 34

pH TURB. T M L [✓ C] Sed

FLD SNS Significant erosion

BED MATERIAL Dominant F Subdom. G

D95 (cm) 24 D (cm) 14 Morph. CP

COVER

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	S	T	N	D	S	T
LOC	P	I	I		P	P	P

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST [✓ C] E INSTREAM VEG [✓ N] A M

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] B R A TEXTURE [✓ F] [✓ G] [✓ C] B R A

RIP. VEG. N G S C D [✓ M] W RIP. VEG. N G S C D [✓ M] W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

MORPHOLOGY

DISTURBANCE INDICATORS O1 B1 [✓ B2] B3 [✓ D1] [✓ D2] D3

C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS N O [✓ I] F S AN

BARS N [✓ SIDE] [✓ DIAG] [✓ MID] SPAN BR

COUPLING DC PC [✓ CO]

CONFINEMENT EN [✓ CO] FC OC UN N/A

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		105
						R__ F__		

HABITAT QUALITY

Overall poor RB hab. Stream lacks G hab → mainly
large G in No O hab - pools too shallow R - poor
stream is a subject to heavy bank erosion exacerbated
by cattle trampling. Water level fluctuate extensively
Heavy sedimentation likely cause of RB absence
However stream easily accessible from Tnudek R.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1369	55	U	d/s of CV
↓	1370	↓	D	"
	1371		U	u/s of CV
	1373		D	u/s of CV

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

C

(53)

106

COMBINED FISH COLLECTION

GAZETTED NAME (local) Rocce 11 B ☐ LAKE ☑ STREAM ☐ WETLAND

WATERSHED CODE 1803740009520001900957 0

WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☑ Y ☐ N

PROJECT ID REACH # 2 FISH PERMIT # SM06-24177

DATE 20060925 to AGENCY C016 CREW MJ BJ ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
72			9 308633 6028405 GP3	EF 1	7	130	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN. LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
72	EF 1	1	LKC	J		5	19	108	R	
72	EF 1	2	LKC	J		2	49	56	R	
		2	LKC	F		4	19	22	R	

GEAR SPECIFICATIONS

NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

107

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	72	EF 1	1	1145	1150	84	100	1	0	400	80	4	SR	12B
	72	EF 1	2	1205	1255	344	700	1	0	400	80	4	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
	72	EF 1	1	LKC	91											R__ F__
	↓	1	↓	↓	108											R__ F__
		1			73											R__ F__
		1			65											R__ F__
		1			98											R__ F__
		2			21											R__ F__
		2			19											R__ F__
		2			49											R__ F__
		2			56											R__ F__
		2			22											R__ F__
		2			22											R__ F__
																R__ F__

Intermittent stream, barely trickling b/w cobble. 1 pool 34 cm
where all the fish captured d/s of CV. ph 1369 u/s, 1370 d/s

108

SITE CARD

STREAM NAME (gaz.) (local) Reece 12A
WATERSHED CODE
ILP MAP # 093L040 ILP # 00126 NID MAP # NID #
REACH # 1 D SITE # 73 FIELD UTM 9 694646 6027708 GP3 SITE LG 200 GE ACCESS FT
DATE 20160926 TIME 1015 AGENCY C016 CREW MJ BJ FISH FORM Y [✓ N]

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.10	1.12	1.10	1.0	1.2	0.9	AL	
WETTED WIDTH (m)	T	0.8	0.2	0.3	0	0.2	0.5	5	3
RES. POOL DEPTH (m)	M)	0.06						5	

W_b Dp (m) 0.3 0.24 0.21 MS STAGE [✓ L] M H No Vis. Ch. DW Dry/[✓ Int] Tribs.

WATER
EMS REQ. #
TEMP 8 °C T3 COND. 110 S/cm S4
pH 7 P3 TURB. T M L [✓ C] 5E

MORPHOLOGY
FLD SNS N
BED MATERIAL Dominant G Subdom. C
D95 (cm) 10 D (cm) 3 Morph. RP
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM [✓ IR] SI ST
ISLANDS [✓ N] O I F S AN
BARS [✓ N] SIDE DIAG MID SPAN BR
COUPLING [✓ DC] PC CO
CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total T

Type	SWD	LWD	B	U	DP	OV	IV
AMT	S	T	N	S	T	D	T
LOC	N	P		P	P	P	

CROWN CLOSURE 0 1 2 [✓ 3] 4 5
LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG N A [✓ M] V
LB SHP U [✓ V] S O RB SHP U [✓ V] S O
TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A
RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W
STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		
						R___ F___		109
						R___ F___		

HABITAT QUALITY
NFH - tiny & seasonal trickle, Barely a stream, flow discontinuous but scoured channel present throughout.
No DW or Shots, R may by occassionally utilized by HC
No RE in the system.

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1375	55	U	NCD - portion
↓	1376	↓	U	book
↓	1377	↓	D	-"-

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS
C Stream becomes NCD about 30 m u/s from confl with ILP 00126 @ UTM 9. 694620, 6027551

56

110

SITE CARD

STREAM NAME (gaz.) (local) Reece 12a
WATERSHED CODE 180374000952000019008570
ILP MAP # ILP # NID MAP # NID #
REACH # 11 D SITE # 76 FIELD UTM 9 694515 6028314 GP3 SITE LG 200 GE ACCESS FT
DATE 20160926 TIME 1120 AGENCY C016 CREW MJ BJ FISH FORM [✓ Y] N

CHANNEL	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	1.7	1.4	1.5	1.4	1.4	1.3	AL	
WETTED WIDTH (m)	T	0.6	0.6	0.7	0.9	0.7	0.8	2	3
RES. POOL DEPTH (m)	MS	0.07	0.11	0.16					

W_b Dp (m) 0.3 0.3 0.3 MS STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER
EMS REQ. #
TEMP 8 °C T3 COND. 110 S/cm S4
pH 7 P3 TURB. T M L [✓ C] 6E

MORPHOLOGY
FLD SNS N
BED MATERIAL Dominant G Subdom. F
D95 (cm) 5 D (cm) 5 Morph. RP
DISTURBANCE INDICATORS O1 B1 B2 B3 D1 D2 D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
PATTERN TM ME IM IR [✓ SI] ST
ISLANDS [✓ N] O I F S AN
BARS N [✓ SIDE] DIAG MID SPAN BR
COUPLING [✓ DC] PC CO
CONFINEMENT EN CO FC [✓ OC] UN N/A

COVER Total M

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	N	S	T	D	N
LOC	P	P		P	P	P	

CROWN CLOSURE 0 1 [✓ 2] 3 4 5
LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG N [✓ A] M V
LB SHP [✓ U] V S O RB SHP [✓ U] V S O
TEXTURE [✓ F] G C B R A TEXTURE [✓ F] G C B R A
RIP. VEG. N G [✓ S] C D M W RIP. VEG. N G [✓ S] C D M W
STAGE INIT SHR PS YF MF [✓ NA] STAGE INIT SHR PS YF MF [✓ NA]

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R___ F___		
						R___ F___		
						R___ F___		111
						R___ F___		

HABITAT QUALITY
R - fair R was available @ higher flows
S - good gravels & holding areas observed @ higher flows
O - none.
Stream covered by ~1 cm thick layer of detritus (pools) and 2 mm through riffles

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1378	55	X	No scale
DIG	1380	55	U	book
DIG	1381	55	D	book

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS
C No channel observed in Wetland UTM, 9.694645, 6028271
Stream extremely shallow, and unlikely RB/CT present in lake. NFC indicates NFB - no access through wetland channel ~~ϕ~~CO with no S in the gully, channel wider as well (1.7m)
No rising fish in lake

56

112

COMBINED FISH COLLECTION

GAZETTED NAME (local) Recce 12a ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE 180 3740 009 5200 9 1900 9570

WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 11 FISH PERMIT # SM06-24177

DATE 2006 03 26 to AGENCY C016 CREW MJ BJ ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
76			9 694515 6028314 GP3	EF 1	8	110	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
76	EF 1	1	NFC				0			

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

113

C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	76	EF 1	1	1140	1200	138	300	0.8	0	400	60	6	SR	12B

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__
																R__ F__

114

SITE CARD

STREAM NAME (gaz.) (local) Recce A

WATERSHED CODE 180 3740 009 5200 41 400 4320

ILP MAP # ILP # NID MAP # NID #

REACH # 3 D SITE # 85 FIELD UTM 10 327283 5975573 GP3 SITE LG 100 GE ACCESS FT

DATE 2006 10 06 TIME 1425 AGENCY C016 CREW MJ BJ FISH FORM [✓ Y] N

CHANNEL

	mthd							GRADIENT %	
CHANNEL WIDTH (m)	T	3.2	3.4	2.9	3.1	3.4	3.3	Ar	
WETTED WIDTH (m)	T	1.6	0.8	1.8	1.7	2.8	2.7	4	4
RES. POOL DEPTH (m)	MS	0.32	0.41	0.35	0.42	0.47			

W_b Dp (m) 0.44 0.44 0.36 MS STAGE [✓ L] M H No Vis. Ch. DW Dry/Int. Tribs.

WATER

EMS REQ. #

TEMP 5 C T3 COND. 100 S/cm S4

pH 7 P3 TURB. T M L [✓ C] GE

MORPHOLOGY

FLD SNS None

BED MATERIAL Dominant G Subdom. C

D95 (cm) 400 D (cm) 16 Morph. CPB

DISTURBANCE INDICATORS O1 B1 [✓ B2] B3 [✓ D1] [✓ D2] D3 C1 C2 C3 C4 C5 S1 S2 S3 S4 S5

PATTERN TM ME IM IR [✓ SI] ST

ISLANDS N [✓ O] I F S AN

BARS N [✓ SIDE] [✓ DIAG] [✓ MID] SPAN BR

COUPLING DC PC [✓ CO]

CONFINEMENT EN [✓ CO] FC OC UN N/A

COVER

COVER Total A

Type	SWD	LWD	B	U	DP	OV	IV
AMT	T	T	S	T	D	T	T
LOC	P	P	P	P	P	P	P

CROWN CLOSURE 0 1 [✓ 2] 3 4 5

LWD FNC N [✓ F] A DIST C [✓ E] INSTREAM VEG N A [✓ M] V

LB SHP U [✓ V] S O RB SHP U [✓ V] S O

TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A TEXTURE [✓ F] [✓ G] [✓ C] [✓ B] [✓ R] A

RIP. VEG. N G S [✓ C] D M W RIP. VEG. N G S [✓ C] D M W

STAGE INIT SHR PS YF [✓ MF] NA STAGE INIT SHR PS YF [✓ MF] NA

FEATURES

C	NID MAP #	NID #	TYPE	HT / LG (m)	mthd	PHOTO	COMMENTS	UTM
						R__ F__		
						R__ F__		
						R__ F__		
						R__ F__		

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HABITAT QUALITY

R- exc hab in abundant & diverse cover, stream fairly stable, only sporadic erosion

S- F-G → usable gravel patches in pool tailouts, good holding pool quite long & not turbulent

D- F-G → 3 suitable pools observed in 100 m section surveyed

FSZ

PHOTO DOCUMENTATION

ROLL #	#	FOC LG	DIR	COMMENTS
DIG	1431	ST	U	book
DIG	1433	ST	D	book

WILDLIFE

GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS

C

C

53

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COMBINED FISH COLLECTION

GAZETTED NAME (local) Recce A ☐ LAKE ☒ STREAM ☐ WETLAND

WATERSHED CODE 180374000952004140043200

WATERBODY ID ILP MAP # ILP # SITE/LAKE CARD ATTACHED ☒ Y ☐ N

PROJECT ID REACH # 3 FISH PERMIT # SM06-24177

DATE 20061006 to AGENCY C016 CREW MJ BJ ☐ RE-SAMPLE

SITE / METHOD

SITE #	NID MAP #	NID #	SITE UTM	MTD / NO.	STREAM CONDITION TEMP	CON	TURB	COMMENTS
85			10 327283 5975573 693	EF 1	5	100	C	

FISH SUMMARY

SITE #	MTD / #	H / P	SPECIES	STAGE	AGE	TOTAL #	MIN LENGTH	MAX LENGTH	FISH ACT.	COMMENTS
85	EF 1	1	RB	J		1	98	98	R	

GEAR SPECIFICATIONS — NET / TRAP SPECIFICATIONS

C	SITE #	MTD / #	HAUL	DATE IN	TIME IN	DATE OUT	TIME OUT	NET TYPE	LENGTH	DEPTH	MESH SIZE	SET	HAB.

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C	SITE #	MTD / #	PASS	TIME IN	TIME OUT	EF SEC.	LENGTH	WIDTH	ENCL	VOLTAGE	FREQ.	PULSE	MAKE	MODEL
	85	EF 1	1	1425	1426	8	1	2	0	500	80	6	SR	1213

C	SITE #	MTD / #	H / P	SPEC.	LENGTH	WEIGHT	SEX	MATUR.	AGE STRUCTURE	AGE SAMPLE #	AGE	VOUCHER #	GENETIC STRUCTURE	GENETIC SAMPLE #	COMMENTS	PHOTO
	85	EF 1	1	RB	98											R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_
																R_ F_

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June 7.

Eastbranch 34 | 5 (Branch A - 2.5h)

GF	10.306453.6034782	255°
GF	10.306775.6034579	179°
GF	10.306828.6034542.	216°
GF	10.306869.6034513	208°
GF	10.306989.6034439	186°
NCD	10.307078.6034369	160°
ends@	10.307086.6034379 (app. 20m wide)	
NCD	10.307109.6034341	214°
NCD	10.307163.6034316	245°
GF	10.307228.6034274	232°
GF	10.307240.6034264	279°
GF	10.307337.6034199	263°

~~GF 10~~.

Branch B -

GF	10.307521.6034341	200°
NCD	10.307371.6034298	232°

Branch C

SG	10.306589.6035109.	186°

June 08

Branch E

GF	10.307400.6036043	247°	
SG	10.307502.6036164	312°	(End 3a)
NCD	10.307813.6036553.	262°	(00003)
GF	10.308224.6036936.	237	

Branch F

NCD 10.307724.6036332. 243°

Block SFU 111

str End 3A R2 CW = 1.0, 1.0, 1.3, 0.9, 0.8, 0.9

ph 0762 ↓

Str 00002 R5 NCD S. ③

ph 0763 ↓ UTM 10.307722.6035602

Overland runoff with some scour present. Flows through gentle swale. No banks, bubbling up. Fluvium <100 m, channelized sections present

BRANCH D

Nothing found

BRANCH J

Nothing found

STR 00012 RZ NCD s.④

UTM 10, 310998, 6036584

Swampy forest, isolated puddles, soggy ground, no channel present, no alluvium. Transition b/w bog & forest, ph 0764 u/s

stream 00013 s.⑤

from point 023. to 047

str 00019 NCD s.⑥

photo 0767 u

UTM 10, 312170, 6036799.

~ 20m wide hummocky valley with puddles b/w hummocks, no flow NFH, drains to 2001B (is 56)

Branch G

1st 50m soggy

GF	10.312082.6037739	090°
GF	10.311980.6037845	160°

June 4, 2006

Block SFU I CW

Str 41024 R1 0615 s.⑦

10.312346.6037920. NCD ph 768 u/s

Swampy ~ 50m wide valley, no alluvium, puddles b/w hummocks, NFH Not a stream.

Branch H

GF	10.312590.6037862.	246°
NCD	10.312592.6037898.	294°
NCD	10.312591.6037934.	080°
NCD	10.312587.6038000.	063°

Unmapped NCD from p 048 → 052. s.⑧

Isolated muddy puddles, no connection to stream, descends down 5m 29% slope with no signs of seepage. (str 00102)

STR 00014 R1 NCD s.⑨

UTM 10.312896.6037959. 0700 am.

photo 770 u/s 4%

NFH – no alluvium, isolated puddles Not a stream, no banks, no continuity

Branch I

depr	10.312936.6037679	260° ↔ 080°

NCD	10.312915,6037637	262°

BLOCK SFU I CE

Branch N

NCD	10.314516.6037910.	044°
swampy/soggy up to	10.314466.6037936.	

GF	10.314166.6037987		242°
GF	10.313738.6037991.		217°
GF	10.313726.6038004.		245°
GF	10.313958.6038362.		318°
Depr	10.313975.6038380	15 × 25m	316°
GF	10.314036.6038410.		287°

BRANCH O

GF	10.314368.6038064.	078°

BRANCH M

GF	10.315309.6038249.	077°
GF	10.315334.6038193.	071°
GF	10.315390.6038100.	060°
GF	10.315403.6038079.	078°
GF	10.315458.6037996.	059°

BRANCH L

GF	10.314790.6038344.	269°
GF	10.314778.6038305.	250°
NCD	10.314784.6038278.	268°
GF	10.314847.6038146.	249°
NCD	10.314875.6038133.	253°

b/w BR L & BR K

GF	10.315012.6038403.	245°

BRANCH K

GF	10.315018.6038660.	319°
GF	10.314997.6038638.	349°
GF	10.314878.6038534.	300°
GF	10.314835.6038487.	341°
GF	10.314827.6038476.	333°

~~June 10, 06 SFU II S~~

~~Branch P~~

June 10, 06 SFU II S

Branch P

Depr 10. 313352.6038449. 20m x 10m 233°

GF 10, 313327.6038528. 142°

NCD 10, 313144.6038674 168°

UNMAPPED P053 → 063

No connection to perent creek. Just gully with watered puddles. Flow from HW of 41020

GF 10, 313020.6038834 069°

Branch R

Nothing found

str 41018 0940 ph. 772 u/s s.⑩

UTM. 10, 313208.6039409.

Narrow wetland with NVC, not a creek

STR 41013 0950 R5 s.⑪

UTM 10. 313175.6039435. ph 773 u/s

Wetland with undefined channel, water either puddling up or percolating through, no fluvium, no banks.

Branch S

Nothing found

Branch Q

Depr 10.312035.6038956. 15 x 7m

Creek 00015 not found, R1. s.⑫
Not any kind of drainage.

STREAM 41023 becomes NCD
@ UTM. ~~10 312318.6038837.~~
10 312634.6038750

BR Q cont'd

Depr/GF 10. 312811.6038870 341°

Branch T

GF 10, 313171.6040132. 026°

NCD 10. 313167.6040171. 098° =
= strm 00018. R2. photo 774 u/s s.⑬
No fluvium not a stream.

BLOCK IV June 10

~~STRM 00006 becomes NCD~~
~~@ UTM.~~ BRANCH U

GF	10, 310336.6034799	320°	
GF	10. 310343.6034766	342°	
GF	10. 310356.6034714	279°	
Depr	10. 310387.6034641	160↔340°	10 x 30m
GF	10. 310521.6034568	106°	
GF	10. 310721.6034632	120°	
GF	10. 310738.6034648	162°	
GF	10. 310782.6034583	216°	
CR 00005	10. 310809.6034524	R3	

CW u/s 1.0; 0.8; 0.8
Wb u/s 0.4; 0.3; 0.45

CW d/s 1.1; 1.2; 0.6; 1.0; 0.8; 0.9
WB d/s 0.3; 0.25; 0.4; 0.4; 0.35; 0.45

Becomes NCD @ | ph. 782 u/s
UTM. 10. 310841.6034546

Branch Y

GF 10. 310956.6034377. 219°

ENDTRZA ~~GF~~ 10. 311239.6034384.
CW 1.3, 1.2, 1.5, 1.2, 1.0, 1.1

Branch U cont'd

NCD 10. 310868.6034353. 256°

Branch X

GF 10. 310735.6034218. 248°
NCD 10. 310626.6034245. 300° strm 00008
site UTM 10. 310518.6034263. photo 783
Seepage - nothing but squishy forest floor in valley bottom with sporadic puddles. NCD s.⑯

Branch U cont'd

GF	10.310968.6034157	237°	
NCD	10. 310764.6033850	169°	
GF	10. 310433.6033725	234°	
GF	10. 310411.6033724	152°	
NCD	10. 310397.6033659	256°	str 00004

Branch W

GF 10, 310284.6033873. 168°

Branch V

GF	10, 310708.6033675	250°
GF	10. 310757.6033646	240°
GF	10. 310942.6033526	072°
GF	10. 310949.6033507	196°

stream 00010 R1 s.⑱
Not any kind of drainage present @ mapped location or within 100 m u/s & d/s,
mapped UTM
10. 311040.6033515.

Block VI June 15

stream 00001 R4 s ㉞ NCD
Seepage through valley
UTM. 10. 306466.6034059 ph 0919 u

stream 00103 R1 s ㉟ NCD
Meltwater runoff with barely scoured pools in places, dry already
UTM 10. 306216.6034059. ph 0918 W

Date June 15, 2006 s. (26)
str 00002 R4. 0828
site UTM 10. 306937, 6035369
photo 0801 u/s
Discontinuous channel & fluvium
NFH → seepage through gully
vegetated by twinberries →
not an FPC stream → NCD

June 16, 2006 s. (32)
str 00017 R1 0925
site 10. 313100. 6039710.
No drainage found @ mapped location
GF indicators, twinberry, sphagnum, minimum

str 41032 R4 s (33)
site UTM 10. 313439. 6040162
10. 313432. 6040177
10. 313425. 6040196
10. 313421. 6040216
10. 313422. 6040235

Seepage end just below Rd drainage outflow.
STR 00103 → seepage → NCD
STR 00001 R4 → seepage → NCD

~~70~~
~~517100~~
~~674150~~ 11067
Stream ~~00006~~ June 30/06
- REACH Δ (Point 1)
from S5 ⇒ S6 ? ← cancell this Δ
664059
6101736 for S. (41)

CW = 2.2; 3.6; 40; 2.4; 1.6; 3.2; 2.3; 3.6; 2.6
- REACH Δ from S5 → S6 ~ 9x15 = 150m U from Pnt 1
Position 663967 6101646
CW = 26; 2.6; 2.8, 3.0; 2.8; 2.5; 2.7
EF = NFC @ ~250m / 101 sec ph U/S #840 : Person

Stream ~~00005~~ 11068 June 30th s. (42)
UTM |9|663771|6101208 ph #841 U/S : Person
Not sampled - too shallow %= 3; 4
CW - 1.4, 1.2, 1.9, 1.8, 1.9, 2.4,

GPS @ 664397 6100431

s. (38) WSC-480-568000-14200 R2.
00007 664817 6100220 ph. #842 X NCD
Swampy, about 30m wide Valley. No channel →

00007 continued

No fluvial, no continuety
Some isolated mucky puddles.

25% for 13m; 21% for 8m; 13% for 25m; 14% for 7m
3.2 | 1.8 | 3.2 | |

9 C 57

July 3rd/06
Site 00024 Creek mouth actually @ 9|668038|6103209
9|668214|6104000 ← general location of end

July 3rd/06
Site 00001 end walk 9|670640|6099845|

July 4th/06 ILP 00104 (S. 45)
Creek 1 - North Rd : channel widths by proposed rd crossing
CW: 2.40; 2.76; 2.60; 2.07; 1.8 → 2.33
Wb : 0.38; 0.26; 0.48; 0.43; 0.53 → 0.42
road cross UTM 9| 656108|6047796|
EF = 155 sec : Length = 100m %→ 4

Incidental for site 49
July 30, 2006 Fish Sampling
UTMS 9; 647200; 6037860;
RB 152, 137, 167
Length 50m, 39 sec.

July 30, 2006 @ 1525 (S. 49)
Stream 2, Blk A77774 ILP 00107
Photo: DIG, #950, US, Mapcase
NCD - occasionally scoured channel with discontinuous fluvium, Melt water runoff through gully @ 21° (AL) & flat @ 12%
UTM. xing 9. 648071. 6036111

Aug 25, 2006 1135 (S 51)
Block A77774 stream 3
site UTM 9, 647982, 6036063
ph 1092 u/s ph 1093 d/s
Gred 10% ILP 00108
NCD - meltwater runoff.
No continuous scoured bed, banks or fluvium. Occasionally exposed cobbles

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Aug 25 2006 1700 9.659643. 6058997
Sampled Beymen C? NFC
150m for 164 sec 400/80/6
temp 12 cond 120

METRIC FIELD

Aug 25, 2006 1730 CP 77773 S.53
Str C. Site UTM. 9.660011.6058267,
Xing UTM. ILP00110
NCD - stream with discontinuous
scoured channel & fluvium,
Sections of surface flow interchanged
with channelized parts.
Chan ~ 20-50, surface 5-10 m
ph 1098 d/s
ph 1099 u/s

Aug 25, 2006 1800 CP77773 S54
Str B site = xing = 9.660370.6058159
ph. 1100 u/s - stream 40 m d/s from xing
ph 1102 u/s — ,, — @ xing
Drainage channelized for 40 m
d/s of xing & 25 m u/s of xing
otherwise mucky & isolated mudholes
no continuous fluvium, scour or
banks — NCD ILP 00111

AUG 26, 2006 0735 CPA77748-1
ILP00113
S.56 UTM. 9.644357.6001071.
ph. 1106 u/s Grad 6% (bench) 15% gully
Drainage with discontinuous scoured
channel, fluvium visible only in
steeper gradient sections, otherwise
organics, overland flows mixed with
channelized sections, channel does not
exceedes 100 m. NFH — NCD
surveyed 200 m. Muddy potholes
~50 m from skid bridge.

Aug 26, 2006 0920 CP A53848
S.57 UTM. 9.646853.6022138.
ph 1109 d/s Grad 4% Surv 200 m
Meltwater runoff, drainage has
no continuous fluvium, scoured
banks or channel. Isolated scoured
holes with some fluvial material
but mainly flows overland when
watered. NFH — NCD ILP 00114

Aug 26, 2006 1055 Carrier Br 5
S.58 UTM, 9.649915.6014180.
ph 1110 u/s Grad 2-8% surv 200 m
Meltwater runoff, no continuous scoured
channel, fluvium or banks. Freq overland flow
when watered. Scour more pronounced
w/in steeper gradient but discontinuous.
NFH — NCD ILP 00115

AUG 27, 2006 0820 A77770
S.60 UTM 9.666141.6024805 xing
All of stream channel scoured
for sections less than 100 m, mucky
trickles joining in places, some
isolated muddy puddles, discontinuities
sections for 10 m, water spreads all
over in sections exceeding 2 m width
Entirely dissipates in U ~ 70 m d/s
ph. 1122. NCD ILP 00117
(WSC 460-70200-30500)?

Aug 26, 2006 0930 site length 150 m
Stearns FSR Δ1+000 xing S 63
UTM 10.338083.6007613. ph 1135 X
Seepage through valley on u/s end
No scoured channel or fluvium.
Water is collected in muddy puddles
during spring runoff, no continuity.
Large puddle @ the xing (10 m × 6 m)
Scour more pronounced on d/s side
of xing as drainage descends to
Sheraton C on 55% slope ~ 30 m d/s
of xing. ph 1136 u/s. Still no
continuity. NCD - NFH
ILP 00121

Aug 28, 2006 1030 site l. 160 m
Lord Cr Br 01 Δ=1+850 S.64
UTM. 10.340927.6017183 ILP00122
ph 1137 u/s - view u/s of xing
ph 1138 d/s - —,,— d/s —,,—
Seepage through gentle & wide
swale through wetlandish area.
No distinct channel observed on
u/s side of rd.
Slight dip (~10 cm & 60 cm wide)
on d/s side of xing for ~50 m
than disperses among sedges & hardhack.
Water seeps through with no visible
scour further d/s. Just a moist
terrain. NCD - NFH

Aug 28, 2006 1140 site L 100
R-10070 Δ=0+260
Off N. Lig.
Confirmed drainage as a stream.
Xing over R4/R5 break.
stream confirmed NFB in 1998
above Cascade obstruction

Aug 28, 2006 1240 site L = 200m
R-09807 (off Tudin 64km) Δ = 0+700
UTM 10, 314265, 6048332 (S.65)
ph 1139 u/s → view ~ 80m d/s of xing
ph 1140 u/s → -"- ~ 60m u/s of xing
Drains @ BRG 343° @ 2%
Watercourse drains small wetland located 100 m u/s from xing through discontinuous & mucky channel.
Water is puddling up in mudholes, no scoured banks or fluvium.
NCD - NFH. Disperses ~ 100m d/s of xing ILP00123

Aug 28, 2006 1600 site L = 200 m
site UTM = xing = 9, 680827, 5992183 (S.66)
ph 1141 u/s → view of "stream" 200 m from "mouth"
Discontinuous drainage through gully @ 7%. Totally disperses 70 m d/s from xing. 3rd visit - NFH
Melt water runoff. ILP00120
CPA75003-1 (Tom Allen) NCD

Aug 29, 2006 1300 site L 200 (S 67)
site UTM = 10, 355287, 6000216. (for Bomb Br 18)
ph 1143 x - view of "stream
Drainage is meltwater runoff. Water from u/s disperses in swampy area ~100m wide filling out numerous muddy puddles.
No channel, scour or fluvium. Not a stream
NCD R1 S6 R2 Δ = 4+500
WSC 189-374000-95200-01900-2720-3880-129

Aug 29, 2006 site L = 100m 1450
site UTM 10. 353255. 5999857 (S. 68)
ph 1144 u/s view of seepage on d/s of xing
ph 1145 u/s — " — on u/s of xing
Bomberger Br 24 Δ = 0+100
Meltwater runoff, hardly signs of flow through gully on u/s side of xing
On d/s watered trickle without channel, water collected from ditch drainage as well as from gully. No channel, no scour no fluvium. Drains to NFB stream. NFH - NCD (br 24 on Bomb.)

WSC — 129-670

Aug 29, 2006 site L = 100m 1545
site UTM 10. 359775. 6007725 (S.69)
Bomberger Br - 10 Δ = 0+150
ph. 1146 u/s view of seepage on d/s side of xing
ph 1147 u/s view of seepage on u/s side of xing
Meltwater runoff, surface flow through ferns with some dry puddles
No scoured channel, fluvium or banks
NFH - NCD ILP 00124

Aug 29, 2004
Lords Br 1 Δ = 0+1
UTM 10, 340136, 6018402.
ph 1148 d/s view from rd
ph 1149 u/s view from rd
ph 1150 CV outlet
ph 1151 CV inlet, 1158 u/s, 1160 d/s
For CV removal

Lords Br 2 Δ = 0+500
UTM 10, 341887, 6016692
ph 1152 u/s view of channel
ph 1153 d/s view of channel
ph 1154 u/s on L B
ph 1155 d/s on L.B.
1156 u/s on R.B
1157 d/s on R.B

Aug 30, 2006 site L = 200 m (S. 70)
Vultee Mtn Br 04 Δ = 0+400 ILP 00125
UTM = 10. 327597. 5984932 Grad = 6%
ph 1162 d/s view of drainage u/s of xing
ph 1163 u/s view — " — d/s of xing
Meltwater runoff with discontinuously scoured channel u/s & d/s of xing.
No banks or continuous fluvial deposits. NFH - NCD

Sept 26, 2006 0955 Block Recce 12a
ILP 00127 UTM. 9, 694570. 6027538
site L 200 m % = 8 (74)
mouth UTM 9, 694612. 6027579
ph 1374 u/s - book
joins parent stream (ILP00128) 40m d/s @ BRG = 087°
NFH - tiny seepage with some scour near "mouth" - otherwise meltwater runoff past 60m from mouth. No continuous scour, fluvium or banks - NCD
ILP 00127

ILP 00128 UTM 9. 694612, 6028518
Block Recce 12a ILP 00128
site L 100 m 1130 (75)
ph 1378 u/s - book
Seasonal seepage, NFH, no fluvium, no continuity, no 'scour', no 'banks'.
Isolated, dry mudholes. NCD

ILP 00130 UTM 9. 691920. 6027638
BLOCK A 81186-1 ILP 00130 (77)
site length = 100 m time 1400
ph 1382 u/s book
HW of stream, flows through ~10 m wide valley. "channel" somewhat scoured but has no fluvium, puddles up frequently loosing vague channel characteristics. NFH - NCD

ILP 00131 UTM 9.690529.6027064
BLOCK A 81186-1 ILP 00131 (78)
site length 100 m time 1445
ph 1383 u/s no scale
NFH - swampy area, no distinct
channel, no fluvium, water
percolates through horsetail patch
NCD

WSC 460-930688-37002
ILP ~~00132~~ UTM 9.689117.6027914
Block A 81188-1 460-930688-37002 (79)
site = 100 m time 1600
no photos → nothing to photograph
NFH - dry gully with no sign
of any kind of flow. Drainage
not present here or u/s 100 m radius
NA

STREAM WSC 460-930688 (80)
UTM 9,689229.6028220.
Block A 81188-1 time 1615
site = 300 m 460-930688
photo 1384 u/s - bank, 1385 u/s - bank + stream
Nothing but runoff, channel occasionally
scoured but has no continuity,
~~No channel present~~ or distinct banks
NFH - NCD fluvial deposits, discontinuous, becomes stream @ UTM
9.689292.6028211.
CW = 0.6, 0.7, 0.7, 1.1, 0.9, 1.0 Wb = 0.12, 0.34, 0.16
Grad. = 5% Too shallow to provide
fish hab; barely a stream

Sept 28, 2006
Division 2 FSR
Crossing Stream 1
UTM = 10. 323946.6026804
CW 1.8, 2.2, 2.0, 1.7, 2.0, 2.1 = 1.97
WB 0.32, 0.36, 0.29, 0.39, 0.38, 0.36 = 0.35
AL 2.0, 3.0, 2.0 AL

Crossing Stream 2
UTM = 10. 323352.6026770
CW 1.3, 1.5, 1.5, 1.7, 1.4, 1.6
WB 0.39, 0.27, 0.29, 0.2, 0.23, 0.24
AL 5, 2

Oct 6, 2006
Recce F
ILP 00132 (site 81)
UTM, 10.319523.5975335 time 1025
ph 1045 u/s
Signs of seepage within 50 m
from road xing. Water collected
@ the road d/t the presence of
old berm blocking drainage
Nothing noted past 50 m into
the proposed block. NCD

Recce B site (82)
ILP 00133 (look for orig) R. 1
UTM. 10.326224.5974142, time 1130
No channel noted @ UTM or 100 m radius.
Just dry & natural small gully

Recce B cont'd
Point 134 — 154 (mouth) (site 83)
photo 1426 u/s time 1140
photo 1427 u/s disc chan w/t the
mouth @ UTM 10. 326874.5974469
Walked stream, No continuous
channel or scour on the entire length
surveyed, fluvium sparse & spotty
Not a creek from mouth. Just
a runoff drainage - NCD WSC = 4320-4026

A 78780-1 (site 84)
UTM. 10.324415.5974359 time 1305
photo 1428 u/s WSC = 43204 4026 R3
Seepage through valley with some
mudholes, no continuous scoured
banks, fluvium or channel. NCD

Branch 7495-1000 time 1530 ILP 00133
xing UTM 10.344810.5981403 (site 86)
photo 1434 u/s - opening in forest floor
1435 u/s - u/s of xing
Drainage becomes channelized and
exhibit stream characteristics @
UTM. 10.344709.5981416, NCD u/s
from this point. S6 d/s → No fish
in numerous surveys in the past
including lake survey. → next p

Drainage does not have continuous
scoured channel or fluvial deposits
freq percolates through forest
floor or descends over organic
steps.

Oct 07, 2006 time 1020
Blk A 78688-1 ILP 00134 (S.87)
UTM xing 10.333874.6022483
Already assessed NCD (WC #6)
500 CMP. Drains @ BRG 071°
Nothing but moist gully,
ph, 1436 u/s.
No scour, fluvium or channel. No signs
of any surface flow. NCD

Blk A 78688-1 ILP 00135 (S.88)
UTM xing 10.334219.6022462 time 1040
Signs of meltwater runoff with
occasionally scoured forest floor
No continuity, no fluvium → NCD
photo 1437 x

Blk A 78688-1 ILP 00136 (S.89)
UTM xing 10.334604.6022614 time 1055
Photo # 1439 u/s
Drainage through swampy area.
Occasional scour, no fluvium observed
many isolated muddy puddles.
NFH → NCD

Oct 07, 2006, time 1115 (site 90)

UTM 10, 335218.6022985. ILP 00137

Disturbed drainage by past logging (~20 yrs ago). Channel intermittent over 200 m surveyed. scour & alluvium discontinuous. NFH
Flow during runoff only. Channel frequently vegetated by shrubs & grasses. NCD
photo 1440 u/s
Xing UTM 10, 335265, 6022849.

Appendix II: Photographs


Site 1: view u/s


Site 1: view d/s


Site 2: view across


Site 3: view u/s


Site 4: view u/s


Site 5: view u/s


Site 5: view d/s

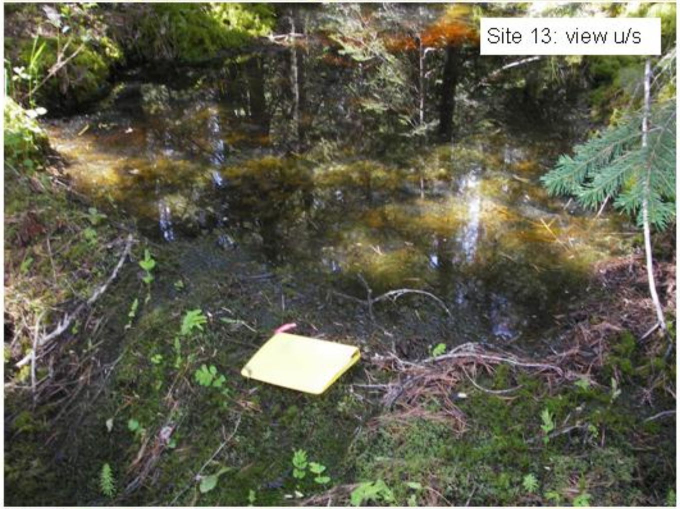

Site 6: view u/s


Site 7: view u/s


Site 9: view d/s


Site 10: view u/s


Site 11: view u/s


Site 13: view u/s


Site 14: view u/s


Site 14: view d/s


Site 15: view u/s


Site 15: NCD view u/s


Site 15: view u/s near mouth


Site 16: view u/s


Site 17: view u/s


Site 17: view d/s


Site 19: view u/s


Site 19: view d/s


Site 20: view u/s


Site 20: view d/s


Site 21: view u/s


Site 22: view u/s


Site 22: view d/s


Site 22: cascade


Site 23: view u/s


Site 23: view d/s


Site 24: view u/s


Site 24: view d/s


Site 25: view u/s


Site 25: view d/s


Site 26: view u/s


Site 27: view d/s


Site 27: view u/s


Site 30: view across


Site 30: view u/s


Site 30: view d/s


Site 31: view u/s


Site 31: view d/s


Site 34: view u/s


Site 35: view u/s


Site 36: view u/s


Site 36: view d/s


Site 37: view u/s


Site 37: view d/s


Site 38: view across


Site 39: view u/s


Site 39: view d/s


Site 39: disappearing point


Site 40: view u/s


Site 40: view d/s


Site 41: view u/s


Site 41: view d/s


Site 41: disappearing point


Site 42: view d/s


Site 43: view u/s


Site 43: view d/s


Site 44: view u/s


Site 44: view d/s


Site 46: view u/s


Site 46: view d/s


Site 47: Rainbow trout


Site 47: view u/s


Site 47: view d/s


Site 48: view u/s


Site 48: view d/s


Site 49: view u/s


Site 50: view u/s


Site 50: view d/s


Site 50: Wetland d/s


Site 51: view u/s


Site 51: view d/s


Site 52: view u/s


Site 52: view d/s


Site 52: disappearing point


Site 53: view u/s


Site 53: view d/s


Site 54: view u/s


Site 54: view d/s


Site 55: view u/s


Site 55: view d/s


Site 55: disappearing point


Site 56: view u/s


Site 57: view u/s


Site 58: view u/s


Site 59: view u/s


Site 59: view d/s


Site 59: view across


Site 60: view u/s


Site 61: stream d/s of x-ing


Site 61: view u/s at x-ing


Site 62: view across


Site 62: view u/s


Site 63: view across


Site 64: view u/s


Site 64: view d/s


Site 65: stream d/s of x-ing


Site 61: stream u/s of x-ing


Site 66: view u/s


Site 67: view across


Site 68: view u/s


Site 68: view d/s


Site 69: view u/s


Site 69: view d/s


Site 70: stream u/s of x-ing


Site 70: stream d/s of x-ing

Site 71: view u/s

Site 71: view d/s

Site 72: view u/s above CV

Site 72: view d/s above CV

Site 72: view u/s below CV

Site 72: view d/s below CV

Site 73: view u/s of NCD

Site 73: view u/s

Site 73: view d/s

Site 74: view u/s

Site 75: view u/s

Site 76: view across

Site 76: view u/s

Site 76: view d/s

Site 77: view u/s

Site 78: view u/s


Site 80: view u/s


Site 80: view u/s


Site 81: view u/s


Site 83: view u/s


Site 83: view u/s


Site 84: view u/s


Site 85: view u/s


Site 85: view d/s


Site 86: view u/s


Site 86: view u/s of x-ing

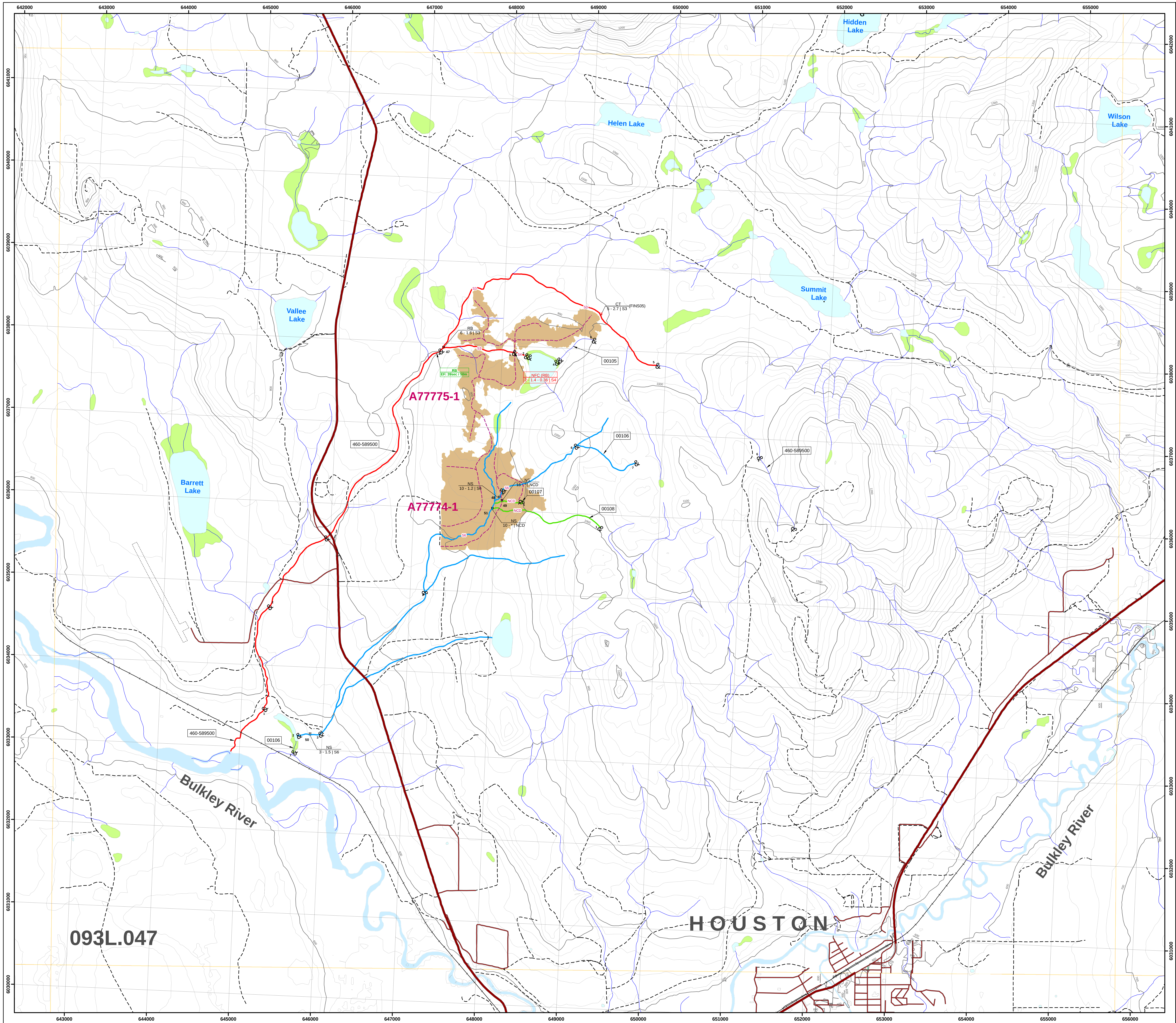

Site 87: view u/s


Site 88: view across


Site 89: view u/s


Site 90: view u/s

Appendix III: Hardcopy Maps



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Blocks A77774-1 and A77775-1

Scale 1: 20,000

1,000 500 0 1,000 Meters

Map 1 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream
S4	Suspected fish presence
S4	Suspected fish absence
S6	Non fish-bearing stream
NCD	Non-Classified Drainage (NCD)
NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species * - Spawning (Inferred) RB* (SK) 8 - 5.7 | (S2) 123 Gradient (%) Channel Width (m) FPC Class (Inferred)	Site location with reference and stream information
Fish code RB EF: 7sec/2m Sampling method Sampling time Sampling length	Additional Sampling
Fish Species * - Spawning (Inferred) RB* (SK) 8 - 5.7 - 0.33 | (S2) - IM Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating	Assessment at the Road Crossing
○	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
00123	Stream ILP
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

F	Falls	XW	Sediment Wedge		Culvert
X	Debris Jam		Beaver Dam	DW	Dewatering
C	Cascade		Fisheries Sensitive Zone	◆	Disappearing Point
20 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→ NCD → Ground Flow Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

	Other streams
1	Reach Boundaries and Reach Numbers
	Highway
	Paved Main Road
	Gravel Road
	Proposed Road
	Railroad
900	Contours (20m intervals)
A74841	Proposed cutblock reference
🟫	Proposed cutblock
🟦	Lakes
🟦	Rivers
🟩	Wetlands
	Mapsheet Boundary

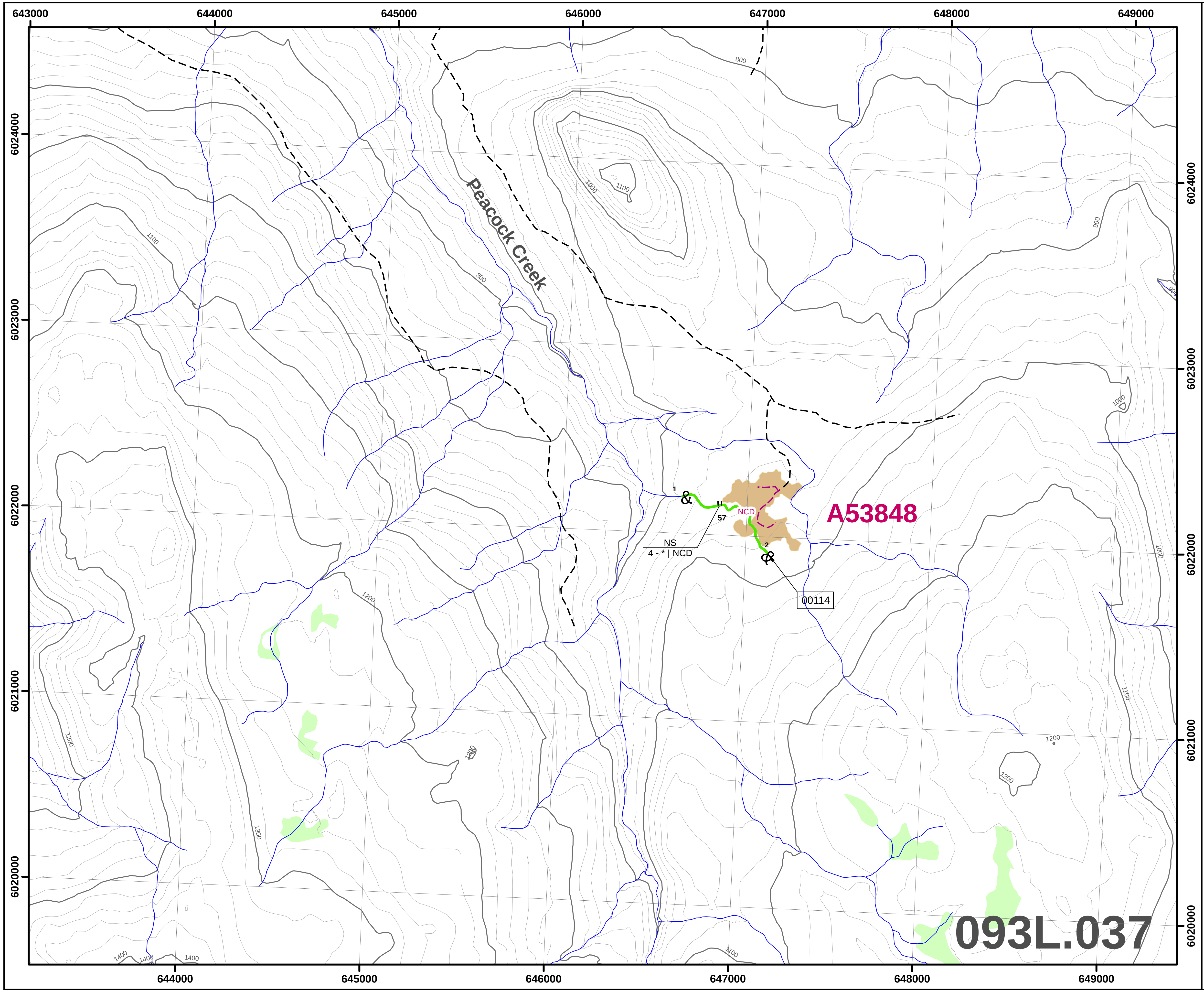
BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**WS**	Wildstone Consulting Ltd.
HC	Hatfield Consultants Ltd.		

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
A77775-1	00105 (BB R1)	47	9.647270.6037952
A77775-1	00105 (BB R1)	XING	9.648152.6037926
A77774-1	00106 (CC R1)	48	9.648064.6036143
A77774-1	00107 (EE R1)	49	9.648071.6036111
A77774-1	00106(BB R2)	50	9.645851.6033178
A77774-1	00108 (DD R1)	51	9.647982.6036063

Confirmed Coordinates for End of Fish Use (EFU) and/or Stream Riparian Classification Change

Area	Stream	Point	UTM (Z.E.N.)
A77775-1	00105 (BB R1)	S3/S4	9.648133.6037910
A77774-1	00106 (CC R1)	EFU	9.645696.6033157



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Block A53848

Scale 1: 20,000

500 250 0 500 1,000
Meters

Map 2 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

- NCD
- Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

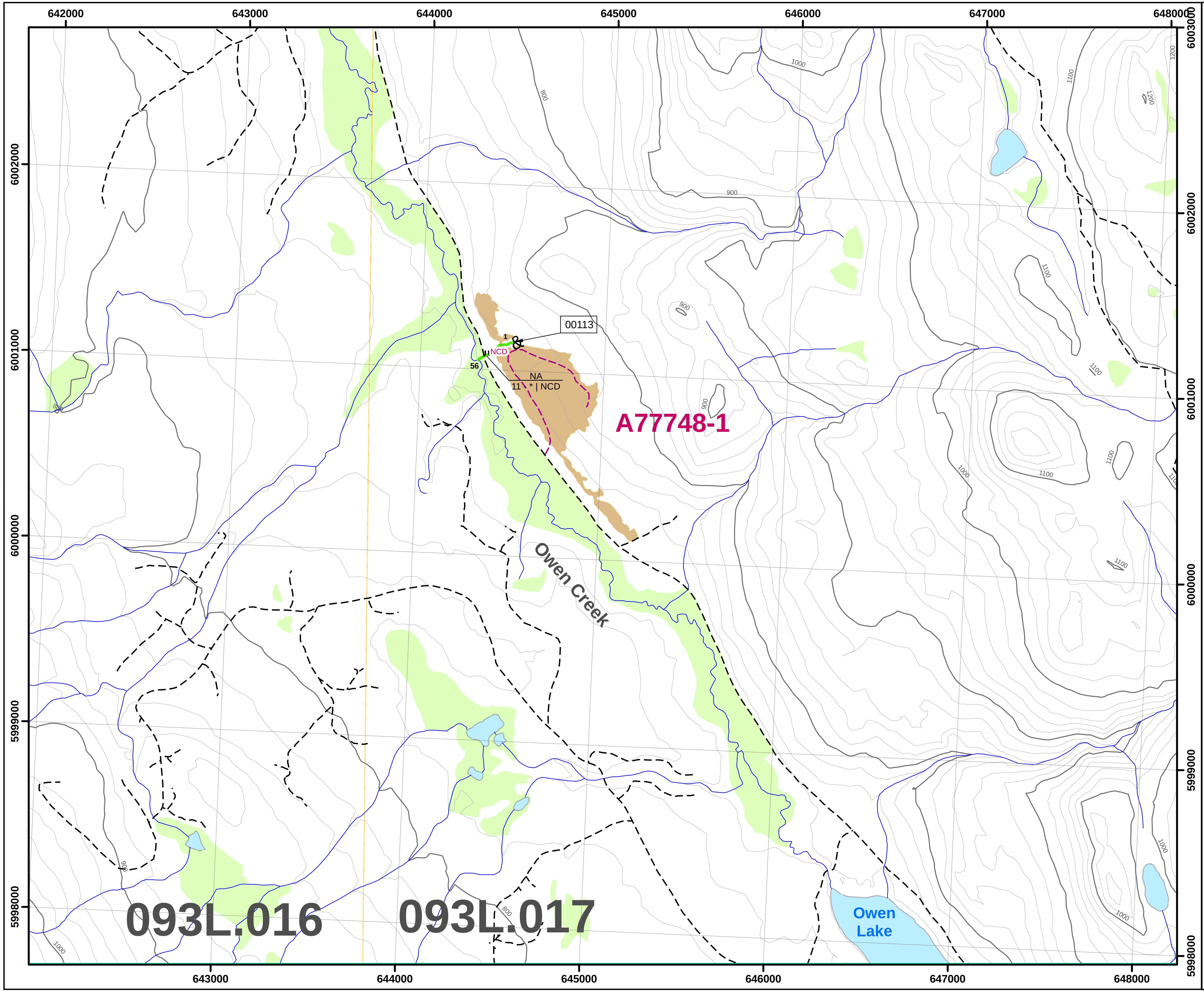
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	🟫	Proposed cutblock
	Highway	🟦	Lakes
	Other Paved Road	🟦	Rivers
	Gravel Road	🟩	Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
A53848	00114 (BB R1)	57	9.646853.6022138



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Block A77748-1

Scale 1: 20,000

500 250 0 500 1,000
Meters

Map 3 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
123 8 - 5.7 | (S2)
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

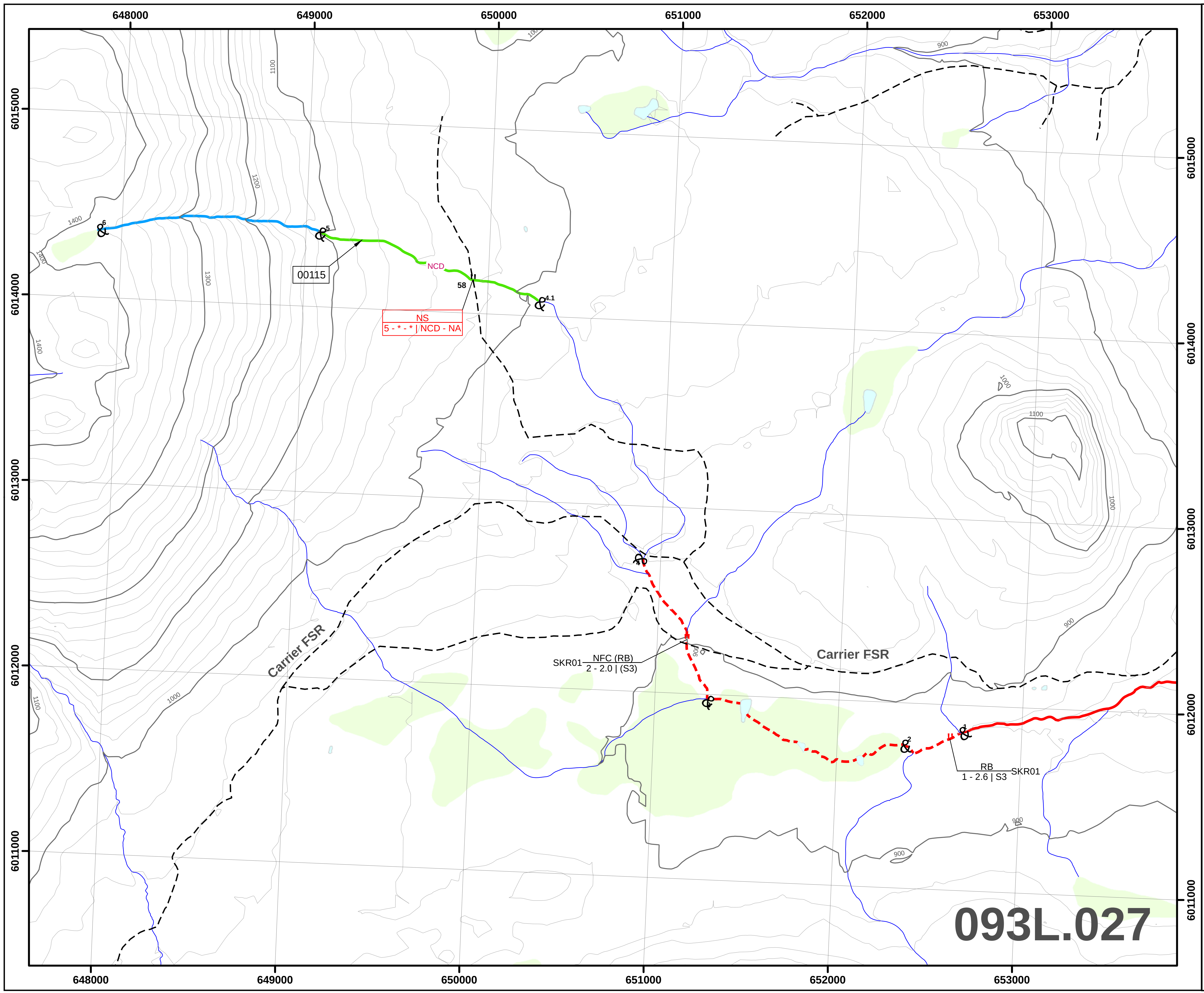
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
00113 (BB R1)	A77748-1	56	9.644357.6001071



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Carrier FSR Br. 5 Crossing

Scale 1: 20,000

500 250 0 500 1,000
Meters

Map 4 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length

Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/ Falls
1 Debris Jam
. Cascade
20 □ 31
Height (m)
Length (m)
Z Sediment Wedge
- Beaver Dam
J Fisheries Sensitive Zone
◆ Base Map Anomaly
0 Culvert
[Dewatering
◆ Disapearing Point
Spring

Drainages at Proposed Roads:

→ NCD
→ Ground Flow
Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

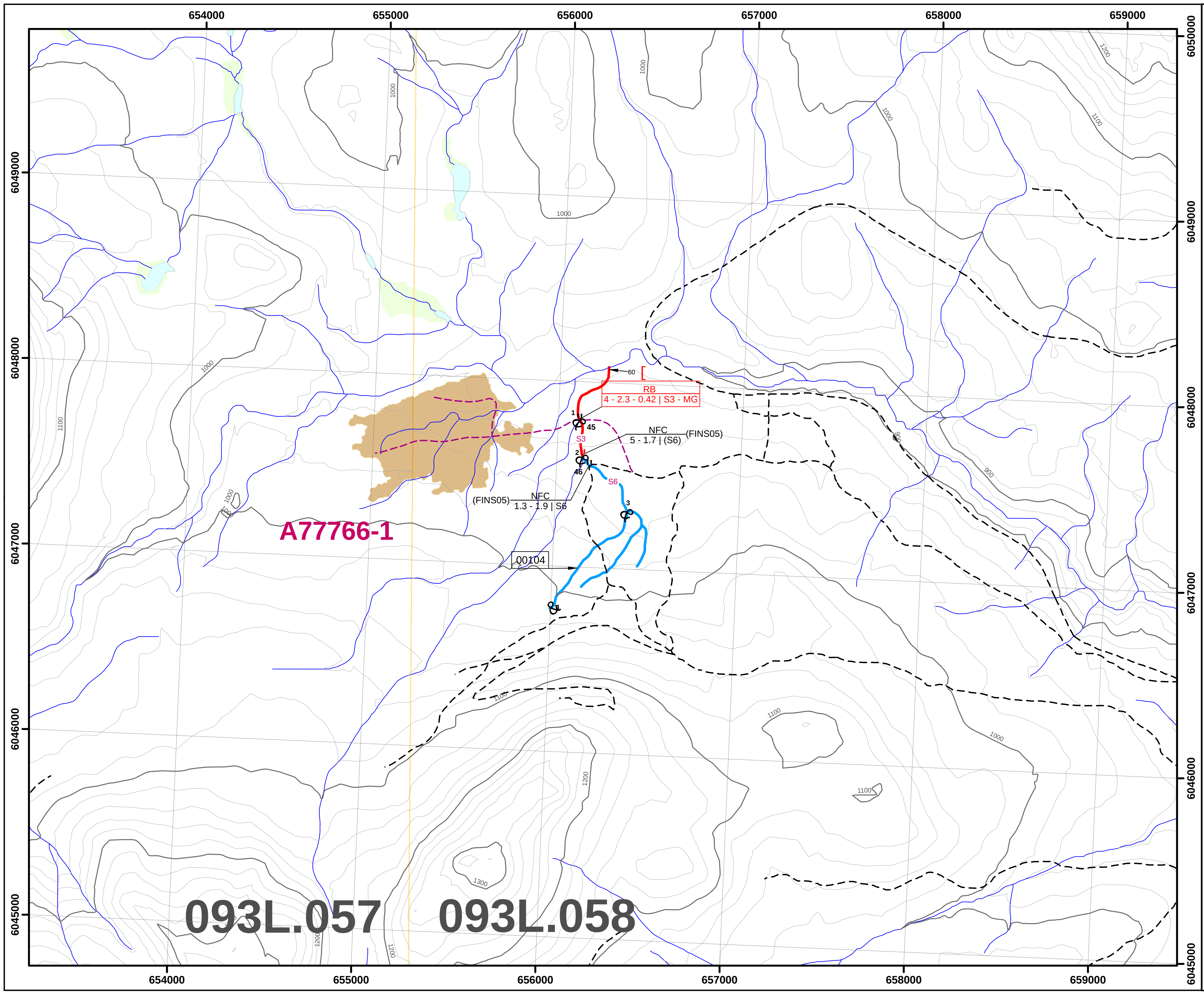
Other streams
1
Reach Boundaries and Reach Numbers
Highway
Other Paved Road
Gravel Road
Proposed Road
Railroad
900
Contours (20m intervals)

A74841 Proposed cutblock reference
Proposed cutblock
Lakes
Rivers
Wetlands
Mapsheet Boundary

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Carrier FSR Br 05	00115	58	9.649915.6014180



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Block A77766-1

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 5 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length

Additional Sampling

	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

- NCD
- Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

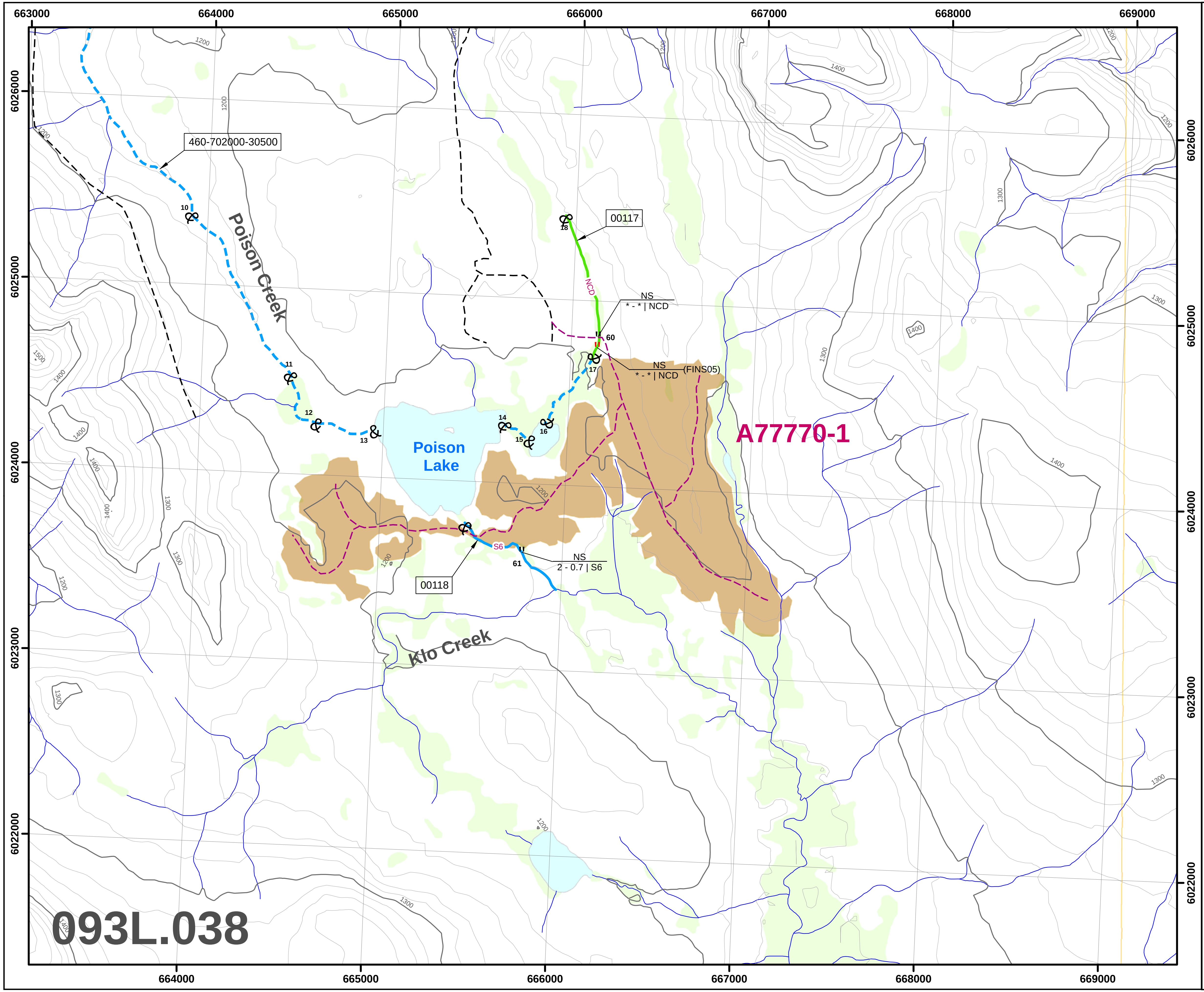
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
A77766-1	00104 (Stream 1)	60	9.656108.6047796
A77766-1	00104 (Stream 1)	61	9.656172.6041540



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Block A77770-1

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 6 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

- → NCD
- → Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

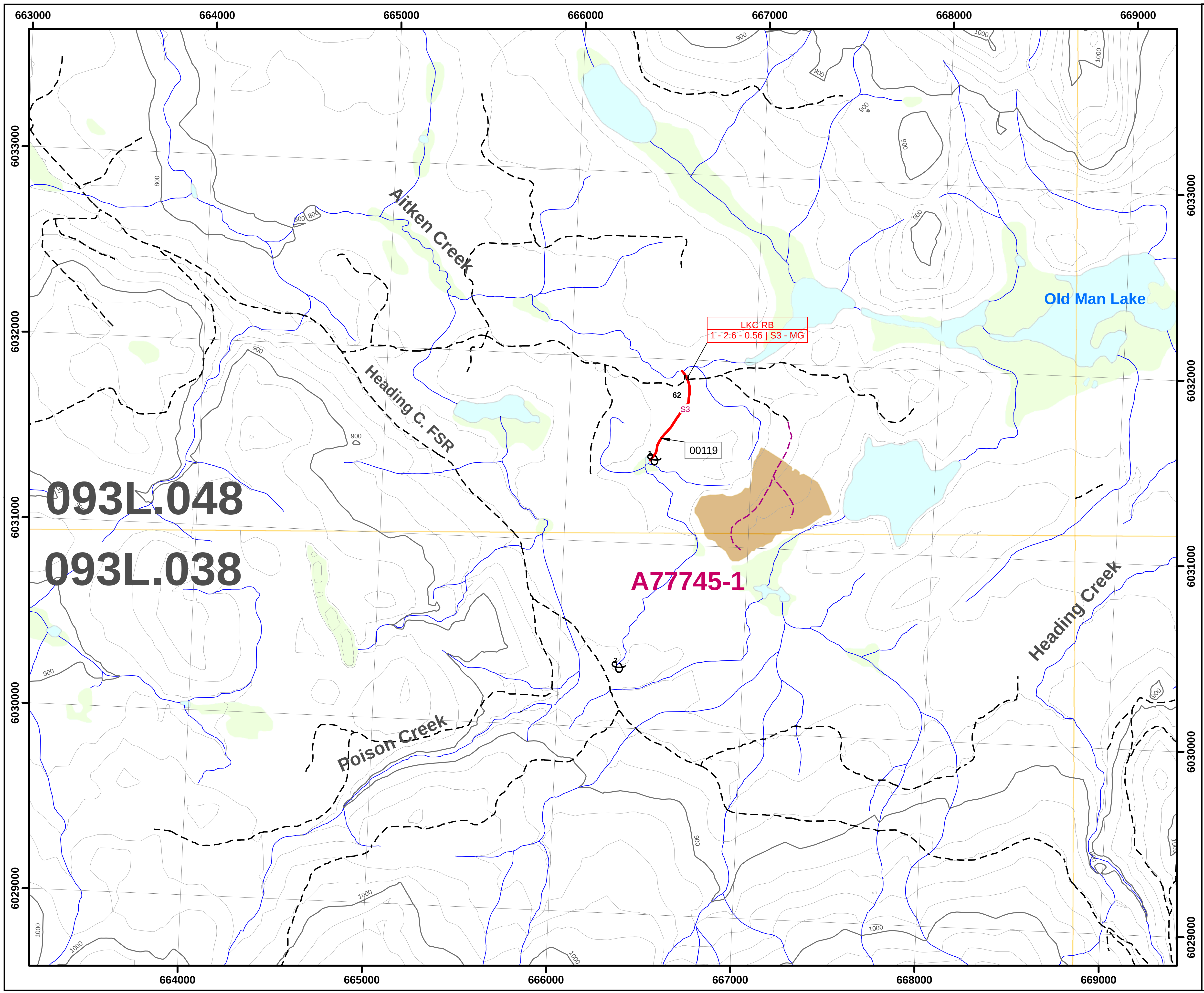
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	🟫	Proposed cutblock
	Highway	🟦	Lakes
	Other Paved Road	🟦	Rivers
	Gravel Road	🟩	Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BLOCK A77770-1	00117 (AA R1)	60	9.66141.6024805
BLOCK A77770-1	00118 (BB R1)	61	9.680117.6032709



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Block A77745-1

Scale 1: 20,000

N

500 250 0 500 1,000
Meters

Map 7 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length

Additional Sampling

	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
	FISS Data

Site Features:

/ Falls
1 Debris Jam
. Cascade
20 □ 31
Height (m)
Length (m)
Z Sediment Wedge
- Beaver Dam
J Fisheries Sensitive Zone
◆ Base Map Anomaly
0 Culvert
[Dewatering
◆ Disapearing Point
Spring

Drainages at Proposed Roads:

→ NCD
→ Ground Flow
Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

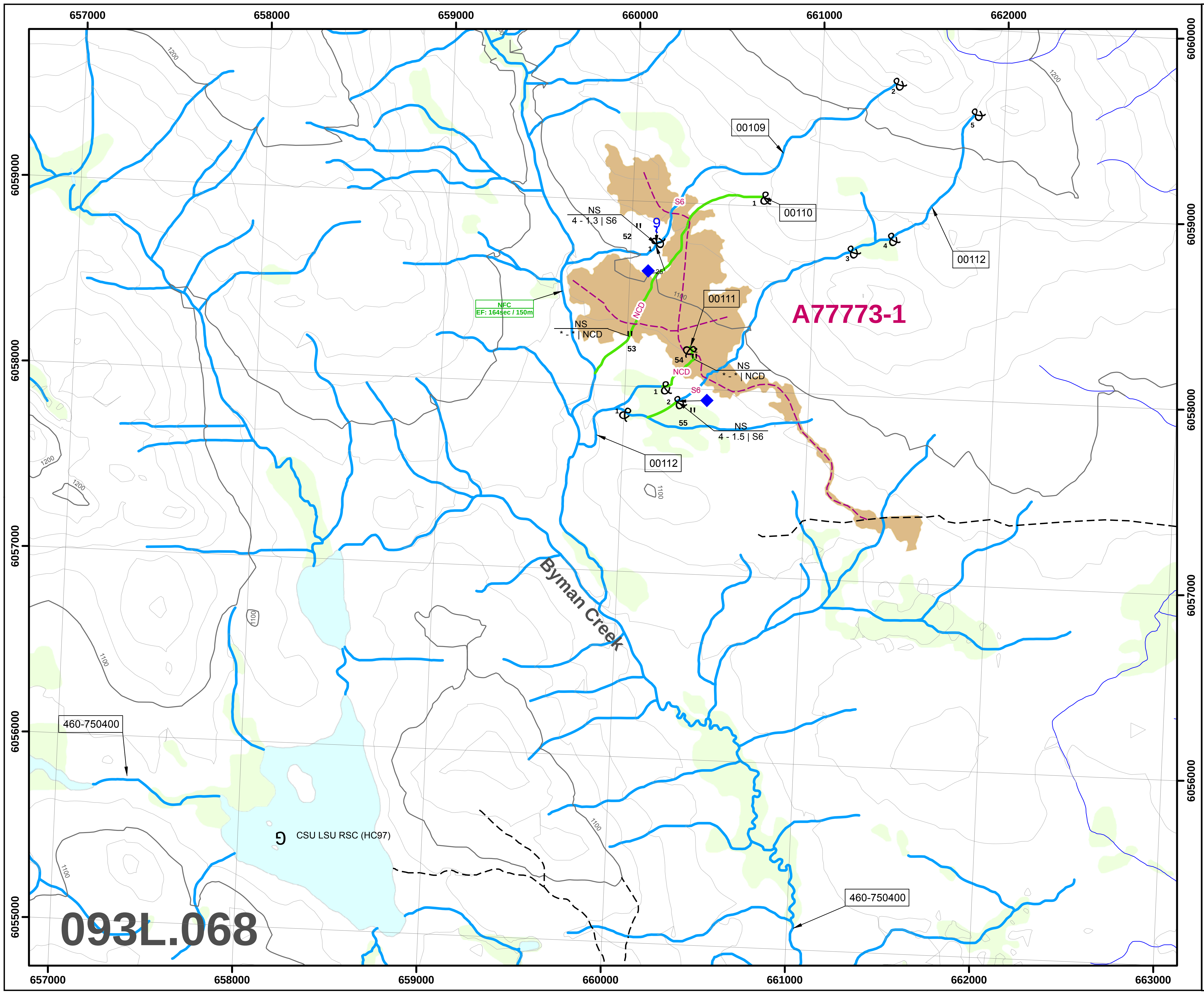
Other streams
1 Reach Boundaries and Reach Numbers
Highway
Other Paved Road
Gravel Road
Proposed Road
Railroad
900 Contours (20m intervals)

A74841 Proposed cutblock reference
Proposed cutblock
Lakes
Rivers
Wetlands
Mapsheet Boundary

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BLOCK A77745-1	00119 (CC R1)	62	9.666625.6031891



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Block A77773-1

Scale 1: 20,000

N

500 250 0 500 1,000
Meters

Map 8 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
123
8 - 5.7 | (S2)
Gradient (%)
Channel Width (m)
FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length
Additional Sampling

Previous Sampling Location
(SKR01) Consultant and Year of Survey
Stream 2 Stream Reference
218-541200-70000 Watershed Code
FISS Data

Site Features:

/ Falls
1 Debris Jam
. Cascade
20 31 Height (m) Length (m)
Z Sediment Wedge
- Beaver Dam
J Fisheries Sensitive Zone
◆ Base Map Anomaly
0 Culvert
[Dewatering
◆ Disapearing Point
Spring

Drainages at Proposed Roads:

→ NCD
→ Ground Flow
Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

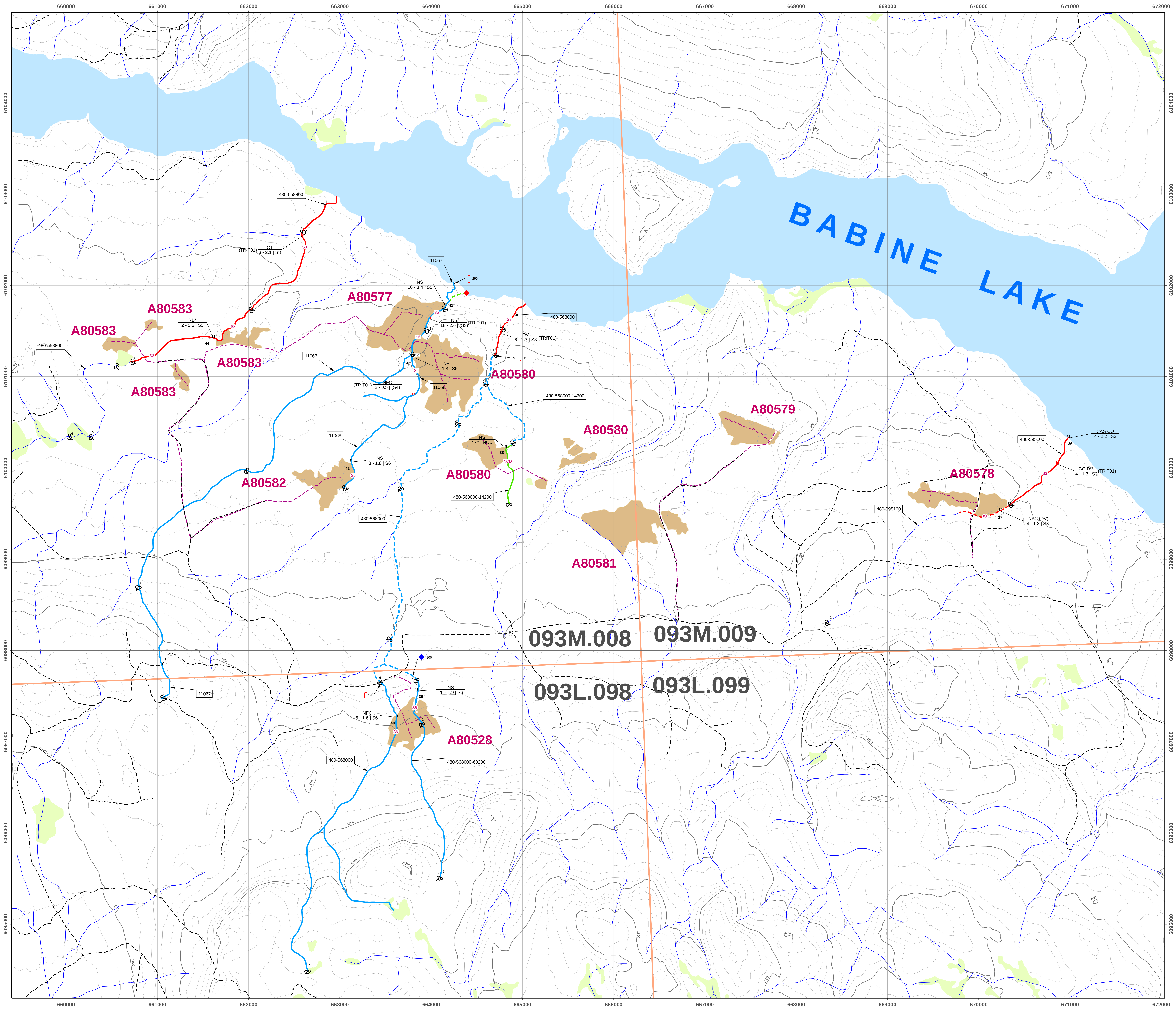
Other streams
1 Reach Boundaries and Reach Numbers
Highway
Other Paved Road
Gravel Road
Proposed Road
Railroad
900 Contours (20m intervals)

A74841 Proposed cutblock reference
Proposed cutblock
Lakes
Rivers
Wetlands
Mapsheet Boundary

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BLOCK 77773-1	00109 (CC R1)	52	9.660137.6058770
BLOCK 77773-1	00110 (CC R1)	53	9.660011.6058267
BLOCK 77773-1	00111 (BB R1)	54	9.660370.6058159
BLOCK 77773-1	00112 (AA R1)	55	9.660288.6057927



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Blocks A77766-1, A80528, A80577, A80578, A80580, A80582 and A80583

Scale 1: 20,000

1,000 500 0 1,000 Meters

Map 9 of 23

N

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

FINS
FISH INVENTORY SPECIALISTS

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream
S4	Suspected fish presence
S4	Suspected fish absence
S6	Non fish-bearing stream
NCD	Non-Classified Drainage (NCD)
NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

○	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
00123	Stream ILP
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

F	Falls	XW	Sediment Wedge		Culvert
X	Debris Jam		Beaver Dam	DW	Dewatering
C	Cascade		Fisheries Sensitive Zone	◆	Disappearing Point
20 31	Height (m) Length (m)	◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→ NCD → Ground Flow Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

	Other streams
1	Reach Boundaries and Reach Numbers
	Highway
	Paved Main Road
	Gravel Road
	Proposed Road
	Railroad
900	Contours (20m intervals)
A74841	Proposed cutblock reference
🟫	Proposed cutblock
🟦	Lakes
🟦	Rivers
🟩	Wetlands
	Mapsheet Boundary

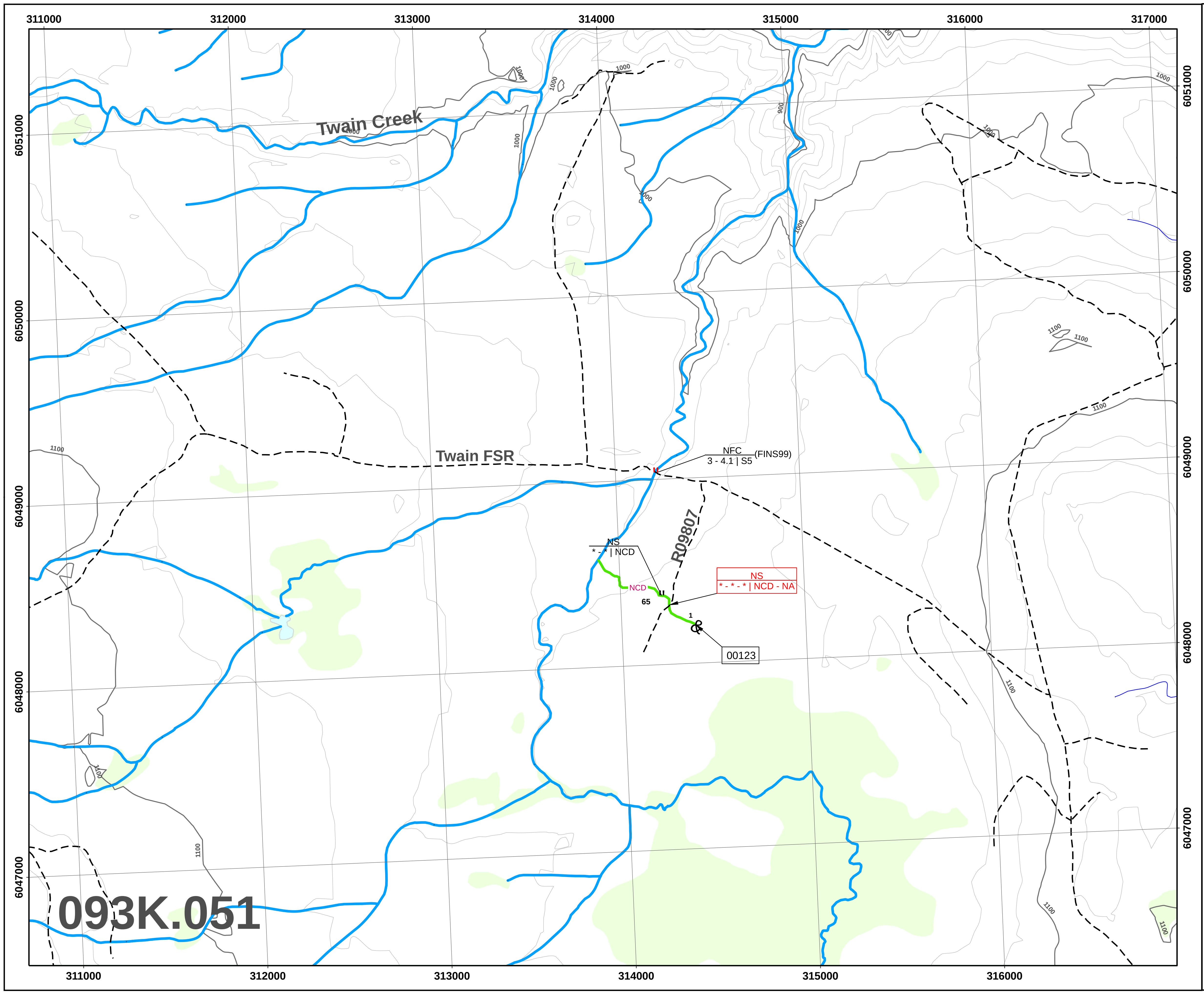
BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
A80578	480-595100	36	9.670983.6100328
A80578	480-595100	37	9.670233.6099492
A80580	480-568000-14200	38	9.664817.6100220
A80528	480-568000-60200	39	9.663844.6097560
A80528	480-568000	40	9.663622.6097268
A80577	11067	41	9.664153.6101782
A80577	11068	42	9.663120.6100065
A80582	11068	43	9.663771.6101208
A80583	480-558800	44	9.661496.6101530
A77766-1	00104	45	9.656108.6047796
A77766-1	00104	46	9.656172.6041540

Confirmed Coordinates for End of Fish Use (EFU) and/or Stream Riparian Classification Change

Area	Stream	Point	UTM (Z.E.N.)
A80577	11067	S5/S6	9.663940.6101495



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Twain FSR - Branch R09807 Crossing

Scale 1: 20,000

N

500 250 0 500 1,000 Meters

Map 10 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length

Additional Sampling

	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
	FISS Data

Site Features:

- / Falls
- 1 Debris Jam
- . Cascade
- 20 □ 31 Height (m) Length (m)
- Z Sediment Wedge
- - Beaver Dam
- J Fisheries Sensitive Zone
- ◆ Base Map Anomaly
- 0 Culvert
- [Dewatering
- ◆ Disapearing Point
- Spring

Drainages at Proposed Roads:

- → NCD
- → Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

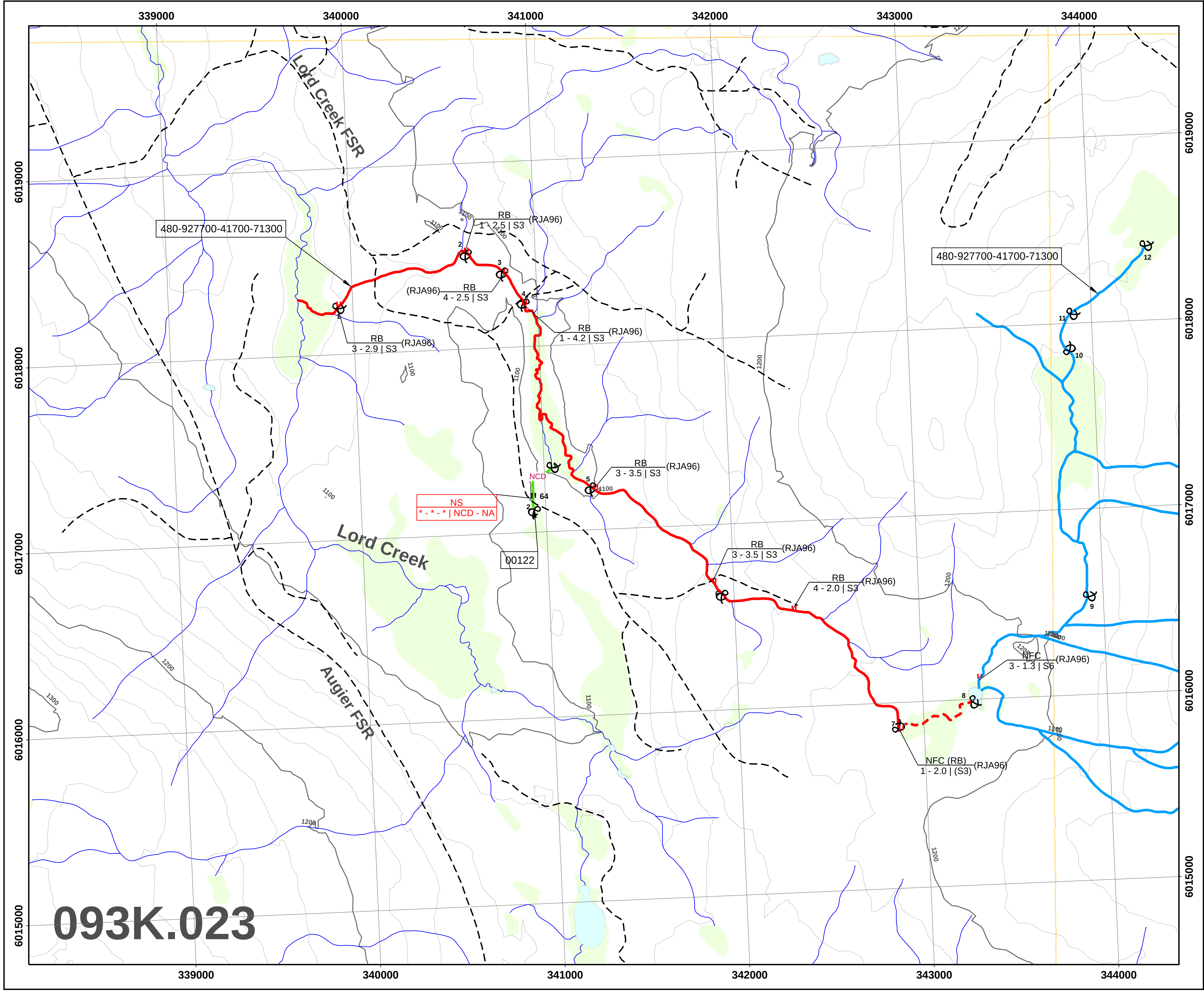
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Br. R09807	00137	65	10.314265.6048332



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Lord Creek FSR - Branch 01 Crossing

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 11 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length

Additional Sampling

	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

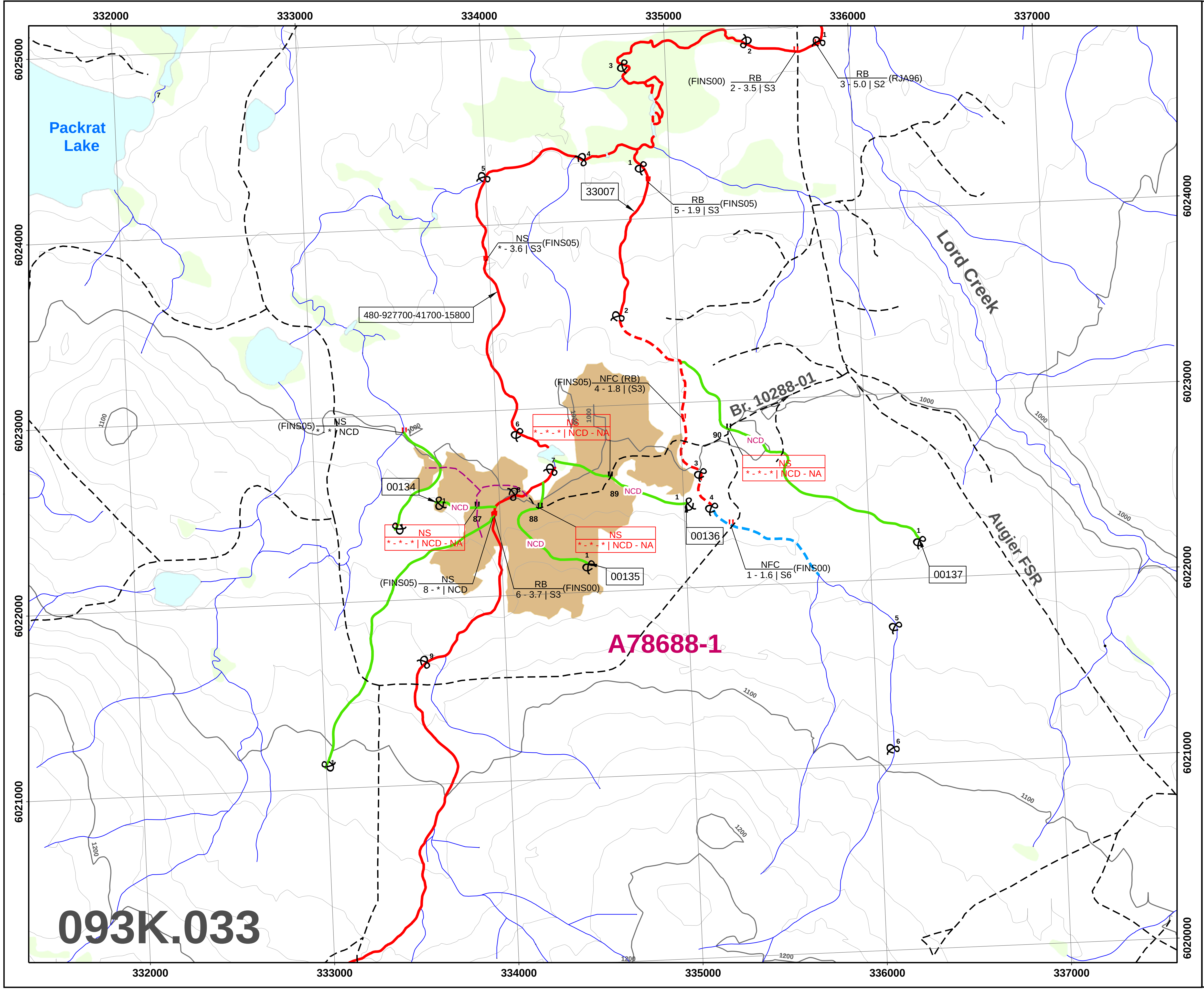
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BR 01 Crossing @ STN=1+850	00122	64	10.340927.6017183



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Augier FSR - Branch 10288-1 Crossings

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 12 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) | Channel Width (m) | FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) | Channel Width (m) | Bankful Depth (m) | FPC Class (Inferred) | Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method | Sampling time | Sampling length
Additional Sampling

	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

- → NCD
- → Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

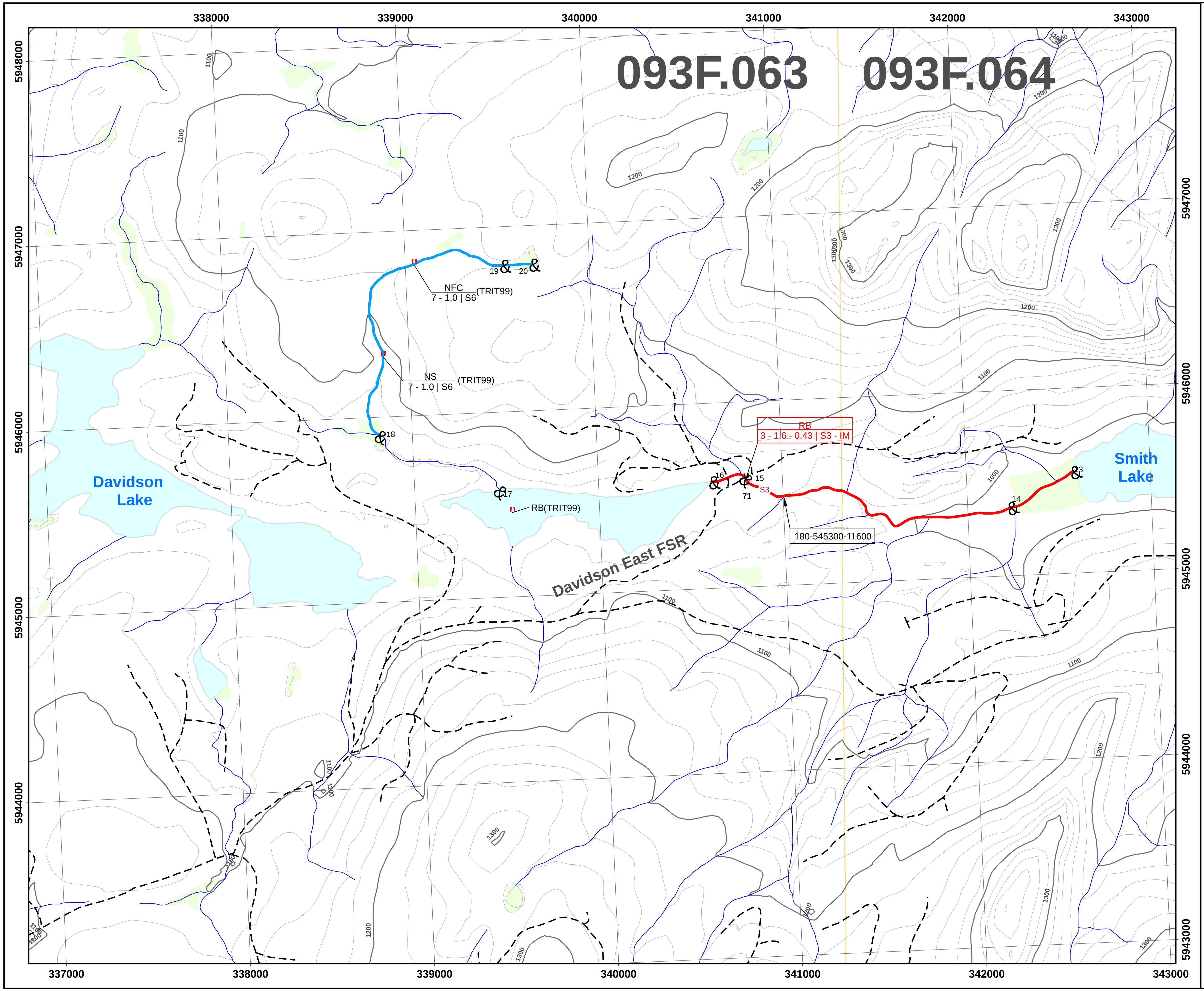
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Branch 10288-01	00134	87	10.333874.6022483
Branch 10288-01	00135	88	10.334219.6022462
Branch 10288-01	00136	89	10.334604.6022614
Branch 10288-01	00137	90	10.335265.6022849



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Davidson East FSR Crossing

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 13 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

FINS
FISH INVENTORY SPECIALISTS

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length

Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly	♀	Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
⩛	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

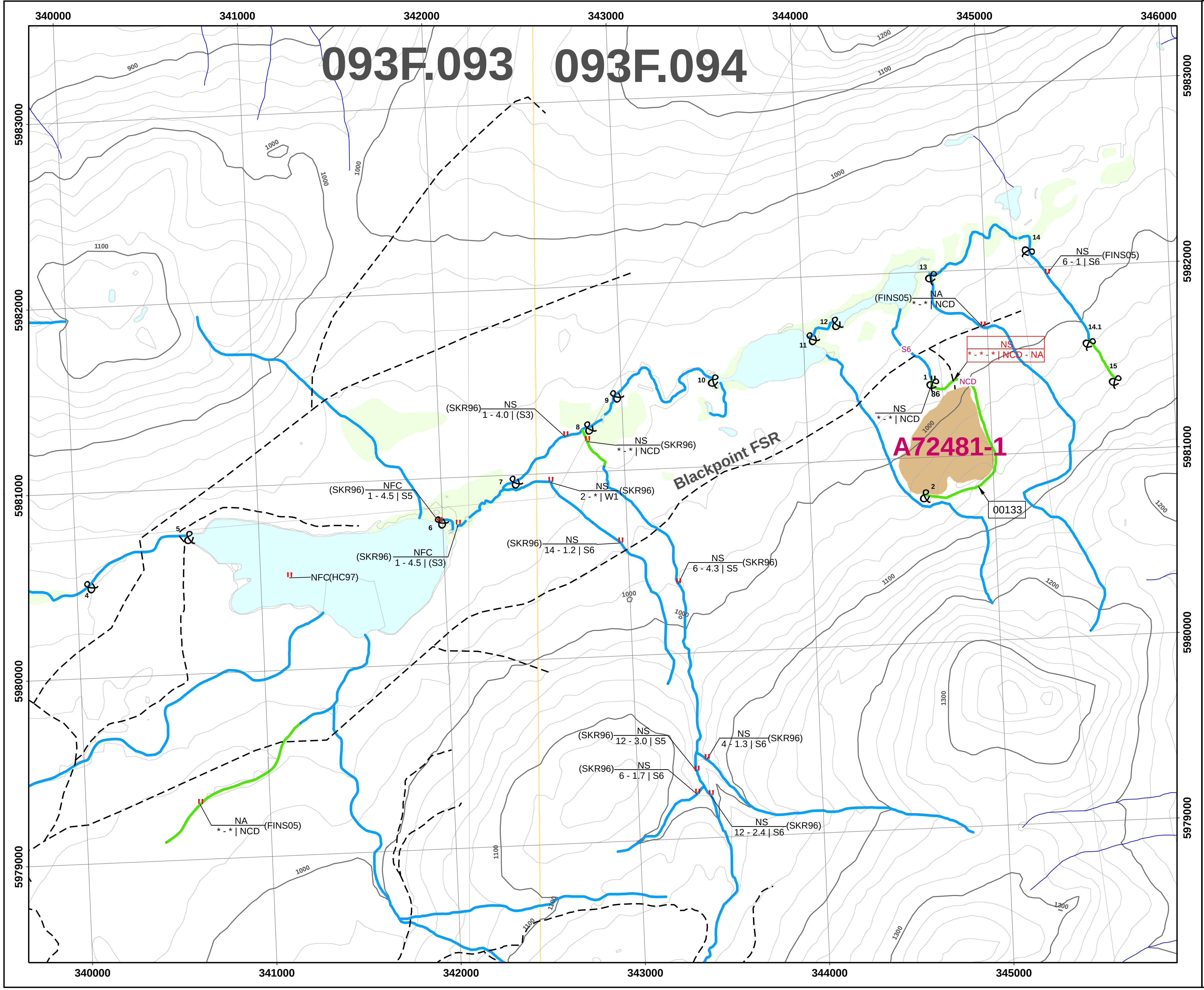
Other Symbols and Abbreviations:

—	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	▨	Proposed cutblock
▬	Highway	▨	Lakes
—	Other Paved Road	▨	Rivers
- - -	Gravel Road	🟩	Wetlands
- - -	Proposed Road	—	Mapsheet Boundary
┼─┼─┼	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Davidson East FSR Crossing @ STN=1+360	180-545300-11600	71	10.340799.5945584



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Blackpoint FSR Br. 1000 Crossing

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 14 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length

Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

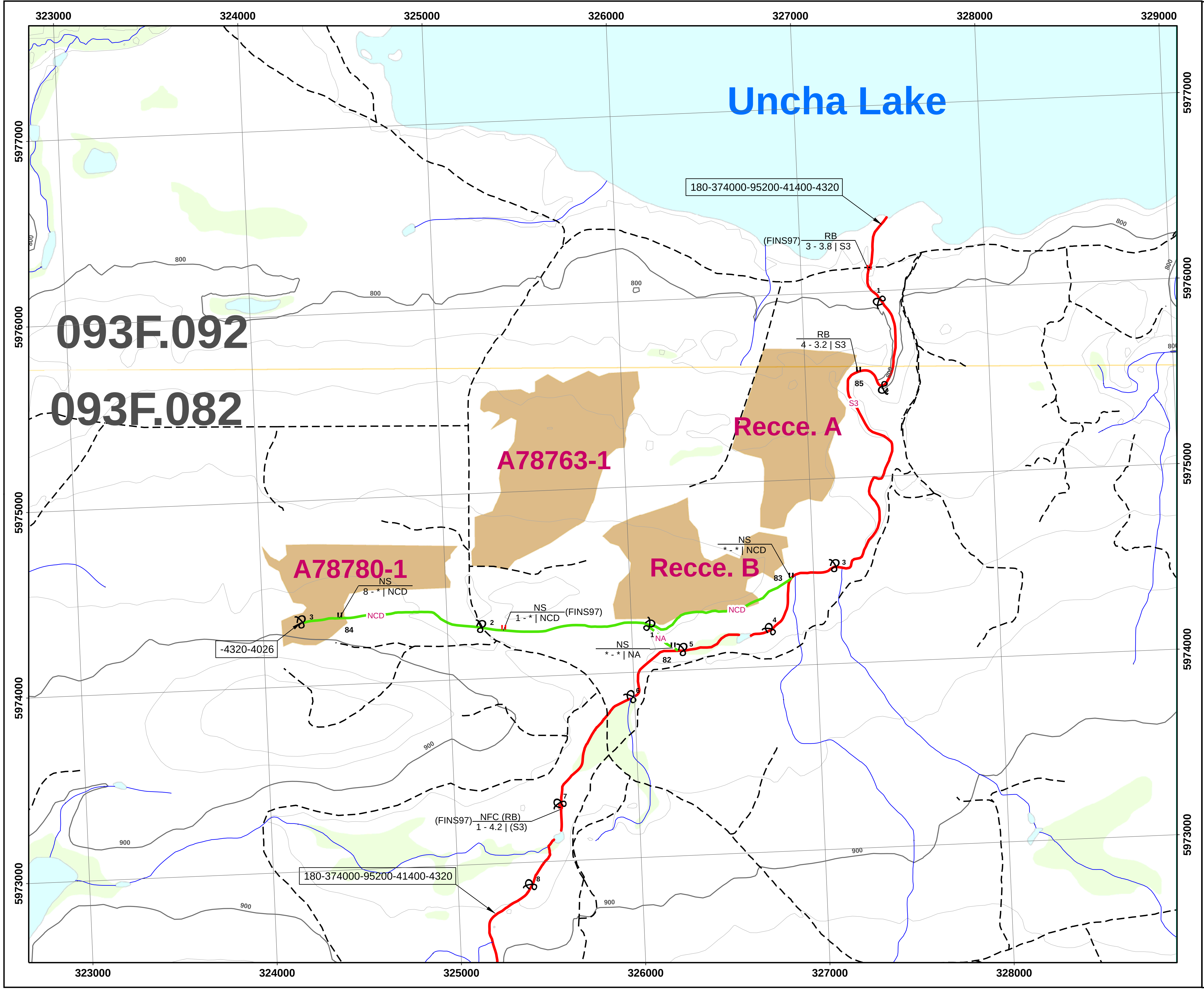
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	🟫	Proposed cutblock
	Highway	🟦	Lakes
	Other Paved Road	🟦	Rivers
	Gravel Road	🟩	Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Blackpoint FSR Br. 1000 Crossing	00133 (EA R1 S4)	86	10.344709.5981416



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Blocks A78780-1, Recce A and B

Scale 1: 20,000

N

500 250 0 500 1,000 Meters

Map 15 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd. FINS FISH INVENTORY SPECIALISTS

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

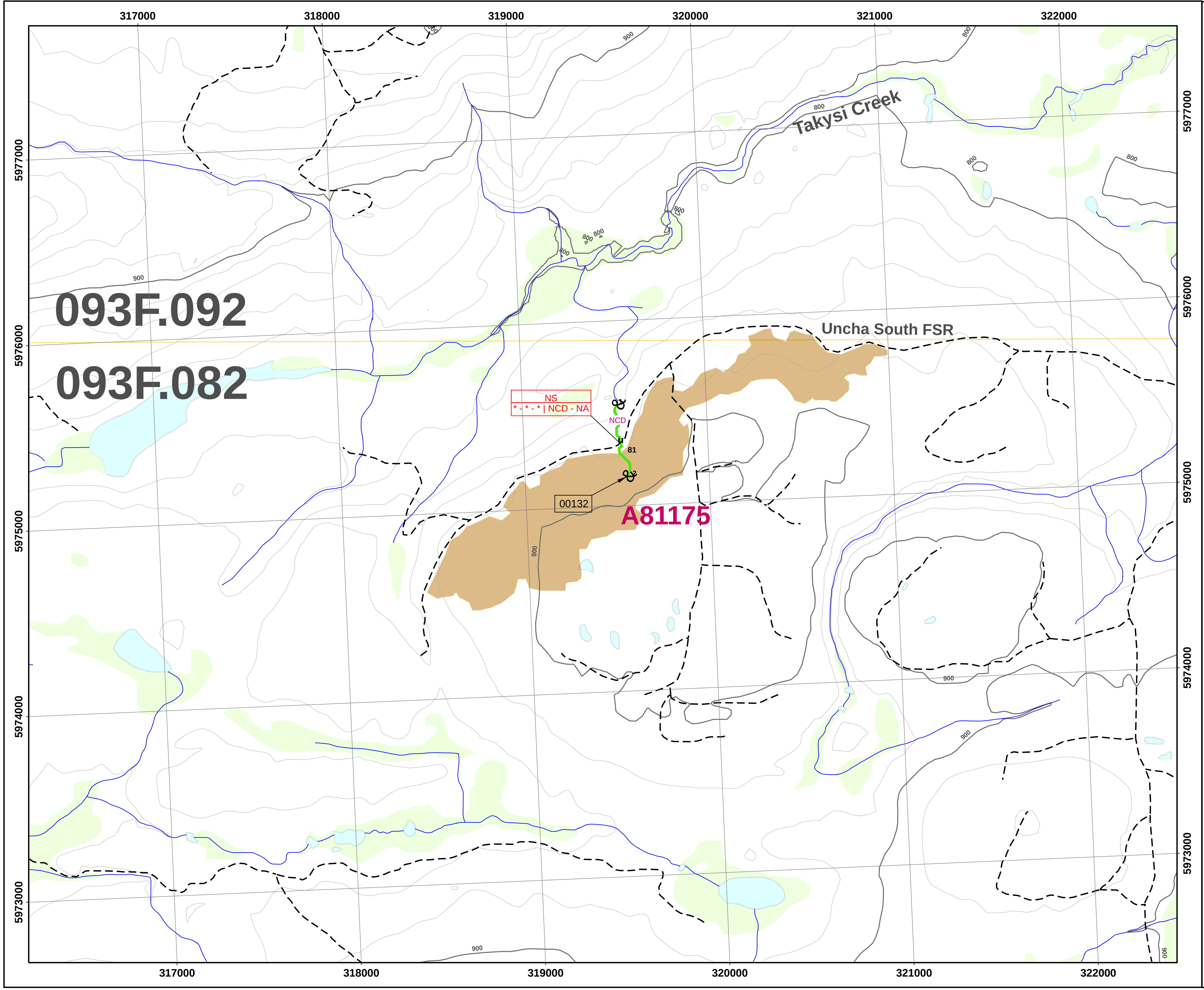
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	▨	Proposed cutblock
	Highway	▨	Lakes
	Other Paved Road	▨	Rivers
	Gravel Road	🟩	Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BLOCK Recce B	180-374000-95200-41400-4320-4026	82	10.326224.5974142
BLOCK Recce B	180-374000-95200-41400-4320-4026	83	10.326874.5974470
BLOCK A78780-1	180-374000-95200-41400-4320-4026	84	10.324415.5974359
BLOCK Recce A	180-374000-95200-41400-4320	85	10.327283.5975573



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Block A81175 (Recce F)

Scale 1: 20,000

Map 16 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
123 8 - 5.7 | (S2)
Gradient (%) Channel Width (m) FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length

Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly	♀	Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
⚶	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

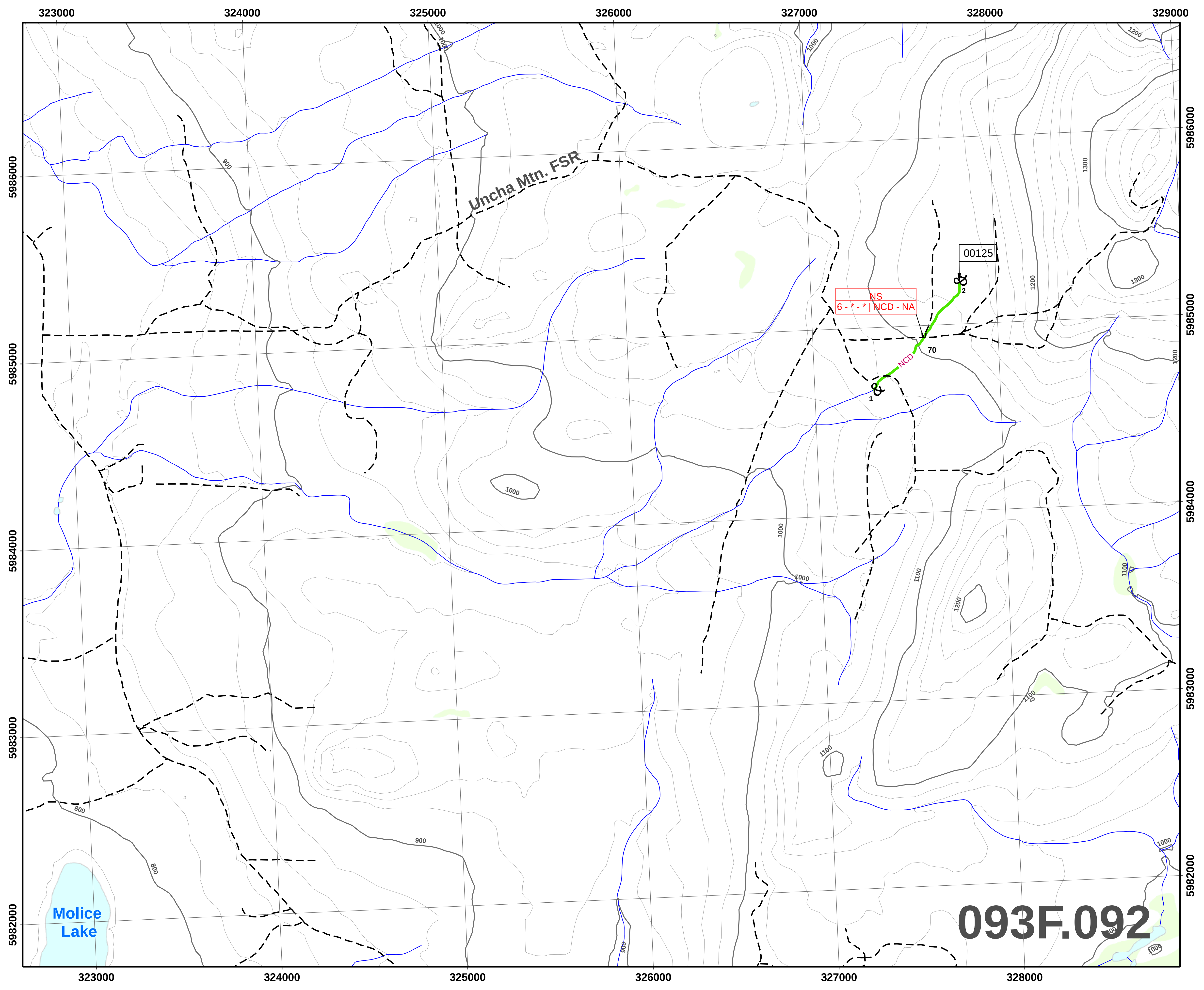
Other Symbols and Abbreviations:

━	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	🟫	Proposed cutblock
━	Highway	🟦	Lakes
━	Other Paved Road	🟦	Rivers
– – –	Gravel Road	🟩	Wetlands
– – –	Proposed Road	━	Mapsheet Boundary
┼─┼─┼	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
A81175 (Recce F)	00132	81	10.319523.5975335



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Uncha Mtn. FSR Br. 04 Crossing

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 17 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

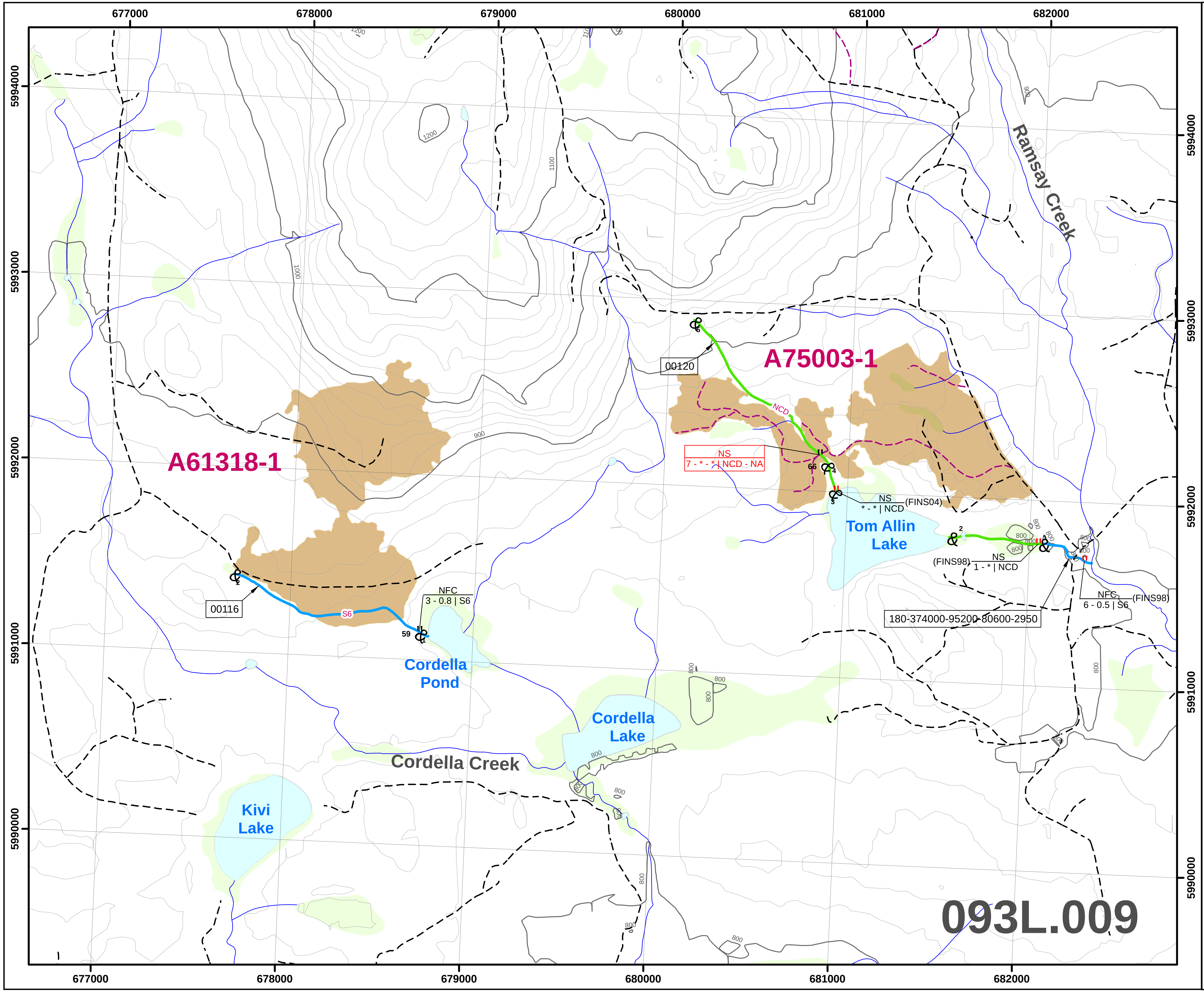
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Uncha Mtn FSR BR 04 Crossing @ STN=0+400	00125	70	10.327597.5984932



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

N

Blocks A61318-1 and A75003-1

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 18 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

- → NCD
- → Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

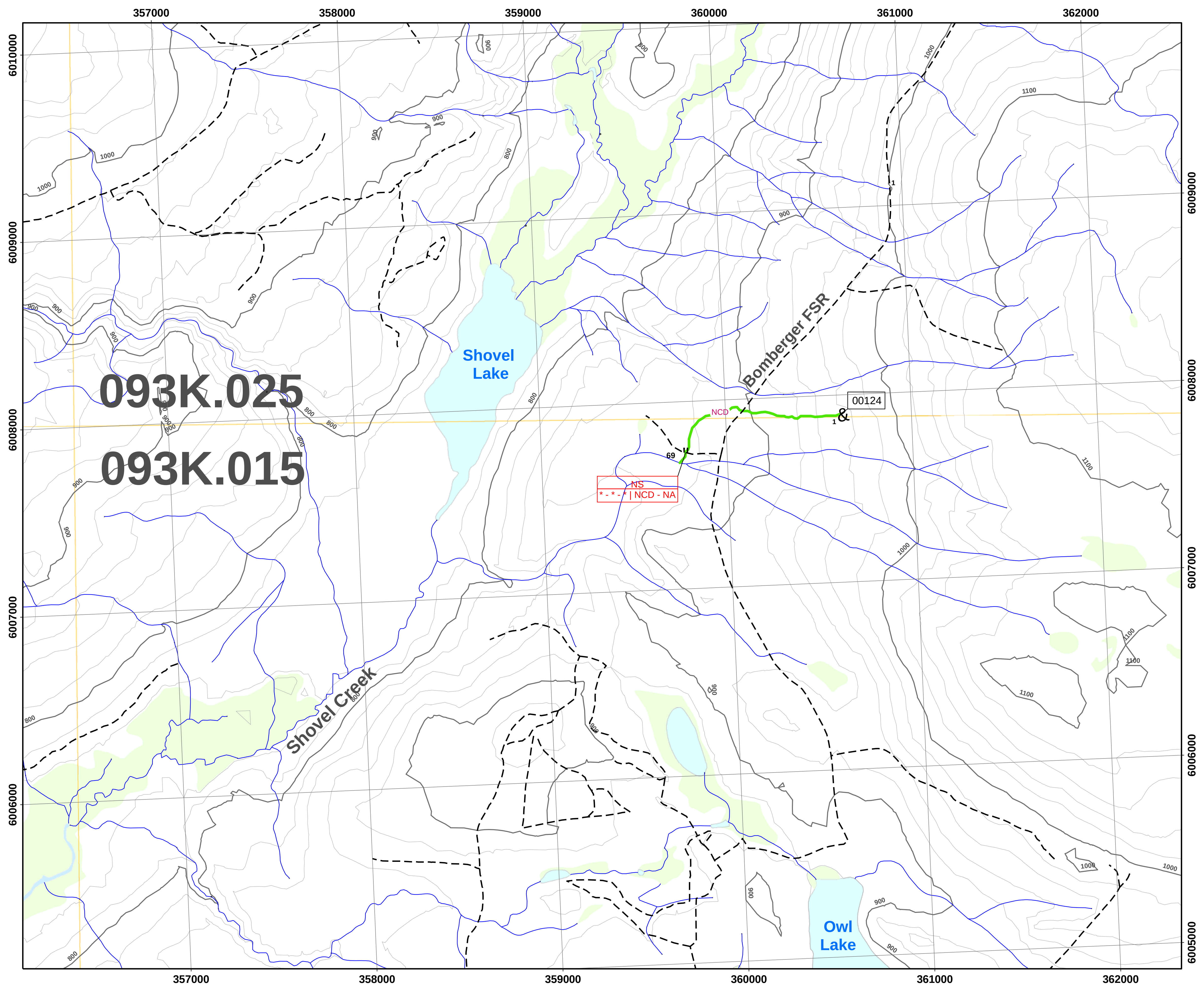
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	🟫	Proposed cutblock
	Highway	🟦	Lakes
	Other Paved Road	🟦	Rivers
	Gravel Road	🟩	Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
A61318-1	00116 (AA R1)	59	9.678708.5991153
A75003-1	00120 (BB R1)	66	9.680827.5992183



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Bomberger FSR - Branch 10 Crossing

Scale 1: 20,000

500 250 0 500 1,000
Meters

Map 19 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length

Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly	♀	Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
⁂	Depression

Habitat Value Rating:

Critical (CR) Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.

Important (IM) Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.

Marginal (MG) Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.

NA No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

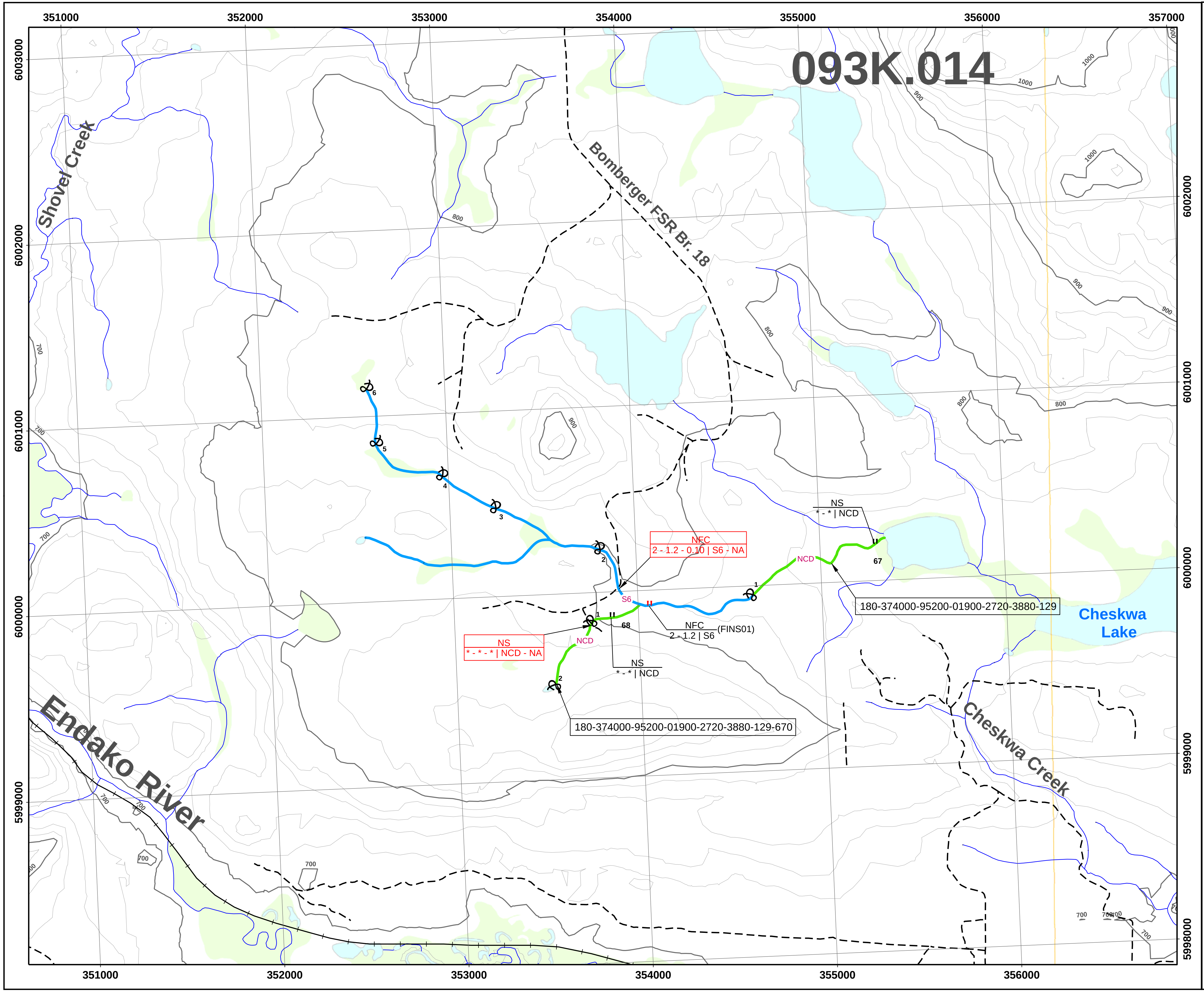
Other Symbols and Abbreviations:

―	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	🟫	Proposed cutblock
═	Highway	🟦	Lakes
―	Other Paved Road	🟦	Rivers
- - -	Gravel Road	🟩	Wetlands
- - -	Proposed Road	―	Mapsheet Boundary
┼	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BR 10 Crossing @ STN=0+150	00124	69	10.359775.6007725



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Bomberger FSR - Branch 18 & 24 Crossings

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 20 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

- S3 Fish-bearing stream
- S4 Suspected fish presence
- S4 Suspected fish absence
- S6 Non fish-bearing stream
- NCD Non-Classified Drainage (NCD)
- NA No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

- / Falls
- 1 Debris Jam
- Cascade
- 20 □ 31 Height (m) Length (m)
- Z Sediment Wedge
- \- Beaver Dam
- J Fisheries Sensitive Zone
- ◆ Base Map Anomaly
- 0 Culvert
- [Dewatering
- ◆ Disapearing Point
- Spring

Drainages at Proposed Roads:

- → NCD
- → Ground Flow
- Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

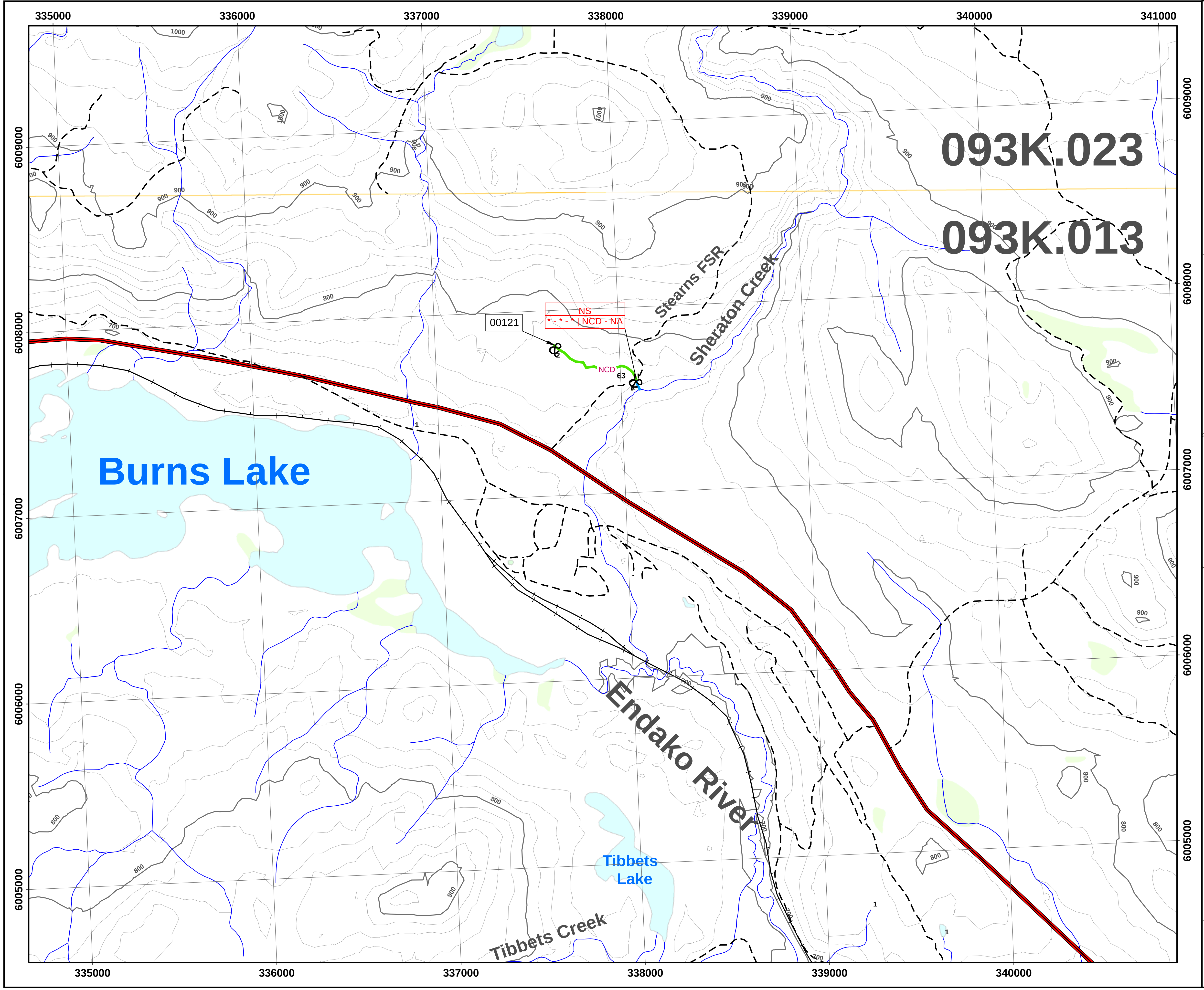
Other Symbols and Abbreviations:

- Other streams
- Reach Boundaries and Reach Numbers
- Highway
- Other Paved Road
- Gravel Road
- Proposed Road
- Railroad
- 900 Contours (20m intervals)
- A74841 Proposed cutblock reference
- Proposed cutblock
- Lakes
- Rivers
- Wetlands
- Mapsheet Boundary

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
BR 18 Crossing @ STN=4+500	180-374000-95200-01900-2720-3880-129	67	10.355287.6000216
BR 24 Crossing @ STN=0+100	180-374000-95200-01900-2720-3880-129-670	68	10.353855.5999857



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Stearns FSR Crossing

Scale 1: 20,000

500 250 0 500 1,000 Meters

Map 21 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) | Channel Width (m) | FPC Class (Inferred)

Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) | Channel Width (m) | Bankful Depth (m) | FPC Class (Inferred) | Habitat Rating

Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method | Sampling time | Sampling length

Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

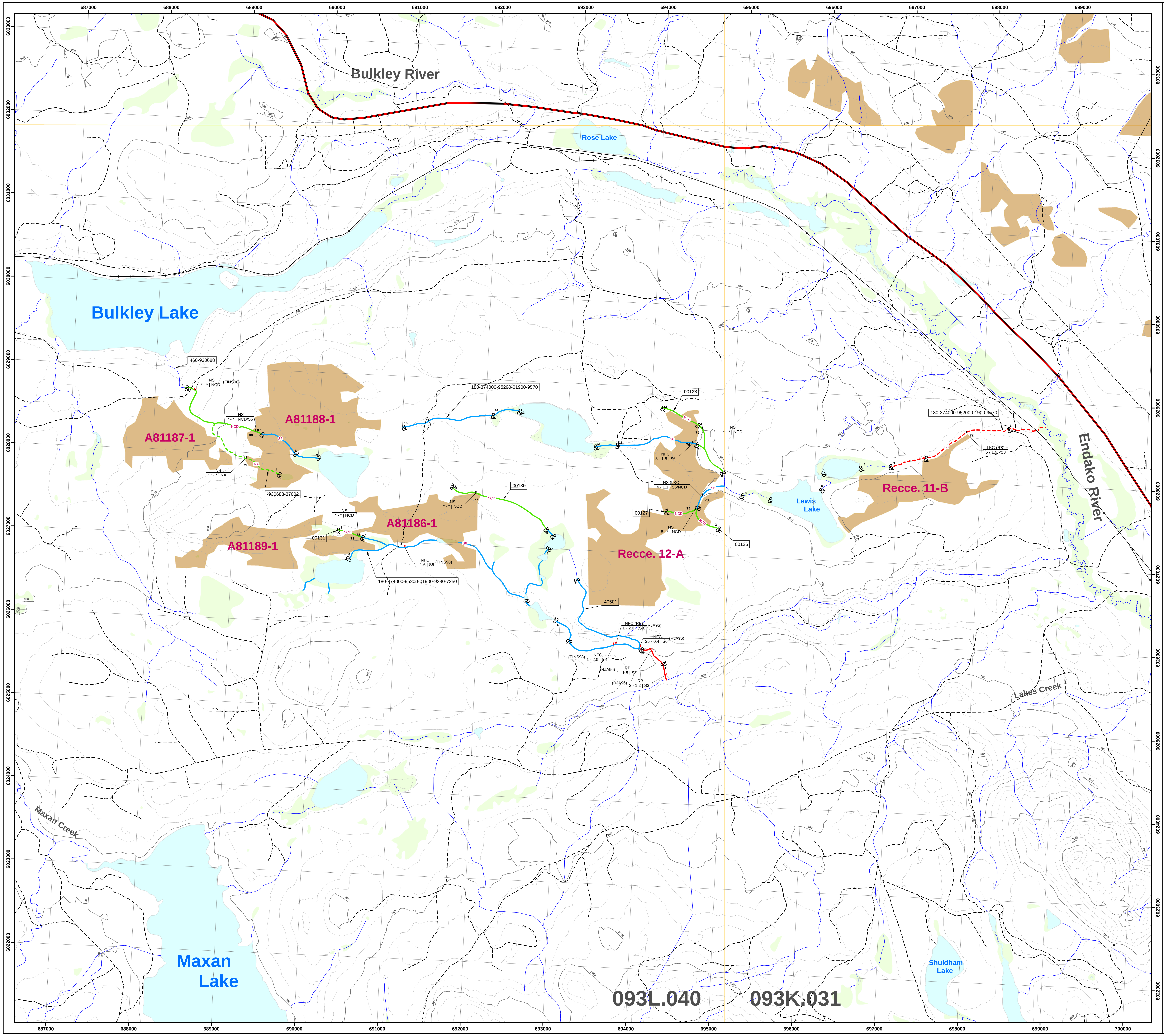
Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers		Proposed cutblock
	Highway		Lakes
	Other Paved Road		Rivers
	Gravel Road		Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**TRIT**	Triton Environmental Cons. Ltd.
HC	Hatfield Consultants Ltd.	**WS**	Wildstone Consulting Ltd.

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Stearns FSR Crossing @ STN=1+000	00121	63	10.338083.6007613



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Blocks A81186-1, A81187-1, A81188-1, Recce 11A and 12B

Scale 1: 20,000

1,000 500 0 1,000 Meters

Map 22 of 23

Projection: UTM (Zone 9)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream
S4	Suspected fish presence
S4	Suspected fish absence
S6	Non fish-bearing stream
NCD	Non-Classified Drainage (NCD)
NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%) Channel Width (m) FPC Class (Inferred)

Site location with reference and stream information

Fish code
RB
EF: 7sec/2m
Sampling method Sampling time Sampling length

Additional Sampling

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%) Channel Width (m) Bankful Depth (m) FPC Class (Inferred) Habitat Rating

Assessment at the Road Crossing

○	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
00123	Stream ILP
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

F	Falls	XW	Sediment Wedge		Culvert
X	Debris Jam		Beaver Dam	DW	Dewatering
C	Cascade		Fisheries Sensitive Zone	◆	Disappearing Point
20 Height (m)	31 Length (m)	◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD	→	Ground Flow		Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

	Other streams
1	Reach Boundaries and Reach Numbers
	Highway
	Paved Main Road
	Gravel Road
	Proposed Road
	Railroad
900	Contours (20m intervals)
A74841	Proposed cutblock reference
🟫	Proposed cutblock
🟦	Lakes
🟦	Rivers
🟩	Wetlands
	Mapsheet Boundary

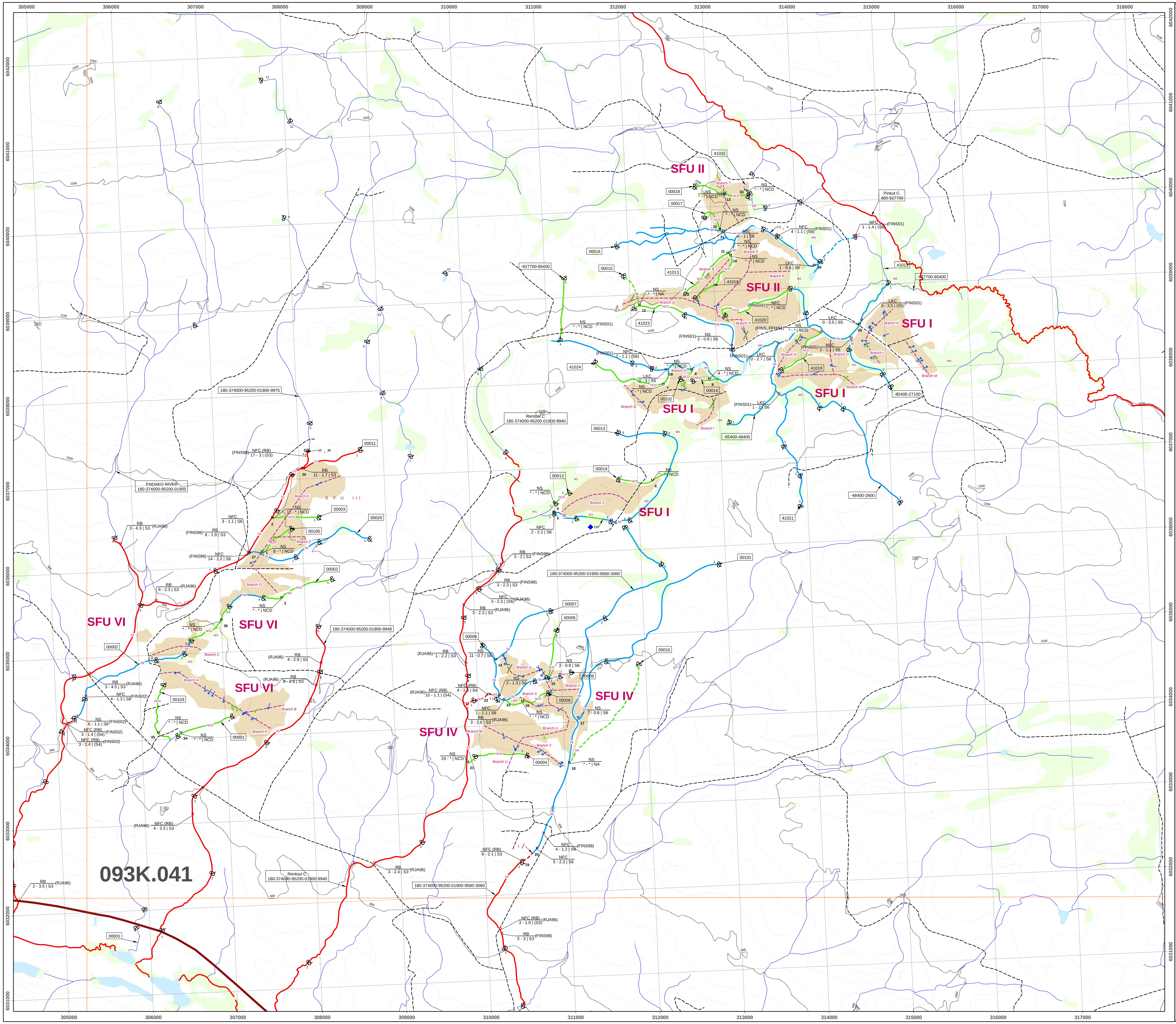
BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**WS**	Wildstone Consulting Ltd.
HC	Hatfield Consultants Ltd.		

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
Recce 11 B	180-374000-95200-01900-9570	72	10.308027.6028344
Recce 12 A	00126	73	9.694646.6027708
Recce 12 A	00127	74	9.694570.6027538
Recce 12 A	00128	75	9.694612.6028518
Recce 12 A	180-374000-95200-01900-9570	76	9.694515.6028314
A81186-1	00130	77	9.691920.6027638
A81186-1	00131	78	9.690529.6027064
A81187-1 & A81188-1	460-930688-37002	79	9.689117.6027914
A81187-1 & A81188-1	460-930688	80	9.689229.6028220

Confirmed Coordinates for End of Fish Use (EFU) and/or Stream Riparian Classification Change

Area	Stream	Point	UTM (Z.E.N.)
Recce 12 A	180-374000-95200-01900-9570	NCD/S6	9.694553.6028332
Recce 12 A	00126	S6/NCD	9.694620.6027551
A81187-1 & A81188-1	460-930688	NCD/S6	9.689292.6028211



2006 Stream Assessment
for
Burns Lake Timber Sales Office
Babine Business Area

Blocks Recce SFU I - VI

Scale 1: 20,000

1,000 500 0 1,000 Meters

N

Map 23 of 23

Projection: UTM (Zone 10)
Datum: NAD 83
Inventory Company: FINS Consulting Ltd.
Field Survey: June7 - October 7, 2006

Map Produced by FINS Consulting Ltd.

FINS
FISH INVENTORY SPECIALISTS

Stream Fish Bearing Status and Riparian Classification:

S3	Fish-bearing stream	S6	Non fish-bearing stream
S4	Suspected fish presence	NCD	Non-Classified Drainage (NCD)
S4	Suspected fish absence	NA	No Drainage Present (NA)

Symbols and abbreviation used:

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 | (S2)
123
Gradient (%)
Channel Width (m)
FPC Class (Inferred)
Site location with reference and stream information

Fish Species
* - Spawning (Inferred)
RB* (SK)
8 - 5.7 - 0.33 | (S2) - IM
Gradient (%)
Channel Width (m)
Bankful Depth (m)
FPC Class (Inferred)
Habitat Rating
Assessment at the Road Crossing

Fish code
RB
EF: 7sec/2m
Sampling method
Sampling time
Sampling length
Additional Sampling

⊙	Previous Sampling Location
(SKR01)	Consultant and Year of Survey
Stream 2	Stream Reference
218-541200-70000	Watershed Code
▲	FISS Data

Site Features:

/	Falls	Z	Sediment Wedge	0	Culvert
1	Debris Jam	-	Beaver Dam	[	Dewatering
.	Cascade	J	Fisheries Sensitive Zone	◆	Disapearing Point
20 □ 31 Height (m) Length (m)		◆	Base Map Anomaly		Spring

Drainages at Proposed Roads:

→	NCD
→	Ground Flow
	Depression

Habitat Value Rating:

Critical (CR)	Extremely abundant or important fish and/or fish habitat present, habitat critical in sustaining a subsistence, commercial, or recreational fishery, or species at risk.
Important (IM)	Moderately abundant fish and/or fish habitat present, but deemed to be not critical; contains similar habitat readily available to the stock elsewhere within a particular watershed.
Marginal (MG)	Sparse fish and/or fish habitat present (i.e. low value habitat or under/non utilized habitat), habitat that marginally contributes to fish production.
NA	No fish present, regardless of habitat quality.

Fish Species:

BB	Burbot	DV	Dolly Varden char	NS	Not Sampled
BMC	Brassy minnow	LKC	Lake chub	NSC	Northern pike minnow
CAS	Prickly sculpin	LSU	Longnose sucker	PCC	Peamouth chub
CSU	Largescale sucker	LT	Lake trout	RB	Rainbow trout
CH	Chinook salmon	LW	Lake whitefish	RSC	Redside shiner
CT	Cutthroat trout	NFC	No Fish Captured		

Other Symbols and Abbreviations:

	Other streams	A74841	Proposed cutblock reference
1	Reach Boundaries and Reach Numbers	▨	Proposed cutblock
	Highway	▨	Lakes
	Other Paved Road	▨	Rivers
	Gravel Road	🟩	Wetlands
	Proposed Road		Mapsheet Boundary
	Railroad		
900	Contours (20m intervals)		

BH	Beacon Hills Consulting Ltd.	**RJA**	RJA Consulting Ltd.
Carm	Carmanah Research Ltd.	**SKR**	SKR Consultants Ltd.
FINS	FINS Consulting Ltd.	**WS**	Wildstone Consulting Ltd.
HC	Hatfield Consultants Ltd.		

Coordinates for Site Locations

Area	Stream	Site	UTM (Z.E.N.)
SFU III	00100	1	10.307513.6036154
SFU III	00003	2	10.307655.6036548
SFU VI	00002	3	10.307722.6035602
SFU I	00012	4	10.310998.6036584
SFU I	00013	5	10.310994.6036468
SFU I	00019	6	10.312170.6036799
SFU I	41024	7	10.312346.6037920
SFU I	00102	8	10.312692.6038078
SFU I	00014	9	10.312896.6037959
SFU II	41018	10	10.313208.6039409
SFU II	41013	11	10.313175.6039435
SFU II	00015	12	10.312634.6038750
SFU II	00018	13	10.313167.6040132
SFU IV	00007	14	10.310225.6034768
SFU IV	00009	15	10.310844.6034524
SFU IV	00008	16	10.310518.6034263
SFU IV	00101	17	10.311170.6034042
SFU IV	00010	18	10.311040.6033515
SFU IV	180-374000-95200-01900-9560-3060	19	10.310443.6032405
SFU IV	180-374000-95200-01900-9560-3060	20	10.310627.6032514
SFU IV	00004	21	10.309840.6033575
SFU IV	00005	22	10.310123.6034357
SFU IV	00005	23	10.310303.6034288
SFU IV	00006	24	10.310251.6034343
SFU III	00011	25	10.308051.6037106
SFU VI	00002	26	10.306997.6035369
SFU III	00020	27	10.307383.6036103
SFU I	480-927700-85400	28	10.312388.6038093
SFU I	480-927700-85400	29	10.314714.6038525
SFU II	41013	30	10.314194.6039247
SFU II	00016	31	10.313135.6039699
SFU II	00017	32	10.313100.6039710
SFU II	41019	33	10.313439.6040162
SFU VI	00001	34	10.306461.6034067
SFU VI	00103	35	10.303496.6034073

Confirmed Coordinates for End of Fish Use (EFU) and/or Stream Riparian Classification Change

Area	Stream	Point	UTM (Z.E.N.)
SFU II	41013	S6/NCD	10.313203.6039451
SFU II	41023	S6/NCD	10.312631.6038749
SFU IV	00009	S6/NCD	10.310971.6034552
SFU IV	180-374000-95200-01900-9560-3060	EFU	10.310576.6032478
SFU IV	00005	S6/NCD	10.310841.6034546
SFU VI	00001	S6/NCD	10.306621.6035141
SFU VI	00001	NCD/S6	10.307084.6035528
SFU VI	00001	S6/NCD	10.307495.6035625