

WSC 460 to WSC 460-600600 (Morice North Planning Area)

Volume 5 of 5





Prepared for:

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Prepared by:



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APPENDIX I

Reach Cards/Site Cards/Fish Collection Forms and Photographs (Sites 566 to 2732)

Morice North Planning Area

Reach # ILP Map #

ILP#

.0 093L.026

	STRE	AMREF	ERE	NCINO	3 1.		a row	19	
Gazetted Name:			4	Local Na	me:				
Watershed Code: 000-000000-0000	0-000-0000-0000-0000-0	00-000-000-	-000-000		ILP Map #: 093L.02	6	IL	P#:	3707
On The Same	and the state of	REA	CH	1		15 p			
Reach #: 1.0 Length (km): .27 Gradient (%): 4.1 US Elev (m): 755 Bars: None ✓ Side Diagona	UTM(Zone/East/Norti Coupling: Decoupled onfinement: Occasionally Islands: NONE Mid-channel 8	Ma Conf Ri	gnitude: Order:	1 1 egetation			Type: Zone: iter: Abs		ed
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	UTM S UTM 9.636647.6011465			ncy: C172 ncy Name	2 Crew: JH/ e: Triton Environmental			2002/09 еггасе)	9/10
一、 11 11 11 11 11 11 11 11 11 11 11 11 11		CHAN	N.E.L	Part I	It should be the	1=TH	11-12	William F	11/ 41/
No Vis.Ch.: ✓ Intermittent: ☐ Dewatered: ☐ Tribs.: ☐ Stage: Low ☐	Channel Width (m): 0. Wetted Width (m): 0.	wg Min .00 0 .00 0	0 0	0	Gradient %: Pool Depth (m):	0.00 0.00	Min 0 0	0 0	0 0
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Bed Material: Dominant: Subdominant:	D95 (cm): D (cm):		Bars: No	on 🗌	Side Diagonal	Mid-	channel	_	pan 🔲 raid 🔲
Channel Pattern: Coupling: Confinement: Morphology:	Islands:		CATORS	01 C3 C4	B1 B2 B3 C5 S1 S2	D1 S3	D2 D S4	S5	
		COV	ER	1.		40			
Total Cover: LWD: LWD Dist: Right Bank: Shape: Left Bank: Shape:	Type: SV Amount: Location: P/S/O: Texture: Fines Gravel Texture: Fines Gravel		Boul	der R	U DP O ock Manmade	V	IV Cro	FS:	
Right Bank: Rip.Veg: Left Bank: Rip.Veg:	Texture: Fines Gravel Cobble Boulder Rock Manmade Stage: Stage: Instream Veg: None Algae Moss Vascular								

Morice North Planning Area

						-01	PR	OJE	CT			1 1 1 1 1 1			- 7-15		375	
Proje Stream Nar Project Watersh	me (gaz.): BULI	KLEY RI	VER	ice Fore:					00		Project C				5270)	
		- 500	S(-25)	1 1		d and	WAT	ERS	HED	231					10 3213	in Y	3003	
Gazetted Name	:							Design Control of the State of		Lo	cal Nam				1,			2001
Watershed Code ILP Map# Field UTM (Z.E.N)	: 093L.0	26		LP #: 37			000-000- ap #: 09		N	IID#: 50	g: 180	Rea	ch #: Me	thod: MA	1.0 P	Acc	Site #: ess: V2	
GIS UTM (Z.E.N)	. 9.0300	47.6011	465						R	ef. Name	B:							
Da	te: 2002	2/09/10	1	Time: 17	:00		Agency:	C172	(Crew:	JH/SG		F	Fish Crd	?: 🗌		ncompl	ete:
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	Mtd	width	width	width	width	width	width	width	width	width	width	Avg	1		Gad	ient %	Mtd	Avg
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Wetted Width (m):			14		1							0.00	N	Method II	:			
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Flood Signs:						Metho	od:						_					
9513				View and the	Jan 18 16	M	ORP	HOL	OGY			7 D				7 (1)	3.45	7.333
Bed Material: D95: Pattern: Islands: Coupling: Confinement: FSZ:		ominant D (cm)			Subdom: Morph:			ISTURB INDICAT		01 C1 N	B1 C2 SIDE	C3 C	ı	C5 S		2 S		4 \$5
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OverWinter Habita	+	None							С	omment	S							
Rearing Habitat		None.				_											-	
Spawning Habitat		None.		-		_	_			_	_							
Spanning Habitat		, tone.	- 500	NAME OF THE PARTY OF		er grading	PU	ото	c				(No.45)	a Calcon	ENSON		n (Cont.)	
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Section									C	omment	S		200	15003				

Morice North Planning Area

Marine 1401 th a landin	ig Ai ça	Reach #	ILP Map #	ILP#	Site
Watershed Code: 000	-000000-00000-0000-0000-0000-000-000-000-000-000-000	1.0	093L.026	3707	566
Section	1	Comments			
CHANNEL	Non fish bearing stream.		·····	··	

Section	Comments	
CHANNEL	Non fish bearing stream.	
CHANNEL	Stream channel meanders within block, loses energy and then disappears, within and under vegetation and disturbance.	١
CHANNEL	Inblock stream. Stream has been so disturbed by previous logging practices that it is impossible to follow or distinguish within harvested area downstream of road.	



Site #566, Upslope photo within old cutblock. Roll #57, Frame #24, Date: 2002/09/10

Morice North Planning Area

Reach # ILP Map #

ILP#

.0 093L.026

	STRI	EAM	REF	ERE	NCIN	I G		1	2 10 11	7	1775
Gazetted Name: Watershed Code: 000-000000-000	00-0000-0000-0000-000	-000-00	00-000-0	000-000	Local N		Map #: 093L.02	26	IL	P#:	3706
	来。[4] · [4] · [5] · [6] · [6]		REA	CH	Man and a second		al angell	352	想	性順	Jr 34.00
Reach #: 3.0 Length (km): .69 Gradient (%): 8.0 US Elev (m): 806 Bars: None Side Diagon	UTM(Zone/East/No Coupling: Decoupled Confinement: Frequently Islands: NONE al Mid-channel		Mag	gnitude: Order:	1 1 egetatio				Type: Zone: ater: Abs		ed
	Maria San San San San San San San San San Sa	i je	SIT	E	M 3		Service Comments	100	3,50		
	d UTM IS UTM 9.636541.601147	6			ncy: C1 ncy Nan		Crew: JH	/SG I Consu		2002/09 errace)	9/10
	The state of the s	C	HAN	NEL	HOW I	100	19 64 M	أبورث		1-1-11	Ser E
No Vis.Ch.: ✓ Intermittent: ☐ Dewatered: ☐ Tribs.: ☐ Stage: Low ☐	Wetted Width (m):	Avg 0.00 0.00	Min 0 0	0 0	0	E	Gradient %: Pool Depth (m):	0.00 0.00	Min 0 0	0 0	0 0
Med ☐ High ☐ Temp (C):	Bankfull Depth (m): pH:	0.00	0	0 Conductiv	0 vity:		Turbi		Turbid oderate	3	Low
		MOR	PHO	LOG	Υ		A TOP OF	70	12	185	EF OF
Bed Material: Dominant: Subdominant: Channel Pattern: Coupling: Confinement: Morphology:	D95 (cm): D (cm): Islands:]	DISTUR	ATORS		Side B1	B2 B3 5 S1 S2		D2 D S4	Br	pan 🗌
The state of the s		- (OVE	R	19.	6	15. at	FA.			
Total Cover: LWD: LWD Dist: Right Bank: Shape: Left Bank: Shape:	Type: S Amount: Location: P/S/O: Texture: Fines Grav Texture: Fines Grav	1	Cobble	Boule	der	U Rock	DP O Manmade	v	IV Cro	FSZ own Clos	
Right Bank: Rip.Veg: Left Bank: Rip.Veg:	Stage:		Cobble	Boule		Rock _	Manmade A	lgae 🗌	Moss	Vasc	cular 🗌

Morice North Planning Area

Reach#

ILP Map #

ILP#

Site

3.0 093L.026 3706 567 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name: Local Name: ILP Map#: 093L.026 ILP#: 3706 NID Map #: 093L.026 NID #: 50567 Reach #: 3.0 Site #: 567 Field UTM (Z.E.N): .. Method: Site Lg: 100 Method: MAP Access: V2 GIS UTM (Z.E.N): 9.636541.6011476 Ref. Name: Date: 2002/09/10 Time: 17:30 Agency: C172 Crew: JH/SG Fish Crd?: Incomplete: CHANNEL Mtd width width width width width width width width width Avg Gadient % Mtd Avg Channel Width (m): MS 0.00 Method I: C 0.00 Wetted Width (m): MS 0.00 Method II: C Pool Depth (m): MS 0.00 No Vis.Ch.: 🗸 Intermittent: Wb Depth: Avg: 0.00 Method: MS Stage: L M H Dw: Tribs.: COVER Total: Type SWD LWD В U DP OV IV **CROWN CLOSURE** Amount Loc: P/S/O INSTREAM VEG: N A M V LWD: DIST: LB SHP: RB SHP: Texture: F G C B R A Texture: F G C B R A RIP: STG: STG: WATER EMS: Req #: Temp: Method: T4 Cond .: Method: S3 pH: Method: P2 Turb.: T M L C Method: GE Flood Signs: Method: GE MORPHOLOGY 01 B1 B2 **B**3 D1 D2 D3 Bed Material: Dominant: Subdom: D95: D (cm): Morph: DISTURBANCE **INDICATORS** Pattern: C1 C2 C3 C4 C5 S1 **S2 S3 S5** Islands: Coupling: Confinement: Bars: SIDE DIAG MID SPAN BR FSZ: HABITAT QUALITY Name Comments OverWinter Habitat None. Rearing Habitat None. Spawning Habitat None. PHOTOS Photo Foc Lg Dir Comments F: 24A R: 57 STD U Upslope photo within harvested block. COMMENTS

Comments

Section

	Morice North Planning	Area	Reach #	ILP Map #	ILP#	Site	
	Watershed Code: 000-00	0000-00000-00000-0000-0000-000-000-000-000-000-000	3.0	093L.026	3706	567	
1	Section	1	Comments				1
Ī	CHANNEL	Non fish bearing stream.					
ı	CHANNEL	Inhinck stream Stream has been so disturbed that it is imposs	sible to follow or diet	inquich within hanvee	led area		



Site #567, Upslope photo within harvested block. Roll #57, Frame #24A, Date: 2002/09/10

FDIS Reach Card

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0

093L.025

		PROJECT	
Stream Name (gaz.):		est District (tribs to Morice R.)	Project Code: 5270
	THE CONTRACT	WATERSHED	
Reach Watershed Code: ILP Map #: 093L.025 Air Photos LINE: BCC98341 #: 0	000-000000-00000-00000-00 ILP #: 3602 Gaz.: Local:	000-0000-000-000-000-000-000 Reach #: 3.0 Names	0 NID Map #: 093L.025 NID #: 11996 UTM(Zone/East/North/Method) 9.624724.6018072 GIS Sample Type: B Wetland: ✓
Determinant		SURVEY INFO	
Date: 2002/08/27		Agency: C172	Crew: SG/SH
		ATTRIBUTES	(A)
Length (km): .44 DS Elev.: 961 US Elev: 964	Gradient: 0.68 Order: 1 Magnitude: 1 BGC Zone: SBS	Setting: VF Open water: P Confinement: OC Coupling: PC	DISTURBANCE O1 B1 B2 B3 D1 D2 D3 INDICATORS
Valley Flat: B Active Floodplain Visible: Channel Pattern: SI	C/D: D Est. Width:	Bars:	Islands: N V N SIDE DIAG MID SPAN BR lass Movement: L Exposed/Eroded: NS Riparian Veg.: C Landuse: NS

The sure	MAPS	725 ASC 18
Map Type	Map#	Year
TRIM	093L.025	

Morice North Planning Area

Reach#

ILP Map #

ILP#

Watershed Code:

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

3.0

093L.025

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Gaz	zetted Na	me:						7				Loca	al:					
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				0-00000	0000-0000	00-000	00-0000-000	000-0	000-000	-000-0	000							
W	/aterbody							IL	P Map	#: 09:	3L.02	5		ILP#:	3602	Reach #:	3 -	
	Projec	ID:	5270	14								Lake/Str	eam:	S	Lake	From Date:		
F	ish Perm	it #:	14	5269	Da	ite: 2	002/09/12		To: 20	002/09	9/12	Age	ency:	C172	Crew: JH/	SG R	esample:	
			33	No.				SIT	E /	ME	TH	O D		Q25 I.V		The Third		77
Site#	NID M	ар	NID	#	UTM:Zone	/East/	North/Mthd	M	TD/NO	Te	mp	Cond	Turt	id		Comment		
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568	EF	I	1	1	0		395	180	0.0		2.0	60	00	1	5	SMITH		2B
100			26	/ = 000	10 July 1	OII Vo		FIS	H S	U M	MA	RY				181 WE	1000	Vari
Site#	MT	D/N	0	H/P	Species	S	Stage	\ge	Tota	al#	Lgt	(Min/Ma	ax)	FishAct		Comment		
568	EF	T	1	1	NFC		77			0								_

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0

093L.025

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Gazetted Na	me:				ı	ocal Name:			
Watershed C	ode: 000-00	0000-00000-00	000-0000-0000-0	00-000-000-0	00-000-000	ILP	Map #: 093L.	025	LP#: 3602
		- 12 m		RE	ACH	G. 25 - 1	· 4 19/6	W- 6.7 4 5	A THE ST
Reach #: 2 Length (km) Gradient (%) US Elev (m)	: 1.53 : 3.3 : 961	Confir	UTM(Zone/East/Noupling: Partially (nement: Frequenti slands: NONE	Couple by Confin	Magnitude: Order: Riparian Veç	3 getation: Decid		Sample Type: BGC Zone: Open water: Ab	
Bars: None	✓ Side L	J Diagonal L_	Mid-channel _	Span	Braid	Landuse: No	t Specified		
			(FASING	S	ITE			Thomas	
Site #:		Field UTN GIS UT	И M 9.626199.6018:	385		y: C172 cy Name: Tritor		H/SG Date: tal Consultants (*	2002/09/12 Геггасе)
JE 111		and Ohio	11- 14 H	CHA	NNEL	11411	OF LAK		
No Vis.Ch.: Dewatered: age: Low		ibs.:	hannel Width (m) Wetted Width (m)	2.25 1.2	3 4.7 00 3.1	# 6 6 3	Gradient %): 0.38 0.300	Max # 6 3 0.5 6
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	ment: Freque ology: CP	ntly Confined Cascade Pool		C1	C2 C	3 C4 C5	S1 S2	2 S3 S4	S5
- V			955 N.E.	CO	VER	7	Toler of	A MA	
LWD: I LWD Dist: C Right Bank: Left Bank: Right Bank:	Few Clumped Shape: U Shape: U Rip.Veg: D	ndercut Text	ure: Fines Gr ure: Fines Gr Stag	T avel Cob avel Cob e: Pole-saplir	ble Boulde ble Boulde	er Rock	DP S Manmade Manmade		FSZ: FSZ: Fown Closure 21-40%
Left Bank:	Rip.Veg:	2527	Stag	e: Pole-saplir	FEATU		g: None 🗸	Algae Moss	U Vascular □
NID Map	NID Typ	e Hgt	Method Lg	Method	Photo	W/62 #35	AirPh	oto	UTM (Z/E/
	55531 F Falls / barrie	5.0	GE		R: 58 F:	06 L:		#:	9.625357.601
Comments.	r alls / barrie	t The signal live and a second	and the state of t						
ita Nussala I	Continu	T Newstreet	1	and the second	SH		See A	The state of the s	
ite Number	Capture Method	Number of Events	Length fished (m)	Total Time	Voltage Speci		Total Fish	Minimum Length (mm)	Maximum Length (mm)
569	EF	1	300	861 sec	600	RB	5	90	110
569	EF	1	300	861 sec	600	DV	2	120	130
570	EF	1	300	418 sec	600	RB	5	100	120
571	EF	1	300	365 sec	600	NFC	0		

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

2.0 093L.025 3602 569 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name: Local Name: ILP Map#: 093L.025 ILP#: 3602 NID Map #: 093L.025 NID#: 50569 Reach #: 2.0 Site #: 569 Field UTM (Z.E.N): .. Method: Site La: 940 Method: MAP Access: V2 GIS UTM (Z.E.N): 9.626199.6018385 Ref. Name: Date: 2002/09/12 Time: 11:50 Agency: C172 Crew: JH/SG Fish Crd?: ~ Incomplete: CHANNEL Mtd width Gadient % Mtd Avg Avg Channel Width (m): 2.80 4.10 3.90 4.70 3.80 2.30 3.60 5.00 Method I: 4.0 5.0 C Wetted Width (m): T 1.20 3.10 3.00 2.90 2.10 1.20 2.25 Method II: 6.0 C Pool Depth (m): 0.50 0.30 0.40 0.40 0.30 0.40 0.38 No Vis.Ch.: Intermittent: Wb Depth: 1.0 .9 .8 Avg: 0.90 Method: T Stage: L M W H Tribs.: Dw: COVER Total: A SWD LWD В OV IV CROWN CLOSURE Type: U DP S T S D Amount N Loc: P/S/O 1 INSTREAM VEG: N A M V LWD: F DIST: C LB SHP: U RB SHP: U Texture: F G C C B R A Texture: F G C B R A RIP: D STG: PS STG: PS WATER EMS: Req #: Temp: 7 Method: T4 Cond.: 110 Method: S3 pH: 6.9 Method: P2 Turb.: T M L C Method: GE Flood Signs: Rafted debris Method: GE MORPHOLOGY 01 B1 **B2 B3** D1 D2 Bed Material: Dominant: C Subdom: B D95: 70.0 D (cm): 30.00 Morph: CP DISTURBANCE **INDICATORS** Pattern: SI C1 C2 C3 C4 C5 S1 **S3** \$5 Islands: N Coupling: PC Confinement: FC SIDE Bars: DIAG MID SPAN BR FSZ: **FEATURES** NID Map Method NID Hgt Method Type Photo AirPhoto UTM (Z/E/N) Method 093L.025 55531 GE 5.0 58 F: 06 9.625357.6018338 GIS R: Comments: Falls / barrier HABITAT QUALITY

Comments

Potential in deeper pools.

Moderate - associated with pools, cover, LWD.

Moderate - associated with gravels, pools, cover.

Name

OverWinter Habitat

Rearing Habitat

Spawning Habitat

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

Watershed Co	de: 000-000000-00000	00000-0000-0000-000-000-000-000-000	2.0	093L.025	3602	569
		PHOTOS			Sing Services	

7				· 原金 · 克里斯	PHOTOS			
Ph	oto		Foc Lg	Dir	Comments			
58	F:	01	STD	U	Upstream photo of habitat within site.			
58	F:	02	STD	D Downstream photo of habitat within site.				
58	F:	03	STD	D	Second cascade within site (upstream one).			
58	F:	04	STD	X	DV captured upstream of cascades (110 mm).			
58	F:	05	STD	U	1.4 m rock falls - no plunge pool at base (bedrock falls).			
58	F:	06	STD	U	5 m Falls.			
TIE			. ". "		COMMENTS			
SIZETO	Sec	ction		2 1 1 1 1 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3	Comments			
CHANNEL 5 m falls, NFC upstream - non fish bearing up					ish bearing upstream.			
	CHA	NNEL	1 / 1 m cas	cade (DV upstream).				
	CHA	NNEL	1 / 2 m cas	cade over bedrock.	DV captured upstream.			
	58 58 58 58 58	58 F: 58 F: 58 F: 58 F: 58 F: CHA	58 F: 01 58 F: 02 58 F: 03 58 F: 04 58 F: 05 58 F: 06 Section	58 F: 01 STD 58 F: 02 STD 58 F: 03 STD 58 F: 04 STD 58 F: 05 STD 58 F: 06 STD Section CHANNEL 5 m falls, N CHANNEL 1/1 m cas	58 F: 01 STD U 58 F: 02 STD D 58 F: 03 STD D 58 F: 04 STD X 58 F: 05 STD U 58 F: 06 STD U Section CHANNEL 5 m falls, NFC upstream - non for a scade (DV upstream)			

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

2.0

093L.025

3				1/1			(m) = (g	5	WA	TER	BOD	Y		1/3/		Est		
	Project W: Watert		: 460-0 : 000-0	000000-00				00-000	-000-	000-0	00-000 093L.02	Loc 5 Lake/St			#: 3		Reach#: 2	1-
-1	Fish P	ermit#	14	5269	D	ate: 200	2/09/12	2	To	200	2/09/12	Ag	ency:	C172	Cre	ew: JH/SG	Resar	nple:
NE.	150	3119	133	-11-12	W. T	7/1/2	NATE:	SI	TE	/ N	ETH	O D	9.8	100	2100	- Spirit		112
Site#	NI	D Map	NID)# (UTM:Zon	e/East/No	orth/Mth	d	MTD	NO	Temp	Cond	Turt	bid		С	omment	
571	10 11 11 11	3L.025	505					GPU	EF	1	7	110	С	upst	ream of	falls.		
570	_	3L.025	505	_					EF	1	7	110	C		nstream			
569	09:	3L.025	505	69					EF	1	7	110	C	upst	ream of	cascades,	downstream of	falls.
Y was	4.23	150	-17	The Park	00~1颗		,	1. G	EA	R S	ETTI	NGS	No.		7.48			
Site#		D/NO	H/P	Date		me In	Date C	_	Time	_					Com	ment		
569	EF	_	1	2002/09			2002/09		12:2									
570	EF	_	1	2002/09			2002/09		12:5									
571	EF	1	1	2002/09			2002/09		11:0									
The same	3 3	200 F		4	rl C	. ELI	CTI	ROF	ISI	HER	SPE	CIF	CA	TION	S			
Site#	S. I.E.	MTD/N		H/P	En		Sec	_	ength		Width	-	tage	Frequ	ency	Pulse	Make	Mod
569	E	F	1	1	0	112	861	3	0.00		3.8	6	00	1		5	SMITH	12E
570	E	F	1	1	1 0		418	3	00.0	I	3.8	6	00			5	SMITH ROOT	12E
571	E	F	1	1	0	111	365	3	0.00	I	3.8	6	00			5	SMITH	12E
160	100	11,	4 /		TANKS.		AND, I	FI	SH	SU	MMAI	RY	the set	10. Tale		15/10		
Site#		MTD/N	10	H/P	Specie			Age	14	Total	# Lgth	(Min/M	lax)	FishAct			Comment	
569	E	F	1_	1	DV	Α		3+		2	12	0 1	130	R				
569	E		1	1	RB	J		2+		5			10	R				
570	E		1	1	RB	J	- 3	2+		5	- 11	0	120	R				
571	E	-	1	1	NFC					0								
	1	//wen						COLUMN TO	美国大学技术	P. P. Stiller	FISH	A STATE OF THE PARTY OF	ENHANCE A		-16			
ite#		D/NO	H/P	Species	11.50	Weight	Sex	Mat		Ag tr/Sm	ge pl#/Age	Vch#	-	enetic Smpl#	Roll#	Frame#	Comr	nent
	EF	1	1	RB	90		U	U			-							
		1	1	RB	100	-	U	U				1			4			
569	EF			RB	90		U	U				-					V	
569 569	EF	1	1		000				1	- 1		1						
569 569 569	EF EF	1	1	RB	90		U	U	+	+	-	+		1				
569 569 569	EF EF	1	1	RB RB	110		U	U										
569 569 569 569	EF EF EF	1 1 1	1 1	RB RB DV	110 120		U	U										
569 569 569 569 569	EF EF EF EF	1 1 1 1	1 1 1	RB RB DV	110 120 130		U U	U U										
569 569 569 569 569 569 569	EF EF EF EF	1 1 1 1 1	1 1 1 1	RB RB DV DV RB	110 120 130 100		U U U	U U U										
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Site #569, Upstream photo of habitat within site. Roll #58, Frame #01, Date: 2002/09/12



Site #569, Downstream photo of habitat within site. Roll #58, Frame #02, Date: 2002/09/12



Site #569, Second cascade within site (upstream one). Roll #58, Frame #03, Date: 2002/09/12



Site #569, DV captured upstream of cascades (110 mm). Roll #58, Frame #04, Date: 2002/09/12



Site #569, 1.4 m rock falls - no plunge pool at base (bedrock falls). Roll #58, Frame #05, Date: 2002/09/12



Site #569, 5 m Falls. Roll #58, Frame #06, Date: 2002/09/12

FDIS Reach Card

Morice North Planning Area

Reach # ILP Map #

2.0

ILP#

093L.025 3605

en all a series and a series ar		PROJECT		
Stream Name (gaz.):		st District (tribs to Morice R.)	Project Code: 52	270
Jan		WATERSHED		
Reach Watershed Code: ILP Map #: 093L.025 Air Photos LINE: BCC98341 #: 0	000-000000-00000-00000-0000 ILP #: 3605 Gaz.: Local:	00-0000-000-000-000-000-000 Reach #: 2.0 Names		NID #: 11236 UTM(Zone/East/North/Method) 9.623765.6018814 GIS Sample Type: B Wetland:
Same and the	THE WAY	SURVEY INFO	10000000000000000000000000000000000000	
Date: 2002/08/27		Agency: C172		Crew: SG/SH
		ATTRIBUTES	Marie	
Length (km): 1.35 DS Elev.: 977 US Elev: 1054 Valley Flat: B	Gradient: 5.7 Order: 3 Magnitude: 7 BGC Zone: ESSF	Setting: VF Open water: A Confinement: OC Coupling: DC	DISTURBANCE INDICATORS C1 C2 C	O1 B1 B2 B3 D1 D2 D3 3 C4 C5 S1 S2 S3 S4 S5
Active Floodplain Visible: Channel Pattern: SI	: Est. Width:	Ma	N SIDE DIAG SS Movement: L Riparian Veg.: NS	MID SPAN BR Exposed/Eroded: NS Landuse: NS
MA	PS			
Map Type Maj	p# Year			

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

2.0

093L.025

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Gaz	zetted	Name:										Loc	al:					
F							000-0000-											
14		ody ID:		00000-	00000-	00000-0	000-0000-	000-00						# D #	2005	_		
**		ject ID:							ILP Ma	ip#: (193L.02	Lake/St	ream:	ILP#:	3605 La	Re ke From		2 -
F	ish P	ermit #:	14	5269		Date:	2002/09/1	2	To:	2002/	09/12	Ag	ency:	C172	Crew:	H/SG	Resa	mple:
0-47	1	13	THE REAL PROPERTY.	1374	1000	1- 5		S	ITE .	/ M	ETH	O D			100	00多层	作 北京	
Site#	NII	О Мар	NID	#	UTM:	Zone/Eas	st/North/M	thd	MTD/N	10	Гетр	Cond	Turt	oid	1100	Corr	ment	
572	093	3L.035	505	72 9	9 62	26293	6018782	GPU	EF	1	7	110	С					
330		Park in	2 //		2000		- 10 Oct	Α.	GEAI	R S	ETT	INGS	Gr.			Likes	5-10 may 1	70 S * 10
Site#	MT	D/NO	H/P	Date	e In	Time Ir	Date	Out	Time C	Out				(Comment			
572	EF	1	1	2002/0	09/12	13:10	2002/0)9/12	13:30)								
A		WE JY	(30)	133		C. E	LECT	RO	FISH	ER	SPE	CIF	CA	TIONS	5.75	1.00		
Site#		MTD/N	0	H/P	200	Encl	Sec	1	ength.	IV	Vidth	Vol	tage	Frequenc	y Pu	lse	Make	Mode
572	EF		1	1	J	0	459		150.0		1.0	6	00	- 1		5	SMITH	12B
WW X	Til.		5.73	18.50	e de la	772	1 = - 3 = 3 th	F	ISH	SUN	MA	RY	3	4 77	1.5		200	17,798
Site#		MTD/N	0	H/P	Spe	ecies	Stage	Ag	еТ	otal #	Lgf	h (Min/M	ax)	FishAct		C	comment	
572	EF		1	1	NF	С			-	0						_		

Morice North Planning Area

Reach # ILP Map #

ILP#

.0 093L.035

		Marie To	STR	EAMRE	FEREN	CING			
Gazetted Na	me:				L	ocal Name:			
Watershed C	Code: 000-00	0000-00000-00	000-0000-0000-00	00-000-000-00	00-000-000	ILP	Map #: 093L.	035 IL	.P#: 3164
				RE	ACH		ito, ig 2		
Reach #: 1 Length (km) Gradient (%) US Elev (m): Bars: None	: .52 : 11.4 : 925	Co Confin	JTM(Zone/East/N upling: Partially (ement: Frequentl slands: NONE Mid-channel	Couple I y Confin	Magnitude: Order: 2			Sample Type: BGC Zone: Open water: Abs	
			106		TE	Cont.		1	
Site #: Site Length			9.627281.60193 M 9.627270.60194			y: C172 cy Name: Triton		H/SG Date: tal Consultants (1	2002/09/12 Terrace)
	ljehr i Ville	- 1tm. 11 -	of the agents of	CHA	NNEL	upl 2 to	Mar Tulkin	COME & SON	
No Vis.Ch.: Dewatered: Stage: Low Med High	□ тг □ ≥	ibs.: C	hannel Width (m): Wetted Width (m): ankfull Depth (m): pH: 6.9	2.07 1.10	5.800	3	Gradient % Pool Depth (m		
	7	1 31		MORPH	OLOGY		in the		
Channel Pa Coul Confine	pling: Partially	Gravels ar, Wandering	D95 (cm): 90 D (cm): 40 Islands: No	0.00 ne DIS	Bars: Non TURBANCE DICATORS C2 C3	01 B1	B2 B3 S1 S2		Span Braid C
		24		CO	VER	2 2 3 Per)	305. 3		- W W W
Total Cover: A LWD: I LWD Dist: Right Bank: Left Bank: Right Bank:	Few	- shape Text	ure: Fines Gr ure: Fines Gr		ole Boulde	er Rock	DP S Manmade Manmade	OV IV T N	FSZ: rown Closure 21-40%
Left Bank:	Rip.Veg:	200		e: Mature fore		Instream Veg	: None 🗸	Algae Moss	Vascular [
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			N - 501 M - 212		SH	L pall	with one party	- 藤 山東家	
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
573	EF	1	200	615 sec	600	DV	5	100	110

Morice North Planning Area

		- N					1/100	PR	OJE	CT	A123.) (A)	War W			L -			
Strea Project V	am Nar	me (gaz	.): BUL	HI within KLEY R 000000-	VER						00		Project (Code:	Me - Maria	all a State of the	52	270		
J. J.	i li		- A 3	War Land	- Valen	17.4	- "Martin	WAT	ERS	HED	S 1	1- 190		£	= 1					
Gazetted Watershed ILP Field UTM (GIS UTM (Code Map# Z.E.N)	: 000-00 : 093L.0 : 9.6272	035 281.6019)340	LP#: 3		00-000-00 M DIM		000-000	N	IID#: 50	g: 220		ach#:	thod: M	1.0 AP	A	Site	#: 573 V2	
GIŞ ÜTIM (Z.E.IV)	. 9.0272	270.0018	1491						R	ef. Name	9:								
	Dat	te: 200	2/09/12	7	Time: 13	:50		Agency:	C172	(Crew:	JH/SG		1	Fish Crd	?: 🗸	2	Incon	nplete:]
	11/10		100	- IT 1/2	1	1000年1月	10	CH	ANN	EL .			of the state of			10 0 -				16
-		Mtd	width	width	width	width	width	width	width	width	width	width	Avg			Gad	dient %	% M	td Avg	
Channel Wid		T	1.10	3.80	3.70	4.60	4.90	3.10	4.90	5.80	5.80	5.80	4.39	4 1-	Method	_			C 11.5	0
Pool Dept		T	0.40	0.30	0.30	0.30	0.40	0.40	3.00 0.60	4.00 0.70			0.43	1 1	Method I	1: 12.0	11.	.0	С	
					0.00	0.00	0.10	0.40	0.00	0.70		-	0.43	1	No Vis.C	h.: 🔲	Inte	rmittent	t: 🗌	
1.00	Depth:	.5	.3	.6	Avg	g: 0.47	V	Method:	Ţ	St	age: L	M	V H			w: 🔲		Tribs.	.: 🔲	
		SWE	1 11				1 66						Lives							
Ar	Type: mount:	T	_	VD D	B T	N	DF	_	DV T	IV N	CRC 2		.OSURE 1-40%							
	P/S/O:								7 1 1					N .	A 🗆		W.C			
	SHP: exture: RIP: STG:	V F М	G 🗸	c 🗆	ST: C	R 🗌 A						RB SHP Texture RIP STG	: F :M	G	Sc	В] R j	_ A		
	2002		- '- '- '- '- '- '- '- '- '- '- '- '- '-				100	W	ATE	₹			AND THE			0.700				- 3
	EMS: Temp: (pH: (Signs: I		debris					od: T4 od: P2 od: GE			Co	eq #: ond.: 100 urb.: T		L	С	V		lethod:		
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Isl	D95: attern: I lands: I pling: F	90.0 R N PC FC	Dominani D (cm)	t: C): 40.00		Subdom Morph			STURB NDICAT Ba	ORS	01 C1 N	B1 C2 SIDE	C3 (C5 S			S3	S4 SS	
)(A-	(F	e della	girent.			HAE	BITA	ΓQU	ALIT	Y				K-4-72		ine.			
OverWinter.			Detail	w1 to	22.00					C	omments								. 1 - 2 - 2	
OverWinter Rearing Ha				al in plur ate - plun																
Spawning H				ravels, p	•		_			_		_		_		_				
		1000	37±1	(), (a)	7 - 5	3.35		PH	ото:	S	100	VYSA		7000	Q235-1	79 (4)		7 3 3		
Photo	7	Foo	c Lg	T	Di	r	The way	THE P.	PASSES.		المالية المالية		Commen		New Y		×	1		-
)7		TD		U		Upstr	ream pho	to of fur	nctioning	LWD.		Jonanen	115	_	-	_			-
	8		TD	11/14	D		_	nstream		-										10

Morice North Planning Area

Reach # ILP Map # 1.0 093L.035

ILP# 3164 Site 573

COMMENTS
Comments
DV captured >110 mm.

573 EF

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573 EF DV

DV

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Morice North Planning Area

Watershed Code: 000-000000-00000-0000-0000-0000-000-000-000-000-000 Reach # ILP Map #

ILP#

1.0 093L.035 3164 WATERBODY Gazetted Name: Local: Waterbody ID: ILP Map #: 093L.035 ILP#: 3164 Reach #: Project ID: 5270 Lake/Stream: S Lake From Date: Fish Permit #: 145269 Date: 2002/09/12 To: 2002/09/12 Agency: C172 Crew: JH/SG Resample: SITE / METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd MTD/NO Temp Comment 573 093L.035 50573 GPU EF 1 A. GEAR SETTINGS Site# MTD/NO H/P Date In Time In Date Out Time Out Comment 573 EF 1 2002/09/12 13:50 2002/09/12 14:30 C. ELECTROFISHER SPECIFICATIONS Site# MTD/NO H/P Encl Sec Length Width Voltage Frequency Pulse Make Model 573 EF 1 0 615 200.0 3.0 600 5 SMITH 12B ROOT FISH SUMMARY Site# MTD/NO H/P Species Stage Age Total # Lgth (Min/Max) FishAct Comment 573 EF DV 3+ 5 100 110 INDIVIDUAL FISH DATA Site# MTD/NO H/P Species Length Weight Sex Mat Age Genetic Roll # Frame# Comment Str/Smpl#/Age Str/Smpl# 573 EF DV 1 106 U U 573 EF DV 1 1 100 U U



Site #573, Upstream photo of functioning LWD. Roll #58, Frame #07, Date: 2002/09/12



Site #573, Downstream photo of debris jam. Roll #58, Frame #08, Date: 2002/09/12

FDIS Reach Card

Morice North Planning Area

	PROJECT
Stream Name (gaz.):	RFFHI within the Morice Forest District (tribs to Morice R.) BULKLEY RIVER Project Code: 5270 460-000000-00000-00000-0000-0000-000-000
	WATERSHED
Reach Watershed Code: ILP Map #: 093L.035 Air Photos LINE: BCC98341 #: 0	000-000000-00000-00000-0000-0000-000-0
TE SUMME NOTES	SURVEY INFO
Date: 2002/08/27	Agency: C172 Crew: SG/SH
	ATTRIBUTES
Length (km): 1.08 DS Elev.: 925 US Elev: 1049	Gradient: 11.48 Setting: VW DISTURBANCE O1 B1 B2 B3 D1 D2 D2 Order: 2 Open water: A INDICATORS
Valley Flat: N Active Floodplain Visible: Channel Pattern: SI	C/D: Islands: N Est. Width: Bars: ✓ N ☐ SIDE ☐ DIAG ☐ MID ☐ SPAN ☐ E Mass Movement: L Exposed/Eroded: NS Riparian Veg.: NS Landuse: NS

	MAPS	**), **
Map Type	Map#	Year
TRIM	093L.035	

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

2.0

093L.035

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	Projec W	S Code	: 460- : 000-			00-0000-0		00-000	0-000-0	0-000	00-000	Loc	al:					
		oody ID oject ID							ILP M	ap #;	093L.03	S5 Lake/St	ream:	ILP S	#: :		Reach #: 2 om Date:	2 -
	Fish P	ermit#	14	5269	D	ate: 200	2/09/12	2	To:	200	2/09/12	Age	ency:	C172	Cr	ew: JH/SG	Resar	mple:
	1.5	100				3.04		SI	TE	/ N	METH	OD.	g/a	M. To	200			
Site#	NI	D Map	NIC)#	UTM:Zon	e/East/No	rth/Mth	nd	MTD/	NO	Temp	Cond	Tur	bid		Co	omment	
574	09	3L.035	505	74 9	6272	88 901	9641	GPU	EF	1	6	130	C					
1000		£ (4.					En 1	4. G	EA	R S	SETT	INGS	3	STEEN.				- min
Site#	M	TD/NO	H/P	Date	In Ti	me In	Date (Out	Time (Out					Com	ment	(2) (1) (2) (3) (3) (4)	
574	EF	1	1	2002/09	9/12 1	4:30	2002/09	9/12	14:5	0								
	4,0				C	. ELE	CT	ROF	ISH	IER	SPE	CIFI	CA	TION	S			
Site#		MTD/N	10	H/P	En	cl :	Sec	Le	ength	T	Width	Vol	tage	Frequ	uency	Pulse	Make	Mode
574	E	F	1	1	C) :	315	1	0.00		4.0	6	00		10.0	5	SMITH	12B
500%	1000			- * w_1		5.00	17	FI	SH	SU	MMA	RY	400		1111			
Site#		MTD/N	10	H/P	Specie	s Sta	ge	Age		Total	# Lgt	h (Min/M	ax)	FishAc	t		Comment	
574	E	F	1	1	DV	J		2+		5	1	00 1	20	R	-			
AT .		that !		Serve Strong			1 N I	IVIC	עם	AL.	FISH	DA	TA		W. 1	. WHY SI		7.00
Site#	МТ	D/NO	H/P	Species	Length	Weight	Sex	Mat		_	ge pl#/Age	Vch#		enetic /Smpl#	Roll #	Frame#	Comr	nent
574	EF	1	1	DV	100		U	U	1	T				1	3			
574	EF	1	1	DV	120	1	U	U										
574	EF	1	1	DV	110		U	U						1		1 2 3 1		
574	EF	1	1	DV	100		U	U							2			
574	EF	1	1	DV	100		U	U						5 (5 .)				

Morice North Planning Area

Reach # ILP Map #

093L.025

ILP#

3.0

			STR	EAM	REF	EREN	CING	oli Inc	1	The state of the	1, =	
Gazetted Na	me:					L	ocal Name:					
Watershed C	ode: 000-00	00000-00000-00	000-0000-0000-00	00-000-00	00-000-	000-000	ILP	Map #: 093L.0	25	ILF	P#:	3601
	*	Sell Constitution	V TANGES		REA	CH		(< 10 ¹) 1 ^m	TIL. 1		1	
Reach #: 3. Length (km): Gradient (%): US Elev (m):	: 3.73 : 7.3 : 1162	Confin	UTM(Zone/East/N oupling: Coupled nement: Confined slands: NONE		Ma Rij	gnitude: Order: 4 parian Veg	etation: Mixe	d C/D	Sample 3 BGC 2 Open wat	Zone: E		ed
Bars: None	✓ Side L	_ Diagonal	Mid-channel _	Span		raid	Landuse: No	t Specified				
(- T.) - A.	17.		******		SIT	E		The state		745	37, 13	a= "F
Site #: Site Length	37.65		M 9.627364.60198 M 9.627358.60198			4.5	y: C172 y Name: Trito	Crew: JF n Environmenta	I/SG al Consult	d'and	2002/09 errace)	9/12
· 安全		JUNE 182	al and the	C	HAN	NEL		HF- 12 (A)				-
No Vis.Ch.:[Dewatered:[Stage: Low[Med[High[T	ribs.:	Channel Width (m): Wetted Width (m): Sankfull Depth (m): pH: 6.9		Min 7 2 0.9	Max 14 5 1	3	Gradient % Pool Depth (m) Turb	idity.:	Min 5 0.300 Turbid	Max 8 0.5	# 3 6 Low
7736135				MOR		LOGY			110	ociu,o_		Sicurity
Channel Par Coup Confiner	Dominant: Subdominant: ttern: Sinuou bling: Couple ment: Confine logy: CP	: Boulders s d	D95 (cm): 140 D (cm): 50 Islands: No	0.00 ne	C1	Bars: Non RBANCE CATORS [C2 C3	O1 B1	B2 B3		D2 D3	В	pan 🗌 raid 🗍
			1770-1-12		OV				13/00/23		S	Ų.
Total Cover: A LWD: F LWD Dist: 0	ew		Type: Amount: Location: P/S/O:	SWD T	S) B T	U N		N C	IV N	FSZ	z: 🗌
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: V Shape: V Rip.Veg: M Rip.Veg:	- shape Text	ure: Fines Gra Stag		forest	✔ Boulde	r✔ Rock	Manmade Manmade g: None 🗸] Algae [Cro	1-20	3 41.41
	1 - 2 - 1				FIS					2.5	700	
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time		Voltage	Species	Total Fish	Minimu Length (imum h (mm)
575 575	EF EF	1	200	470 se		700 700	RB DV	5	100			10 20
		1				1,00		1	100	4. 57		

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

3.0 093L.025 3601 575 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name Local Name: ILP Map#: 093L.025 ILP #: 3601 NID Map #: 093L.035 NID #: 50575 3.0 Reach # Site #: 575 Field UTM (Z.E.N): 9.627364.6019841 Method: GPU Site Lg: 290 Method: MAP Access: V2 GIS UTM (Z.E.N): 9.627358.6019829 Ref. Name: Date: 2002/09/12 Time: 15:10 Agency: C172 Crew: JH/SG Fish Crd?: Incomplete: CHANNEL Mtd width width width width width width width width width Gadient % Mtd width Avg Avg Channel Width (m): GE 8.00 10.00 7.00 9.00 10.00 8.00 14.00 12.00 12.00 12.00 9.75 6.33 Method I: 5.0 6.0 C Wetted Width (m): GE 2.00 2.00 5.00 3.00 2.00 3.00 2.83 Method II: 8.0 C Pool Depth (m): 0.40 0.50 0.50 0.30 0.30 0.40 0.40 No Vis.Ch.: Intermittent: Wb Depth: 1.0 1.0 Stage: L W M H Avg: 0.97 Method: T Dw: Tribs.: COVER Total: A SWD LWD Type: В DP OV **CROWN CLOSURE** IV Amount S N D N N 1-20% Loc: P/S/O: 1 V INSTREAM VEG: N A M V LWD: F DIST: C LB SHP: V GGCVBVRGAG Texture: F G C B R A RIP: M RIP: M STG: MF STG: MF WATER EMS: Reg #: Temp: 7 Method: T4 Cond.: 110 Method: S3 pH: 6.9 Method: P2 Turb.: T M L C Method: GE Flood Signs: Rafted debris Method: GE MORPHOLOGY 01 **B1 B2** D1 D2 Bed Material: Dominant: C Subdom: B D95: 140.0 D (cm): 50.00 Morph: CP DISTURBANCE **INDICATORS** Pattern: SI C1 C3 C5 SI S2 **S3 S5** Islands: N Coupling: CO Confinement: CO BR SIDE DIAG Bars: MID SPAN FSZ: HABITAT QUALITY Name Comments OverWinter Habitat Associated with deep pools. Rearing Habitat Moderate - associated with cover, D95, LWD and access. Spawning Habitat Moderate - associated with gravels, cover and flows. PHOTOS Foc Lg Photo Dir 58 F: 09 STD U Upstream photo of cascade pool habitat within confined section. 58 10 STD D Downstream photo of debris jam.

Morice North Planning Area

Reacr

ILP Map #

ILP#

Site

3.0

093L.025

3601

	COMMENTS
Section	Comments
CHANNEL	DV, RB present >110 mm

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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3.0

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	Fish P	ermit#	: 14	15269	D	ate: 2002	2/09/12		To: 200	02/09/1	2	Age	ency:	C172	Cre	w: JH/SG	Resar	nple:
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Site #575, Upstream photo of cascade pool habitat within confined section. Roll #58, Frame #09, Date: 2002/09/12



Site #575, Downstream photo of debris jam. Roll #58, Frame #10, Date: 2002/09/12

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0 093L.025

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Gazetted Na	ime:				1	ocal Name:					
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16531		7 60		RE	ACH	4-11/2 //		153	- (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	1	- 1
Reach #: 2 Length (km) Gradient (%) US Elev (m) Bars: None): 1.85): 3.5): 1021	Confir	UTM(Zone/East/N pupling: Partially C nement: Frequenti Islands: NONE	couple	Magnitude: Order: Riparian Veg	19 2 getation: Mixed Landuse: Not	C/D	Sample Ty BGC Zo Open wate	one: ES		
Card. Hone	- Side L	_ Diagonal _	Mio-chariner _		ITE	Landuse: Not	Specified	20 May 71		1000	- 1
Site #:			M 9.620649.60178	63	Agenc	y: C172 cy Name: Tritor			Date: 20 nts (Terra		4
			any and Freque	CHA	NNEL		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	15 15 E	20-1-1	Wal-	
No Vis.Ch.: Dewatered: Stage: Low Med High	□ т □ ∨	ribs.:	Channel Width (m): Wetted Width (m): Bankfull Depth (m): pH: 6.9	4.98 3.9 2.38 1	lin Max 200 5.800 .9 3.200 .5 0.6	3	Gradient % Pool Depth (m	6: 4.00): 0.80 bidity.: T	4	1	# 2 6 ow
Y SW				MORP	HOLOGY		W 31 - 53		CONTRACTOR OF THE CONTRACTOR O	-210	
Channel Pa Cou Confine	: Dominant: Subdominant: attern: Sinuou pling: Partiall; ment: Freque blogy: RP	: Boulders s	D95 (cm): 90 D (cm): 40 Islands: No	.00 .00 ne DIS	Bars: Non STURBANCE IDICATORS	O1 B1	B2 B3 S1 S2	D1 D2		Spar Braid	-
	ares e		307	CO	VER					37	
Total Cover: LWD: LWD Dist:		le _	Type: Amount: Location: P/S/O:	SWD I	WD B	U N	DP S		V N	FSZ:	
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: V Shape: V Rip.Veg: M Rip.Veg:	- shape Text	ture: Fines Gra	avel Cob avel Cob e: Mature for e: Mature for	est		Manmade Manmade	Algae 🗌 N		Closur 21-40% Vascul	6
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Site Number	Capture Method	Number of Events	Length fished (m)	Total Time	Voltage	Species	Total Fish	Minimur Length (m		Maximu ength (i	
581	EF	1	200	510 sec	700	RB	10	80		120	

Morice North Planning Area

Reach#

ILP Map #

ILP#

Site

2.0 093L.025 3617 581

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Gazetted Name: Watershed Code: 000-00 ILP Map#: 093L.0 Field UTM (Z.E.N): 9.6206 GIS UTM (Z.E.N): 9.6206	0-0000-0 517 Method:	: GPU			Local Name: NID #: 50581 Reac Site Lg: 210 Ref. Name:		ch #: 2.0 S Method: MAP Acces		Site #: 58 ss: H	1					
Date: 2002/09/14 Time: 09:15 Agency: C172 Crew: JH/JA Fish Crd?: ✓ Incomplete										: 🗌					
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Islands: N															
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Spawning Habitat	Moderate -	associated	with cov	er, pools	, gravel	- limited	by coars	e substr	ates.						
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Photo Fo	oc Lg	D	ir	1		-			(Commen	ts				
R: 59 F: 01 S	TD		J	Upst	ream ph	noto of h	abitat wit	hin strea		-					
R: 59 F: 02 S	TD		D	Dow	nstream	photo o	f habitat	within st	ream.						

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site 581

2.0

093L.025

	COMMENTS
Section	Comments
CHANNEL	Low fish densities.
CHANNEL	RB 80-90 mm ~5 / 100 m.
CHANNEL	RB 100-120 mm ~5 / 100 m.

Morice North Planning Area

Reach #

ILP Map #

ILP#

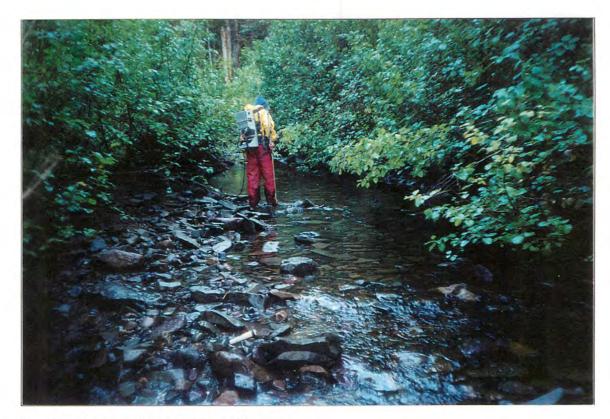
Watershed Code:

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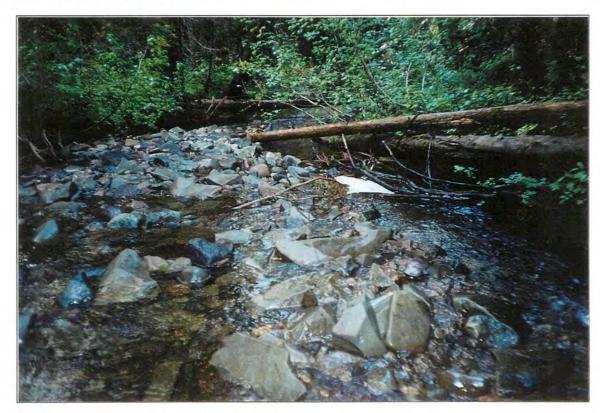
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581	E	F	1	1	RB	J		2+		0	-	20	R	7 100		- Comment	
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581	EF	1	1	RB	120		U	U			M Lee						
581	EF	1	1	RB	110		U	U									
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Site #581, Upstream photo of habitat within stream. Roll #59, Frame #01, Date: 2002/09/14



Site #581, Downstream photo of habitat within stream. Roll #59, Frame #02, Date: 2002/09/14

Morice North Planning Area

Reach # ILP Map #

093L.025

ILP#

1.0

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Gazetted Na	ne:					Lo	ocal Name:					
Watershed C	ode: 000-000	000-00000-000	00-0000-0000-000	0-000-00	0-000-0	000-000	ILF	Map #: 093L.02	25	ILI	P#:	3626
					REA	CH		12 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	""		- 10	1985 41 V
Reach #: 1. Length (km): Gradient (%): US Elev (m): Bars: None	1.90 4.8 1087	Confin	JTM(Zone/East/No upling: Partially Co ement: Occasiona slands: NONE Mid-channel	ouple Illy Conf	Ma Rip	gnitude: Order: 2 parian Veg	2 etation: Mixe Landuse: No	ed C/D	Sample BGC pen wa	Zone:		ed
, n			La de San		SIT	E	1/2				- 29	
Site #: Site Length	7570	Field UTM GIS UTI	I М 9.620357.601770	08			y: C172 by Name: Trito	Crew: JH. on Environmenta	/JA I Consul		2002/09 errace)	9/14
yir Alka	1 1/4	1 12 post		C	HAN	NEL		The state of the s	THE STATE OF	The way		18 7
No Vis.Ch.:	Intermit	tent:		Avg	Min	Max	#		Avg	Min	Max	#
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Stage: Low			Wetted Width (m):	0.67	0.400	0.800	6	Pool Depth (m):	0.13	0.100	0.200	6
Med	/	В	ankfull Depth (m):	0.23	0.2	0.3	3	Turbi	dity.:	Turbid		Low
High [To	emp (C): 7	pH: 7.2		(Conductivity	y: 30		Me	oderate		Clear
	1 " // //	TO CATE OF	Court In	MOR	PHC	LOGY	President		10000	11 6		- 16
Bed Material:	Dominant:		D95 (cm): 70. D (cm): 20.			Bars: Non	✓ Side	Diagonal	Mid-	channel	-	pan 🔲
Confiner	ttern: Sinuous bling: Partially nent: Occasio logy: RP		Islands: Nor	ne [C2 C3	01 B1 C4 C	B2 B3 5 S1 S2	D1 S3	D2 D S4	S5	
		- m - s - n	SAPE SAPE		COV	ER			~ 142h	150		
Total Cover: A LWD: N LWD Dist: I		e	Type: Amount: Location: P/S/O:	SWD T	S	D B N	U N		D C	IV N	FSZ	z: 🗌
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Site Number	Capture Method	Number of Events	Length fished (m)	Tota Time		Voltage	Species	Total Fish	Minim Length			mum h (mm)
							1					

Morice North Planning Area

Reach #

Comments

ILP Map #

ILP#

Site

1.0 093L.025 3626 582 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Local Name: ILP Map#: 093L.025 ILP#: 3626 NID Map #: 093L.025 NID#: 50582 Reach #: Site #: 582 Field UTM (Z.E.N): .. Method: Site Lg: 100 Method: MAP Access: H GIS UTM (Z.E.N): 9.620357.6017708 Ref. Name: Date: 2002/09/14 Time: 09:40 Agency: C172 Crew: JH/JA V Fish Crd?: Incomplete: CHANNEL Avg Avg Mtd width Gadient % Mtd Channel Width (m) 1.80 1.60 2.00 2.20 1.80 1.40 1.80 Method I: 12.0 3.0 С 6.00 Wetted Width (m): T 0.60 0.80 0.40 0.60 0.80 0.80 0.67 Method II: 2.0 7.0 C Pool Depth (m): 0.10 0.10 0.20 0.10 0.20 0.10 0.13 No Vis.Ch.: Intermittent: Wb Depth: .3 .2 Avg: 0.23 Method: T Stage: L M W H Dw: Tribs.: COVER Total: A Type: SWD LWD В **CROWN CLOSURE** DP OV IV Amount S D N Loc: P/S/O: INSTREAM VEG: N A M V V LWD: N DIST: NA LB SHP: V Texture: F G C B R A Texture: F G C C B R A RIP: M RIP: M STG: MF STG: MF WATER EMS: Reg #: Temp: 7 Method: T4 Cond.: 30 Method: S3 pH: 7.2 Method: P2 Turb.: T M L C Method: GE Flood Signs: None Method: GE MORPHOLOGY 01 **B1 B2** D2 Bed Material: Dominant: C Subdom: B D95: 70.0 D (cm): 20.00 Morph: RP DISTURBANCE **INDICATORS** Pattern: SI C1 **S1 S**3 **S5** Islands: N Coupling: PC Confinement: OC Bars: NV DIAG MID SPAN BR FSZ: HABITAT QUALITY Name Comments OverWinter Habitat None observed in site. Rearing Habitat Low - small shallow pools. Spawning Habitat Low - cover and small gravel patches. PHOTOS

Upstream photo of habitat within site.

Downstream photo of habitat within site

Foc Lg

STD

STD

Dir

U

D

Photo

59

59

F: 03

F: 04

Morice North Planning Area

ILP Map #

ILP#

Site 582

Reach # 1.0

093L.025

	COMMENTS
Section	Comments
CHANNEL	Fish bearing reach, solid reach. No barriers observed.
CHANNEL	12% pitch at confluence.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

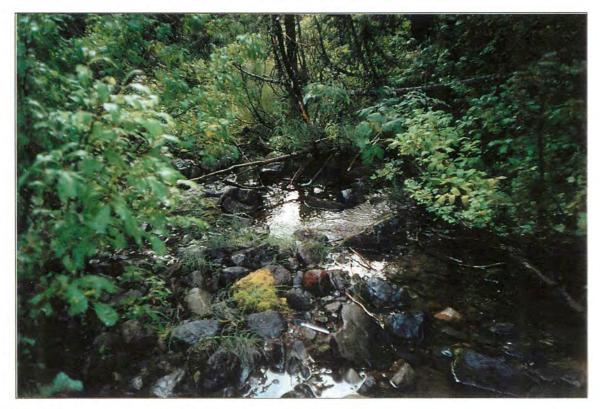
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Gaz	zetted Name									Loca	al:					
F	Project Code	460-0	000000-0	00000-00000	-0000-0000-	000-00	00-000-00	0-000-	0							
	WS Code:	000-0	000000-0	00000-00000	-0000-0000-	000-00	00-000-00	0-000-	000							
N	Vaterbody ID:						ILP Map	#: 09	3L.02	.5		ILP#:	30	626	Reach #:	1 -
	Project ID:	5270								Lake/Str	eam:	S		Lake Fro	om Date:	
F	ish Permit#:	14	5269	Date	: 2002/09/1	14	To: 2	2002/0	9/14	Age	ency:	C172	Cre	w: JH/JA	Res	ample:
		3	8.1		#6	S	ITE /	ME	TH	O D	1		May V			150
Site#	NID Map	NID	#	UTM:Zone/E	ast/North/M	thd	MTD/NO	Te	emp	Cond	Tur	bid		Co	omment	
582	093L.025	5058	32			GPU	EF 1	H	7	30	C					
	454.00					A	GEAR	SE	TT	NGS			1 ×	E mujage		Full - Selle
Site#	MTD/NO	H/P	Date	In Time	In Date	Out	Time Ou	ıt					Comm	nent		1900
582	EF 1	1	2002/0	F-12-12-12-12-12-12-12-12-12-12-12-12-12-			10:10									
P		100		C.	ELECT	RO	FISHE	ER S	SPE	CIFI	CA	TIONS	<u> </u>	重量	17.70 I	1000
Site#	MTD/N	Ю	H/P	Encl	Sec	1	.ength	W	idth	Volt	age	Frequer	псу	Pulse	Make	Model
582	EF	1	1	0	760		100.0		2.0	80	00	1		5	SMITH	12B
					3. (1) (w a)	F	ISH S	UM	MA	RY	150	7 - 5 m	X = 1		ne de	
Site#	MTD/N	10	H/P	Species	Stage	Ag	e To	tal#	Lgt	h (Min/Ma	ax)	FishAct			Comment	
582	EF	1	1	NFC				0				-				



Site #582, Upstream photo of habitat within site. Roll #59, Frame #03, Date: 2002/09/14



Site #582, Downstream photo of habitat within site. Roll #59, Frame #04, Date: 2002/09/14

FDIS Reach Card

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0

093L,025

		W - W 1	W X	PROJEC	Τ -	112 11 119	WAR ENTRY
Stream I	Name (gaz.):	BULKLEY RIVE	R	st District (tribs to Morice		Project Code: 5	
		STATE OF	A PARTY	WATERS	IED		
Reach Wate ILP Map #: 093L. Air Photo: LINE: BCC98341_ #: 0	025 s		00-00000-000 3628	00-0000-000-000-000 Reach #: 1.0 Names	0-000-000	NID Map #: 093L.035	NID #: 11205 UTM(Zone/East/North/Method) 9.618548.6019205 GIS Sample Type: B Wetland:
- 1 2 / minh	1-369	3 2/18		SURVEY	NFO		AFIA SA
Date: 2002/08/2	27			Agency: C172			Crew: SG/SH
		, + 1 1	W (S.) - <u>1</u>	ATTRIBUT	res .	200 Harris	Apply whether
Length (km): DS Elev.: US Elev: Valley Flat:	1021 1279 N	Or Magnitu BGC Zo		Setting: Open water: Confinement: Coupling:	VW A CO PC	DISTURBANCE INDICATORS C1 C2 Islands: N	O1 B1 B2 B3 D1 D2 D3 C3 C4 C5 S1 S2 S3 S4 S5
Active Floods Channel Patt		Est.	Width:	В	11111111	N SIDE DIAG s Movement: L iparian Veg.: C	BR Exposed/Eroded: NS Landuse: NS
	MA	PS	Jirawa I	- 0			
Map Type TRIM	Map 093L.02		Year				

Morice North Planning Area

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Reach # ILP Map #

Watershed Code:

1.0

093L.025

ILP# 3628

1, 77	45	n n		1774			111111		WATE	RB	OD.	Y		心里	1	TAKE T		
	Proje W Water		: 460- : 000-	-000000-0 -000000-0						-000-	000 3L.025	Loca		ILP			Reach #:	1 -
	Fish F	Permit #	: 14	45269	D	ate: 200	2/09/14		To: 2	002/0	9/14	Age	ency:	C172	Cre	ew: JH/JA		mple:
1.12	The state of	No E	1191	Sur Sur		三面。为东		SI	TE I	ME	THO	-			in a state	-7.00		
Site#	N	D Map	NIE	0#	UTM:Zon	e/East/No	orth/Mth		MTD/NO		mp	Cond	Tur	hid I	The same		omment	
583	_	3L.025	505			20 (2000) 4 22 3	7881 I		EF 1	-	8	30	C		-		oninent	
	12:11	- 53	E	3 - 3 50 X 1			1	\. C	EAR	SE	TTI			75.50			1873	
Site#	M	TD/NO	H/P	Date	In Ti	me In	Date C	Out I	Time Out	T		123000		(A) 5 G	Com	ment	N State	E-991
583	EF	1	1	2002/09	9/14 1	0:15	2002/09	0/14	10:35	1					Comm	mon,		
Buk		光 動/時	1-3	N. Sta	C	. ELI	CTI	ROF	ISHE	R	SPE	CIFI	CA	TION	S	with .	AS 2 - 20 Set	10 -26 10
Site#		MTD/N	10	H/P	En	cl	Sec	Le	ength	W	idth	Volt	age	Frequ	ency T	Pulse	Make	Mode
583	E	F	1	1	0		271	- 1	0.00		5.0	80				5	SMITH	12B
	27/10	M.E.		100		197	() j	FI	SH S	UM	MAF	Y	and the	13-12	Service 3	*	AND THE	100
Site#		MTD/N	10	H/P	Specie	s Sta	ge	Age	Tot	al#	Lgth	(Min/Ma	ax)	FishAct	The same of the sa		Comment	×
583	E	F	1	1	RB	J		2+	1	5	10	0 1	20	R			32 411113431	
	11-	71 7	179	MARK.		Wat with	INE	IVI	DUAL	F	SH	DA	TA	1	108/570		AND THE T	F SA"
Site#	МТ	D/NO	H/P	Species	Length	Weight	Sex	Mat		Age mpl#/	Age	Vch#		enetic Smpl#	Roll #	Frame#	Comr	nent
583	EF	1	1	RB	110		U	U										
583	EF	1.	1	RB	110		U	U	Le-				7					
583	EF	1	1	RB	100		U	U										
583	EF	1	11	RB	120		U	U						1				
583	EF	1	1	RB	100		U	U										

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0

093L.025

	3/10/2		SIR	EAM	KEF	EREN	CING	- St. Francis	LES		ME.	- 63
Gazetted Nam	ie:					Lo	ocal Name:					
Watershed Co	de: 000-000	000-00000-000	00-0000-0000-000	0-000-00	00-000-0	000-000	ILP	Map #: 093L.02	15	ILF	P#:	3617
	1 2	10 A 10 A	等规划与工	1 (g) (g)	REA	CH			3070		100	
Reach #: 3.0 Length (km): Gradient (%): US Elev (m): Bars: None	3.00 5.5 1185	Confine	TM(Zone/East/No upling: Partially Co ement: Frequently lands: NONE Mid-channel	ouple	Ma Rip	gnitude: Order: 2 parian Vege	5 etation: Mixe Landuse: No	o ed C/D		Type: Zone: E ter: Abse		ed
		J105 1 3	Calle Mark		SIT	E	White an		13/2			-1-
Site #: 5			9.620345.60178 49.620357.60178				r: C172 y Name: Trito	Crew: JH/ on Environmenta		15500	2002/0 errace)	9/14
- W W W	1 - 1500	Uses Adjust to		C	HAN	NEL	1 Jan 2 11 2 11 2 11 2 11 2 11 2 11 2 11 2	(White So	WAW!	Marie .		132
No Vis.Ch.:	Intermitt	ent:		Avg	Min	Max	#		Avg	Min	Max	#
Dewatered:	Tri	bs.: C	nannel Width (m):	3.43	2.6	4.2	6	Gradient %:	2.00	2	2	2
Stage: Low	1		Vetted Width (m):	1.97	1.200	2.8	6	Pool Depth (m):	0.38	0.300	0.5	4
Med	ī -	Ba	ankfull Depth (m):	0.30	0.3	0.3	3	Turbi	idity.:	Turbid		Low
High	Te	emp (C): 7	pH: 6.9			Conductivity	y: 30		M	oderate[Clear
	- The S	THE YEAR		MOF	PHO	LOGY			100			16.2
Bed Material:	Dominant: ubdominant:		D95 (cm): 60. D (cm): 30.			Bars: Non	Side	✓ Diagonal	Mid-	channel		pan _ raid _
Confinen	ling: Partially nent: Occasio	Coupled onally Confine	Islands: Nor	ne		RBANCE CATORS C2 C3	O1 B1	B2 B3 5 S1 S2	D1 S3	D2 D S4	S5	
Morphol	ogy: RP	Riffle Pool			Ш							
1-36-71		- 4/4		13	COV	ER	SUL Y	W = \$/// -	16.1	1500	P	
Total Cover: A	bundant		Type:	SWD	LW	D B	U	DP C)V	IV		
LWD: F	ew		Amount:	Т	S	T	N		D	N		
LWD Dist: 0			Location: P/S/O:								FS	Z: 🗌
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: V Shape: V Rip.Veg: M Rip.Veg:	- shape Text	ure: Fines Gra Stag	avel 🗸 avel 🗸 e: Matur e: Matur	Cobble re forest	Boulde	Rock [Manmade Manmade eg: None	Algae [Cre Moss		sure 40% scular [
A TELEVISION	h all	in / E.		100	FIS	H	In the k	Le Maria Santa II	1		Major Sa	·q3
Site Number	Capture Method	Number of Events	Length fished (m)	Tota		Voltage	Species	Total Fish	Minin Length			imum th (mm)
584	EF	1	100	210 s	sec	800	RB	5	8)		90

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

3.0 093L.025 3617 584

1		19				The state of	PR	OJE	CT	201	1-17-1	SIL-A	187		100		
Stream Nan	ne (gaz.): BUL	KLEY R	VER						00		Project C	ode:			5270	
TWENT PROPERTY	\$						WAT	ERS	HED	Ver			de la constante	The Sign	STATE OF		
Gazetted Name:								- 41 114 114		Lo	cal Nam	e:	20142.000		1.15 ×		
Watershed Code:	000-00	0000-00	000-000	00-000	0-0000-0	00-000-0	000-000	-000-000)								
ILP Map#:	: 093L.0	25	1	LP#: 36	617	NID M	lap #: 09	3L.025	N	ID#: 50	0584	Rea	ch #:	3	3.0	Sit	te #: 584
Field UTM (Z.E.N):	9.6203	45.6017	865	1	Method:	GPU				Site L	g: 100		Meth	od: MAF		Access	: H
GIS UTM (Z.E.N):	9.6203	57.6017	851						R	ef. Name	e:						
Dat	e: 200	2/09/14	,	Time: 11	:00		Agency	C172		crew:	JH/.JA		Fi	sh Crd?:		Inco	omplete:
		Testa	925					ANN		TOTAL STREET		101100	00 n 20	dieses		11100	mpiete.
	Mtd	width	width	width	width	width	width	width	-	width	Ludelth	I A.co			Codi		Mar I Aug
Channel Width (m):		_	2.80	2.60	3.80	4.20	4.00	widin	width	Width	width	Avg 3.43	L	lethod I:	Gadie	2.0	Mtd Avg
Wetted Width (m):	T	1.80	1.20	2.00	1.80	2.80	2.20					1.97		ethod II:	2.0	- 1	C
Pool Depth (m):	T	0.30	0.40	0.30	0.50							0.38		dan.			
Wh Depth:	3	1 2	.3	1	g: 0.30		dathad:	+	· ·	20 a		- u -		Vis.Ch.		Intermitte	
			-	•	j. 0.30		Method:	1.0	Si	age: L	✓ M	Пн	_	Dw	/; <u> </u>	Trib	s.:
				al: A			-										
	Channel Width (m): T 3.20 2. Wetted Width (m): T 1.80 7 Pool Depth (m): T 0.30 6 Wb Depth: .3 .3 .3 COVER Type: SWD LWD Amount: T S Loc: P/S/O:			В	U	DF	_	OV	IV			OSURE					
1 2000	Lar I	_		T	N	T		D	N	2		1-40%	N. C			V (=)	
	V					V	V		لاللال	1140	IKEAM	VEG:		~ [IVI	v	
Texture:	F [G ✓	c 🗆	В	R 🗆 A						RB SHP Texture RIP STG	: F 🖂	G 🗸	c 🗆	В	R	, _□
		- F		3	i di	200	W	ATE	R	100				1 33	1 3		out of a
EMS:										R	eq #:						
							od: T4			C	ond.: 30					Method	d: S3
							od: P2			1	urb.: T	ПМ	TL	T C	1	Method	d: GE
Flood Signs:	None					Metho	od: GE					_			2.1		
	Miles		nal s		11/1	1 00 1	ORF	HOL	OGY					- 11 - 15 - 11	100		
Bed Material:		Dominan	t: C		Subdom	n: B				01	B1	B2 E	33 [01 D	2 D	3	
D95:	60.0	D (cm): 30.00		Morph	: RP	i	DISTURE	BANCE								
Pattern:	SI							INDICA		C1	C2	C3 (24 (C5 S	1 S:	2 53	S4 S5
Islands:	N									ITT		FIL		TIE	TIT	110	ППП
Coupling:	PC												-11				
								D	oro:	NC	CID		DIACE		up-	CDANG	
FSZ:[D.	ars:	N	SID	~	DIAG		NID_	SPAN	BR
15 July 15 Jul	11212	200	11.3	074		HAI	BITA	TQL	JALI	ΓY	100	20000	1754	114, 11	8 2	7200	6 1
Name		1	12			SOUTH IN			DESCRIPTION OF	ommen	ls.	113		1. 814		1.00	(%) -28
	it	Potent	ial in poo	ols.		_		_		Othineth			_	_	_		
Rearing Habitat					with LW	D, pools	and cov	er.									
Spawning Habitat		Moder	ate - ass	ociated	with gra	vels, pod											
	11		13/10	1/= 1-	16/02/10	多新	PH	ото	S			American Services	4619	120.0	No.	The same	
the state of the s				D	Advantage of the second							Commer	its				
R: 59 F: 05						_			abitat wit								
R: 59 F: 06	S	TD		- [0	Dow	vnstream	photo o	f habitat	within s	ite.						

Morice North Planning Area

ILP Map #

ILP#

Site

Reach #

093L.025

3617

S OF STUDY	COMMENTS
AN EXPENSE	COMMENTS
Section	Comments
CHANNEL	RB captured ~ 80-90 mm.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

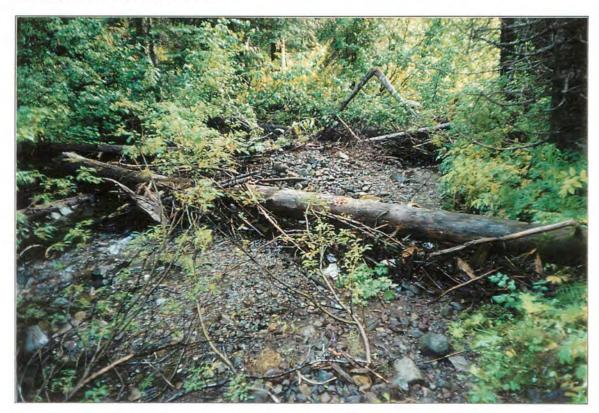
3.0

093L.025

-31	TO THE				ine can	SEE THE		W	ATE	RBOL	Y		= 1/2 (6)				North Park
G	azette	d Name	:								Loc	al:					
	W		: 000-	000000-0 000000-0				0-000-0	00-000				ILP	4.	3617	Reach #:	3 -
		oject ID)				,	i wap i	r. U33L.U	Lake/St	ream:		<i>m</i>		om Date:	3 -
	Fish F	Permit #	: 14	15269	D	ate: 200	2/09/14		To: 20	02/09/14	Ag	ency:	C172	Cr	ew: JH/JA	Resa	mple:
	100		Y ·					SIT	E/I	METH	O D			No de de la companya	150		1 . %
Site#	N	D Map	NIE	0#	JTM:Zone	e/East/No	rth/Mth	d M	TD/NO	Temp	Cond	Turt	oid	110	С	omment	-
584	09	3L.025	505	84				GPU E	F 1	7	30	С					
	11-112			-1.67	of the state		111	, GE	AR	SETT	INGS	of the same	7 m W		The Section	地名为西西	
Site#	M	TD/NO	H/P	Date	n Ti	me In	Date C	Out Ti	me Out		Sandy Property		LA CONTRACTOR	Com	ment	angulation in the second	180
584	E	1	1	2002/09	9/14 1	0:45	2002/09	/14	11:05								
	5		9	8 × in	™ C	. ELE	CTF	ROFI	SHE	RSP	ECIFI	CA	TION	S		77 (A. A.	A Comment
Site#		MTD/I	OP	H/P	En	cl :	Sec	Leng	th	Width	Vol	tage	Frequ	ency	Pulse	Make	Mode
584	E	F	1	1	0		210	100	.0	3.0	8	00			5	SMITH ROOT	12B
1	1	0					The last	FIS	H S	UMMA	RY				102/11/19	多种种	CT CO
Site#	1	MTD/N	10	H/P	Species	Stag	ge	Age	Tota	al# Lg	th (Min/M	ax)	FishAct			Comment	
584	E	F	1	1	RB	J		3+	Land 1	5	80	90	R				
4		1000		100	CVS.		IND	IVID	UAL	FIS	I DA	TA		= 1	- 100		
ite#	МТ	D/NO	H/P	Species	Length	Weight	Sex	Mat		Age mpl#/Age	Vch#		enetic Smpl#	Roll #	Frame#	Com	ment
584	EF	1	1	RB	80		U	U									
584	EF	1	1	RB	90		U	U				9					
584	EF	1	1	RB	90		U	U				1					
584	EF	1	1	RB	80		U	U									
584	EF	1	1	RB	80	2-1	U	U									



Site #584, Upstream photo of habitat within site. Roll #59, Frame #05, Date: 2002/09/14



Site #584, Downstream photo of habitat within site. Roll #59, Frame #06, Date: 2002/09/14

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0 093L.025

Gazetted N				SERVICE SERVICE	200	SAMPLE	对欧洲省	the second	40.275555	G	140	1	1819/17/4	2071	100
	lame:							11	Local Na	ime:					
Watershed	Code: 000	-000000-000	00-00	0000-0000-	0000-00	0-000-0	00-000	000-000		ILP Map #	: 093L.02	25	IL	P#:	3628
		= 11	36				REA	CH			D 43	= 4	A PARTY	117	11
Reach #: Length (kn Gradient (% US Elev (n Bars: None	n): .27 6): 0.0 n): 1279		Confi	UTM(Zone oupling: De nement: O Islands: No	ecoupled ccasiona ONE		Ma	.6019417 gnitude: Order: parian Ve	3 getation	: Shrubs se: Not Spec	o	Sample BGC pen wa	Zone:		ed
Naje.		10-3(E			3/15/		SIT	E	- 30-3			Salari	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		1000
Site :	#: 585 h (m): 300			M 9.61840 M 9.61849	0.00			1000	cy: C17	2 Cre e: Triton Envir	ew: JH.	752		2002/09 errace)	9/14
	JAN 1	ar dine			That is	I C	HAN	NEL	100	- 1 33	JE 34	14 6	F(2))		2. 30
No Vis.Ch.	: Inte	rmittent:				Avg	Min	Max	#	1		Avg	Min	Max	#
Dewatered	:	Tribs.:		Channel Wi		1.97	1.600	2.400	6		adient %:	0.50	0	1	2
tage: Lov	v			Wetted Wi		1.13	0.800	2	6	Pool D	epth (m):	0.10	0.100	0.100	4
Med	4		-	Bankfull De	pth (m):	0.53	0.4	0.6	3		Turbi	dity.:	Turbid		Low
High		Temp (C):	8	pl	1: 7.6			Conductiv	ty: 30			Mo	oderate		Clear
Confin	upling: Dec ement: Occ nology: RF	casionally Co					C1	C2 C	3 C4	C5 S	1 S2	\$3	\$4	\$5	
12/2	a ^y	115 W		7	Selection of		COV	ER		17.47	7. 3- , T				*
Total Cover	: Abundant				Type:	SWD	LWI	ОВ	S4 .5	U DP	0	V	IV		
	Mana		_		nount:	N	N			S N	1)	N		
LWD	: None			I acation:	D/0/10-10			1	100					0.72	
	: None : Not Appli	cable		Location:	7370.			V	V					FS	z: 🔲
	: Not Applie : Shape : Shape : Rip.Vee	e: Undercut e: Undercut g: Shrubs		ture: Fines	Gra Gra Stage	e: Shrub	/herb st	✔ Bould	er R		made	ll L		own Clos 1-2 Vas	sure 0%
LWD Dist Right Bank Left Bank Right Bank	: Not Applie : Shape : Shape : Rip.Vee	e: Undercut e: Undercut g: Shrubs		ture: Fines	Gra Gra Stage	ivel 🗸 e: Shrub	Cobble /herb st /herb st	✔ Bould	er R	Rock Man	made	Mgae		own Clo	sure 0%
Right Bank Left Bank Right Bank Left Bank	: Not Applii : Shape : Shape : Rip.Vee	e: Undercut e: Undercut g: Shrubs g:	Tex	ture: Fines	Gra Gra Stage	ivel 🗸 e: Shrub	Cobble /herb st /herb st	Bould Bould age age	er R er R	Rock Man	made	- 10° R - 1		own Clos 1-2	sure 0% cular
LWD Dist Right Bank Left Bank Right Bank Left Bank NID Map 093L.035	: Not Applii : Shape : Shape : Rip.Vee : Rip.Vee	e: Undercut e: Undercut g: Shrubs g: Type Hg C 50.	Tex	ture: Fines ture: Fines Method GE	Gra Gra Stage	e: Shrub	Cobble /herb st /herb st	Bould Bould age age	er Res	Rock Man	made made AirPhot	- 10° R - 1		own Clos 1-2 Vas	sure 0% cular [
LWD Dist Right Bank Left Bank Right Bank Left Bank NID Map 093L.035	: Not Applii : Shape : Shape : Rip.Vee : Rip.Vee	e: Undercut e: Undercut g: Shrubs g: Type Hg	Tex	ture: Fines ture: Fines Method GE	Gra Stage Stage	e: Shrub e: Shrub e: Shrub	Cobble /herb st /herb st Grade R:	Bould age age EATU Phot	er Res	Rock Man	made made AirPhot	- 10 - 1		own Clos 1-2 Vas	sure 0% cular [
LWD Dist Right Bank Left Bank Right Bank Left Bank NID Map 093L.035	: Not Applii : Shape : Shape : Rip.Vee : Rip.Vee	e: Undercut e: Undercut g: Shrubs g: Type Hg C 50.0 e with 5 m Fa	t	ture: Fines ture: Fines Method GE	Gran Stage Stage Lg 50	e: Shrub e: Shrub e: Shrub	Cobble /herb st /herb st F od R:	Bould age age EATU Phot	Instre	am Veg: No	made made Aine AirPhot	- 10 - 1	Moss	v Vas UTI 9.6185	sure 0%

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

2.0 093L.025 3628 585

		344	- 100					PR	OJE	CT	0.5						VI T	
	Proje Stream Na ect Watersh	me (gaz): BUL		VER			The same			00	F	roject C	ode:			5270	
	No.	67.97			- who			WAT	ERS	HED	15		Electric .	-cubin	111	nov-		
	etted Name shed Code ILP Map#	: 000-00			00-0000 LP#: 36		00-000-		-000-000)	100	cal Name		ch #:	2	.0	5	Site #: 585
	M (Z.E.N)): 9.6184	97.6019	234		fethod:			- Street		Site Lo ef. Name	e:			d: MAP		Acces	
	Ua	ite: 200	2/09/14		ime: 11:	30	200	Agency:			Crew: .	JH/JA	1	Fish	h Crd?:	~	In	complete: _
			1 - 91		- 43	Stra	2500		ANN		3 1	3.1		- Value		15 (4)	794	HENSE /
Observat	Martin (-)	Mtd	width	width	width	width	width	width	width	width	width	width	Avg	-		Gadie		Mtd Avg
	Width (m): Width (m):		0.80	0.80	1.80	1.60	1.60	2.20			-		1.97		thod I:	0.0	1.0	C 0.50
	Depth (m):		0.10	0.10	0.10	0.10	1.20	2.00					1.13	Met	hod II:			С
	Wb Depth:		.6	.4		: 0.53		Method:	T				0.10	No	Vis.Ch.:		Intermit	-
-	COVER	1 .0			al: A	. 0.33		vietriou.		31	age: L	_ M	V II [_	Dw:		ii.	ibs.:
	Type:	SWE	LV	VD	В	U	DF	-	ov T	IV	CR	OWN CL	OSURE					
	Amount	-	1	4	T	S	N	_	D	N	1		-20%					
ı	oc: P/S/O:					V	in				INS	TREAM	VEG:	NI	AII	1 .	VΠ	
	LB SHP Texture RIP STG	: F [G 🗸	c 🔽	В	R [] A						RB SHP: Texture: RIP: STG:	F 🖂	G 🗸	c 🗸	В	R 🗌	A 🔲
No.	× SHILL	100	100	1/3		150	W. 52 J	W	ATE	R	N/B		along a	100	Tige	- : 70		X.
	EMS:										Re	eq #:						
	Temp:	8					Metho	od: T4			Co	ond.: 30					Meth	od: S3
	pH:	7.6					Metho	od: P2			т	urb.: T	- M	-1.	700	á	Moth	od: GE
Fl	ood Signs:	None					Metho	od: GE				U.U 1		7.			Wear	ou. GL
10 - X-3		ils		-	Section	27 28	N	ORF	HOL	OGY	(n)	2-2-	St. 7 1	Ser. Til	476617	100/60		
D.	d Material:		\!			0. 1. 1.			The state of the s	S. II. S.	01	B1	B2 E	33 D	-		3	
Бе		50.0	D /cm): 10.00		Subdom Morph							пΤг		116	ITE		
			D (CIII)). 10.00		Morph	KP		DISTURE				ш				П	
	Pattern:								INDICA	TORS	C1	C2	C3 (C4 C5	5 S1	SZ	2 53	S4 S
	Islands:																	
	Coupling:																	
Col	nfinement: FSZ:								В	ars:	N	SIDE		DIAG	М	ID	SPAN	I□ BF
		8,2	2/15 /		4-11-19-41	NOT THE	11/11-00	FEA	TUR	ES	20	新加州		100			1000 P	W. 1
NID Map	NID 1	Гуре	Hgt	Method	L	a I M	lethod	THE PARTY	Photo	enterior (AirPh	oto		N-300-70	TM (Z	(E/N)	Metho
			50.0	GE	5		GE	R: 59		09 L	:1	7.401 11	#:		_		019181	
Comments			4.64		-					1.	-		12.4					
A SALE SHEET	Nama 1	(ann)	= 37,0	1) = -	700	100	HAI	BITA	TQL	ALI	TY	THE REAL PROPERTY.	SUSSIII	USS S		0/ 3		***
	Name	/ Same	1989	lat.	-			MA EA		STATE OF THE	omment	c 42	NAME OF THE PERSON	-36	19.9 N		- 3	35.00
	inter Habita	at	None	observed	in site	potentia	ly unstra	eam			ominent	.5				_		
	ng Habitat		_	associate	_				pools.		-		_				-	
	ing Habita	t		associate					A CONTRACTOR							_		

Morice North Planning Area

ILP Map # Reach#

093L.025

2.0

3628

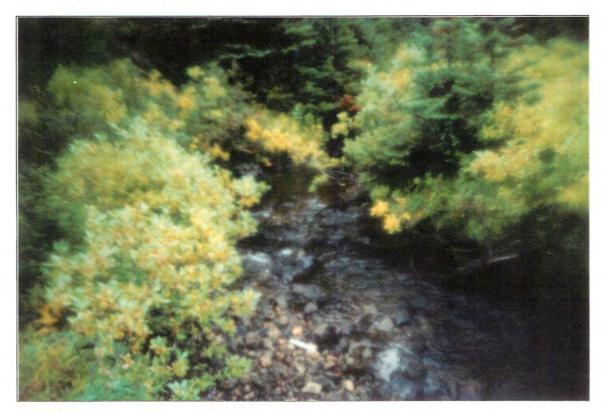
Site 585

5						PHOTOS
	Ph	oto		Foc Lg	Dir	Comments
R:	59	F:	07	STD	U	Upstream photo of typical habitat.
R:	59	F:	08	STD	D	Downstream photo of typical habitat.
R:	59	F:	09	STD	U	Cascade with 5 m falls within.
200	3	Co.		(1)	新州市 多四	COMMENTS

2	1495			13.	Elike Levis		
	Ph	oto		Foo	: Lg	Dir	Comments
R:	59	F:	07	ST	D	U	Upstream photo of typical habitat.
R:	59	F:	80	ST	D	D	Downstream photo of typical habitat.
R:	59	F:	09	ST	D	U	Cascade with 5 m falls within.
	N.	0=4770		196			COMMENTS
		Sec	tion				Comments
	T	CHAI	NNEL		NFC upstream of ba	arrier.	
		CHAI	NNEL		NFC upstream of F	alls / Casca	ade.
	_	_					



Site #585, Upstream photo of typical habitat. Roll #59, Frame #07, Date: 2002/09/14



Site #585, Downstream photo of typical habitat. Roll #59, Frame #08, Date: 2002/09/14



Site #585, Cascade with 5 m falls within. Roll #59, Frame #09, Date: 2002/09/14

Morice North Planning Area

Reach # ILP Map #

ILP#

.0 093L.035

STREAM REFERENCING	
Gazetted Name: Local Name:	
Watershed Code: 000-00000-00000-0000-0000-000-000-000-	.P#: 3375
REACH	
Reach #: 1.0 UTM(Zone/East/North): 9.618564.6019639 Sample Type: Length (km): .31 Coupling: Decoupled Magnitude: 5 BGC Zone: Gradient (%): 6.8 Confinement: Occasionally Conf US Elev (m): 1297 Islands: NONE Riparian Vegetation: Shrubs Bars: None Side Diagonal Mid-channel Span Braid Landuse: Not Specified	
NATION TO THE STATE OF THE STAT	MIT TO JUNE 1
Site #: 586 Field UTM Agency: C172 Crew: JH/JA Date: Site Length (m): 110 GIS UTM 9.618380.6019498 Agency Name: Triton Environmental Consultants (1	2002/09/14 errace)
CHANNEL	and the second
No Vis.Ch.: Intermittent: Avg Min Max # Avg Min	Max #
Dewatered: Tribs.: Channel Width (m): 0.93 0.800 1 6 Gradient %: 1.00 1	1 2
Stage: Low Wetted Width (m): 0.87 0.600 1 6 Pool Depth (m): 0.10 0.100	0.100 4
Med ✓ Bankfull Depth (m): 0.27 0.2 0.3 3 Turbidity.: Turbid	Low
High Temp (C): 7 pH: 7.4 Conductivity: 30 Moderate	
MORPHOLOGY	C. Asim
Bed Material: Dominant: Cobble D95 (cm): 40.00 Bars: Non ✓ Side Diagonal Mid-channel Subdominant: Boulders D (cm): 10.00	Span Braid
Channel Pattern: Sinuous Islands: None Coupling: Decoupled INDICATORS DISTURBANCE O1 B1 B2 B3 D1 D2 INDICATORS DISTURBANCE O1 D1	03 S5
COVER	
Total Cover: Abundant Type: SWD LWD B U DP OV IV	
LWD: None Amount: N N N S N D N	
LWD Dist: Not Applicable Location: P/S/O:	FSZ:
Right Bank: Shape: V - shape Texture: Fines Gravel Cobble Boulder Rock Manmade Cibert Bank: Shape: V - shape Texture: Fines Gravel Cobble Boulder Rock Manmade Right Bank: Rip.Veg: Shrubs Stage: Shrub/herb stage Instream Veg: None Algae Moss	rown Closure 1-20%
The state of the s	
Site Number Capture Number of Length fished Total Voltage Species Total Minimum Length (mm) Capture Number of Events Capture Capture Number of Length fished Total Voltage Species Total Capture Capture Number of Length fished Total Voltage Species Total Capture Capture Number of Length fished Total Voltage Species Total Capture Capture Number of Length fished Total Voltage Species Total Capture Capture	Maximum Length (mm)
586 EF 1 100 250 sec 800 NFC 0	

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

1.0 093L.035 3375 586

PROJECT	-1-
Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 Project Watershed Code: 460-000000-00000-0000-0000-0000-0000-00	
WATERSHED	400
Gazetted Name: Watershed Code: 000-000000-00000-00000-0000-0000-000-0	3
Date: 2002/09/14 Time: 12:00 Agency: C172 Crew: JH/JA Fish Crd?: ✓ Incomplete	: 🗌
CHANNEL	70
Mtd width Avg Gadient % Mtd	Avg
	1.00
Wetted Width (m): T 0.80 1.00 1.00 0.80 0.60 1.00 0.87 Method II: C	
Pool Depth (m): T 0.10 0.10 0.10 0.10 0.10 0.10	
No Vis.Ch.: Intermittent:	
Wb Depth: .3 .2 .3 Avg: 0.27 Method; T Stage: L ☐ M ✓ H ☐ Dw: ☐ Tribs.: ☐	
COVER Total: A	
Type: SWD LWD B U DP OV IV CROWN CLOSURE	
Amount: N N N S N D N 1 1-20%	
Loc: P/S/O: INSTREAM VEG: N A M V	
LWD: N DIST: NA	
LB SHP: V RB SHP: V	
Texture: F G C B R A	
RIP:S	
STG: SHR STG: SHR	
3500 300	
WATER	23
EMS: Req #:	
Temp: 7 Method: T3 Cond.: 30 Method: S3	
pH: 7.4 Method: P2 Turb.: T M L C ✓ Method: GE	
Flood Signs: None Method: GE Turb.; T M L C Method: GE	
MORPHOLOGY	-
01 01 02 02 03	
Bed Material: Dominant: C Subdom: B O1 B1 B2 B3 D1 D2 D3	
D95: 40.0 D (cm): 10.00 Morph: RP DISTURBANCE	
Pattern: SI INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4	S5
Islands: N	
Coupling: DC	
Confinement: OC	
FSZ: DIAG MID SPAN	BR
HABITAT QUALITY	
Name Comments	
- Commonto	
Overvinter habitat Inone observed.	
OverWinter Habitat None observed. Rearing Habitat Low - shallow pools.	
Rearing Habitat Low - shallow pools. Spawning Habitat Low - coarse substrates, shallow.	
Rearing Habitat Low - shallow pools. Spawning Habitat Low - coarse substrates, shallow. PHOTOS	-
Rearing Habitat Low - shallow pools. Spawning Habitat Low - coarse substrates, shallow.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

Morice North Planning Area

ILP Map # Reach #

093L.035

3375

Site 586

1.0

Section Comments CHANNEL NFC

COMMENTS

Morice North Planning Area

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Reach # ILP Map # ILP#

Watershed Code:

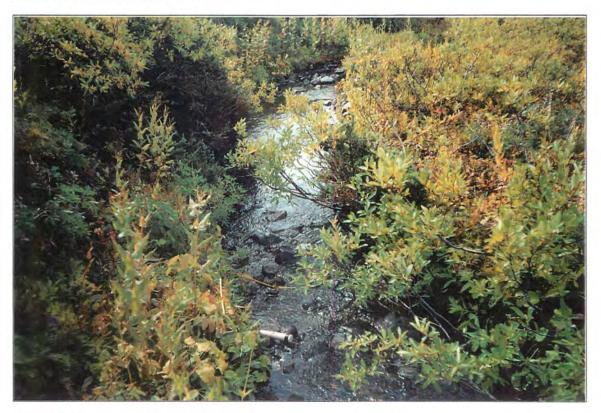
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093L.035

Ga	zetted	Name:							-			Loca	al.				
			460-0	000000-0	0000-00	000-000	0-0000-000	-000-0	200-000	000-0		LUCA	ан.				
							0-0000-000										
W		ody ID:							P Map #					ILP#:	3375	Reach #:	11-
	Proj	ect ID:	5270	V.							L	ake/Str	eam:	S	Lake F	rom Date:	
F	ish Pe	rmit #:	14	5269	1	Date: 2	002/09/14		To: 20	02/09	/14	Age	ency:	C172	Crew: JH/J	A Resa	mple:
	Car.	n/e-			William	7.75		SIT	E /	ME:	тно	D	6	問題即	小流域		
Site#	NID	Мар	NID	#	UTM:Zo	ne/East/	North/Mthd	M	MTD/NO	Ter	mp	Cond	Turb	id		Comment	
586	093	L.035	505	86		- J T	G	PU E	F 1	7		30	С				
NEW YEAR	r h				Alerin-		Α.	GE	EAR	SE	TIP	IGS	000	1 April 1	- The state of the		- 132"
Site#	MTI	ONIC	H/P	Date	In 1	ime In	Date Ou	t Ti	ime Out					C	omment		
586	EF	1	1	2002/0		12:00	2002/09/1	-	12:15								
	-3		378	1	(EL	LECTR	OFI	SHE	R S	PE	CIFI	CAT	TIONS		12/11/10 G	380 27-
Site#	110	MTD/N	0	H/P	E	ncl	Sec	Leng	gth	Wic	ith	Volt	age	Frequency	Pulse	Make	Model
586	EF		1	1			250	100	0.0	1	.0	80	00	THE STATE OF	5	SMITH	12B
			W.	in Type	-1000	-77 4	PRINCE	FIS	H SU	JMA	AR	Y	C. Carl	7 10 VIII	A	L KOOT	
Site#		MTD/N	0	H/P	Specie	s S	Stage	Age	Tota	1#	Lgth	Min/Ma	ex)	FishAct	y de la	Comment	
586	EF	- 1	1	4	NFC			_		0		1				75154-205-11	



Site #586, Upstream habitat within site. Roll #59, Frame #10, Date: 2002/09/14



Site #586, Downstream habitat within site. Roll #59, Frame #11, Date: 2002/09/14

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0

093L.025

			STR	EAM	REF	EREN	CING	1 - N				
Gazetted Na	me:					L	ocal Name:					
Watershed C	ode: 000-00	0000-00000-00	000-0000-0000-00	0-000-0	00-000	000-000	IL	P Map #: 093L.0	25	IL	P#:	3628
		沙洲 为一种			REA	CH	(*************************************		1000	1	1 - 11	35
Reach #: 3 Length (km) Gradient (%) US Elev (m) Bars: None	: .49 : 1.4 : 1286	Confir	UTM(Zone/East/No pupling: Decoupled nement: Occasiona Islands: NONE Mid-channel	1	Ma Rip	gnitude: Order: 2	2 getation: Sh	(Sample BGC Open wa	Zone:		ed
	111	10 10	T. Mass. Day		SIT	E		UV SUMMER S	2.4			3,1-9
Site #:	Contract of	Field UTM GIS UT	M TM 9.618328.60194	55		1,020,00	y: C172 cy Name: Tri	Crew: JH ton Environmenta	I/JA al Consul		2002/09 errace)	9/14
MEN TO	4 20	3 - 10e	建一些 。	C	HAN	NEL				- 57 %	4.50	who is
No Vis.Ch.: Dewatered:	Intermit	ribs.:	Channel Width (m):	Avg 2.70	Min 2.200	Max 3	6	Gradient %:	Avg 1.00	Min 1	Max 1	2
Stage: Low Med		В	Wetted Width (m): Bankfull Depth (m):	0.57	0.600	0.6	3	Pool Depth (m):	0.33 idity.:	0.200 Turbid	0.7	6 Low
High	I	emp (C): 7	pH: 7.4		(Conductivit	y: 30		Мо	oderate		Clear
	10		1	MOR	PHC	LOGY			100	37/4	-31	
Bed Material	: Dominant: Subdominant:		D95 (cm): 15. D (cm): 10.			Bars: Non	Side	Diagonal [Mid-	channel	-	pan [
Cou	pling: Decoup	ar, Wandering bled onally Confine	Islands: Nor	ne		RBANCE CATORS	O1 B1	B2 B3 C5 S1 S2	D1 [D2 D	03 S5	
	logy: RP	Riffle Pool		I								
1886				11/	COVI	ER	la we in	The State of	4.7	2a 1	V	
Total Cover: / LWD: I LWD Dist: I		e	Type: Amount: Location: P/S/O:	SWD N	LWE N	D B N	U S		D C	IV N	FSZ	z: 🗌
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: U Shape: U Rip.Veg: S Rip.Veg:	ndercut Text	ture: Fines Gra	vel 🗸 (vel 🗸 e: Shrub/ e: Shrub/	Cobble herb sta	Boulde	er Rock	Manmade Manmad	Algae 🗌		own Clos 1-20	
ENERGY.	The Maria			W. UST	FIS	Halle	मानी है। साही क		17 16		4/3/3	
Site Number	Capture	Number of	Length fished	Tota		Voltage	Species	Total	Minim	2. 4. 4. 4. 4.		mum
Site Number	Method	Events	(m)	Time	3			Fish	Length	(mm)	Lengti	h (mm)

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

093L.025 3628 587

			(iii)				PR	OJE	СТ	V-1						4-
Project Watersho	ne (gaz.	.): BUL		VER						00		Project C	ode:		5270	
	150	10.		19.5		30 A	WAT	ERS	HED			The house			Sales Sales	
Gazetted Name: Watershed Code: ILP Map#: Field UTM (Z.E.N): GIS UTM (Z.E.N):	000-00 093L.0	25	1	LP#: 36		00-000-0		-000-000	N	ID#: 5	ocal Nam 0587 g: 150	e:	ch #: Method	3.0 : MAP	Site #: Access: H	
Date	e: 200	2/09/14	1	ime: 12:	:20	19	Agency:			crew:	JH/JA		Fish	Crd?: ✓	Incomple	ete:
THE SALVEY	41.30	- 38	Jr		3446	- 2	CH	ANN	EL				- 9-738	Section 1	A. T. C.	
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg	1573	Gad	ient % Mtd	Avg
Channel Width (m):	T	2.20	2.80	2,40	3.00	2.80	3.00			-		2.70	Meth	nod I: 1.0	1.0 C	1.00
Wetted Width (m):	T	0.60	1.00	1.60	1.20	1.40	1.80					1.27	Meth	od II:	C	
Pool Depth (m):	T	0.20	0.20	0.20	0.70	0.30	0.40				_	0.33	No V	s.Ch.:	Intermittent:	
Wb Depth:	.6	.5	.6	Avg	: 0.57		Method:	т	St	age: L	V M	ПНГ		Dw:	Tribs.:	=
COVER			Tota	al: A							•	LJ L			(1,550)	
	SWD	1 1 1 1 1				1 60		ou T		1 00	01481.01	001105				
Type: Amount:	N		VD V	B N	S	DF		OV D	IV N	1	OWN CL	-20%				
Loc: P/S/O:						100							NEA	$\neg \mathbf{n} \neg$	V	
				الناليا	VILL					l live	INCAM	VEG.	🗸 ^	\square M \square	, L	
LWD:	N		D	ST: NA												
LB SHP:	U										RB SHP	: U				
Texture:	F	GV	C	BIT	RA						Texture	: F 🗆	GVO	B	RAL	T
RIP:	S										RIP	-				
STG:	SHR											SHR				
	- 10				X+1/2/2/2-1-1-1		***									
W							· W	ATE	R		1	7.			1	
EMS:	,										eq #:					
Temp: 7							d: T4				ond.: 30				Method: S	3
Flood Signs: N							d: GE			7	Turb.: T	M		CV	Method: G	E
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						M	ORP	HOL	OGY			11	1.			
Bed Material:		Dominan	t: G		Subdom	: C				01	B1	B2 E	33 D1	D2 [03	
D95:	15.0	D (cm)	: 10.00		Morph	: RP	D	ISTURB	ANCE							
Pattern: I	R							INDICA		C1	C2	C3 (C4 C5	S1 S	32 S3 S4	4 S5
Islands: 1											П	ПП	TIT	TITT		ımı
Coupling: [1		
Confinement: C								D.		AI(==	CIDI		DIACO		2011	
FSZ:								Da	ars:	NV	SIDE		DIAG	MID	SPAN	BR
17	- 1		300	==9	NOV S	HAE	BITA	TQU	ALIT	Υ	7110 76				72.72	
Name		T	SEC.			179012			C	ommen	ts	11 3	1-74			3. 3. 25
OverWinter Habitat		Low - a	associate	d with p	ools.											
Rearing Habitat		_	Moderate			And the second second										
Spawning Habitat		Low - a	associate	d with g	ravels -	small gra										
OF WAR		- 8f	1 1 2	التأليا		- Y	PH	ото	S	2/2 25	Stormue I	1		1000		: 1-31
Photo		c Lg		Di	r							Commen	ts			
R: 59 F: 12		TD		L					abitat wit	distant the same of						
R: 59 F: 13	S	TD		0)	Dow	nstream	photo o	f habitat	within s	ite.					

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

00-000 3.0 093L.025

	COMMENTS
Section	Comments
CHANNEL	NFC .

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

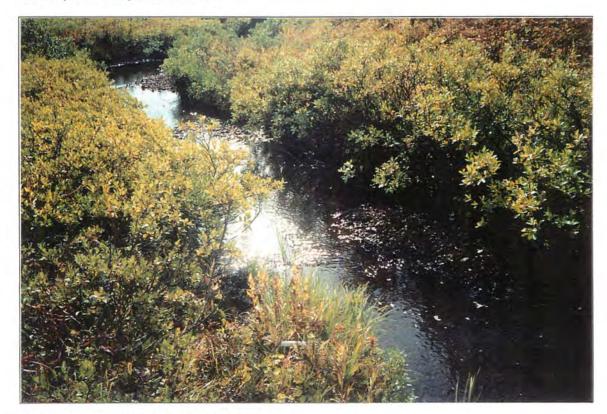
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093L.025

10	Vin	1/2/4	ton =	- 30,40			MAD CONTINUE TO THE PARTY OF TH	WAT	ERB	OD.	Y		The Sale	e e Malos		
	rojec		460-0				0-0000-000-0				Loca	al:				
W		oody ID: oject ID:		5				ILP Ma	p#: 09		5 Lake/Str	eam:	ILP#:	3628 Lake I	Reach #: From Date:	3 -
F	ish P	ermit #:	14	5269		Date: 2	002/09/14	To:	2002/0	9/14	Age	ency:	C172	Crew: JH/J	A Resa	imple:
- Ward		1175		V CALLY	in the		Section S	ITE	ME	THO	O D		· 表别26年,3	1960	The Contract of the Contract o	
Site#	NII	D Map	NID	#	UTM:Z	one/East/	North/Mthd	MTD/N	O Te	emp	Cond	Turi	oid	20,711	Comment	
587	093	3L.035	505	87			GPU	EF	1	7	30	C				
300		5.875		炭()	n = 10 (ii)		Α.	GEAR	SE	TTI	NGS	31		et /// sin-	No. of the last of	
Site#	M	TD/NO	H/P	Date	In	Time In	Date Out	Time O	ut	0004000			(Comment	3,000,000	1 -0
587	EF	1	া :	2002/0	9/14	12:15	2002/09/14	12:30	0 ==							
			V6)1	54/	The last	C. El	ECTRO	FISH	ER:	SPE	CIFI	CA	TIONS	Phins.		
Site#		MTD/N	10	H/P		Encl	Sec	Length	W	idth	Volt	age	Frequenc	y Pulse	Make	Mode
587	E	F	1	1		0	180	150.0	_	1.0	30	00		5	SMITH	12B
7.16		1/2		- T	The latest		F	ISH	SUM	MAI	RY		18 Agr. 18	\$. The 146	W 300	1-
Site#	100	MTD/N	Ю	H/P	Spec	ies S	tage Ag	e T	otal #	Lgth	(Min/Ma	ax)	FishAct		Comment	
587	E	F	1	1	NFC				0			_				



Site #587, Upstream photo of habitat within site. Roll #59, Frame #12, Date: 2002/09/14



Site #587, Downstream photo of habitat within site. Roll #59, Frame #13, Date: 2002/09/14

FDIS Reach Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

2.0

093L.025

3618

	The Allerin	PROJECT		
Stream Name (gaz.):	BULKLEY RIVER	est District (tribs to Morice R.)	Project Code: 5270	
	4449-15	WATERSHED		45.0
Reach Watershed Code: ILP Map #: 093L.025 Air Photos LINE: BCC98341 #: 0	000-000000-00000-00000-00 ILP #: 3618 Gaz.: Local:	000-0000-000-000-000-000-000 Reach #: 2.0 Names		NID#: 11947 e/East/North/Method) 2.6016235
and the self-self		SURVEY INFO		
Date: 2002/08/27		Agency: C172	Crew:	SG/SH
		ATTRIBUTES		
Length (km): .81 DS Elev.: 975 US Elev: 976	Gradient: 0.12 Order: 2 Magnitude: 6 BGC Zone: SBS	Setting: VF Open water: P Confinement: OC Coupling: DC	DISTURBANCE O1 B1 INDICATORS C1 C2 C3 C4 C5	
Valley Flat: B Active Floodplain Visible: Channel Pattern: SI	C/D: C Est. Width:			SPAN BF
MA	P.S.			
Map Type Mar	o# Year			

TRIM

093L.025

Morice North Planning Area

Watershed Code:

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

Reach #

ILP Map #

ILP#

2.0

093L.025

100	1304	1-1-					WA	TEF	BOD	Y					
Gaz	zetted Name	:								Loc	al:				
F	Project Code	460-0	00000-0	0000-0000	0-0000-0	000-000-00	0-000	-000-0	0-00						
	WS Code	000-0	00000-0	0000-0000	0-0000-0	000-000-00	0-000	-000-0	00-000						
V	aterbody ID:						ILP !	Map #:	093L.0	25		ILP#:	3618	Reach #: 2	2 -
	Project ID:	5270						96		Lake/Str	ream:	S	Lake Fro	om Date:	
F	ish Permit #:	145	269	Da	te: 200	2/09/14	To	200	2/09/14	Age	ency: (C172 C	rew: JH/JA	Resar	mple:
				建	Julio T	S	ITE	1 1	ETH	OD	188		" Valley	Sant 4	
Site#	NID Map	NID	#	UTM:Zone	East/No	rth/Mthd	MTC	O/NO	Temp	Cond	Turb	id	C	omment	
588	093L.025	5058	8			GPU	EF	1	7	60	С	2		-	
w = 1 - 6			A P		0,400	Α. (SEA	R S	ETT	INGS			militing of the	TARY OF S	- B
Site#	MTD/NO	H/P	Date	In Tim	e In	Date Out	Time	Out		100	THE STATE OF THE S	Cor	nment	3000000	
588	EF 1	1	2002/0	9/14 12	:30 2	2002/09/14	12:	45	-						
		X - 11	111	C.	ELE	CTRO	15	HER	SPI	CIFI	CAT	TIONS			
Site#	MTD/N	10	H/P	Enc		Sec L	ength		Width	Volt	tage	Frequency	Pulse	Make	Model
588	EF	1	1	0	387	165	0.00		2.0	80	00	1	5	SMITH	12B
-197	CO PARISON IN		- N - N - N - N - N - N - N - N - N - N	THE WATER CO.	200						-			ROOT	
(34)	715-18	10	100				SH	SU	MMA	RY		Car Report		· 1	
Site#	MTD/N	0	H/P	Species	Stag	ge Age	-	Total	# Lg	th (Min/Ma	ax)	FishAct		Comment	
588	EF	1	1	NFC				0							
	100		as this	70%, W		70.5	CO	MM	ENTS		18	- News T			
	Section									Comm	ents	P. T.	112 3 100		
٧	WATERBOD'	Y	Diff	icult shocki	ng - shou	uld be minno	w trap	ped u	ostream.						
V	VATERBOD	Y	_	tom 100m c			-								

Morice North Planning Area

Reach # ILP Map #

ILP# 3618

1.0

093L.025

STREAM REFERENCING **Gazetted Name:** Local Name: ILP Map #: 093L.025 ILP#: 3618 Reach #: 1.0 UTM(Zone/East/North): 9.621581.6016873 Sample Type: Length (km): 1.27 Coupling: Decoupled Magnitude: 6 BGC Zone: SBS Gradient (%): 1.8 Confinement: Occasionally Conf Order: 2 Open water: Absent US Elev (m): 975 Islands: NONE Riparian Vegetation: Shrubs Bars: None ✓ Side ☐ Diagonal ☐ Mid-channel ☐ Span ☐ Braid ☐ Landuse: Not Specified Site #: 589 Field UTM 9.621726.6017311 Agency: C172 JH/JA Crew: Date: 2002/09/14 Site Length (m): 150 GIS UTM 9.621690.6017248 Agency Name: Triton Environmental Consultants (Terrace) CHANNEL No Vis.Ch.: Intermittent: Avg Min Max # Avg Min Max # Tribs.: Dewatered: Channel Width (m): 1.97 1.600 2.400 6 Gradient % 1.00 2 Wetted Width (m): 1.90 1.600 2.200 6 Pool Depth (m): Stage: Low 0.58 0.400 6 Bankfull Depth (m): 0.77 0.7 0.8 3 Med V Turbidity.: Turbid Low High Temp (C): 7 pH: 7.6 Conductivity: 60 Moderate Clear V MORPHOLOGY Bed Material: Dominant: Fines D95 (cm): 1.00 Side Diagonal Bars: Non 🗸 Mid-channel Subdominant: Not Applicable D (cm): 1.00 Braid Channel Pattern: Sinuous Islands: None DISTURBANCE Coupling: Decoupled **INDICATORS** Confinement: Occasionally Confine C3 C5 SI S2 **S3 S4** Morphology: RP Riffle Pool COVER Total Cover: Abundant SWD LWD Type: B DP OV IV Amount N N N S D LWD: None Location: P/S/O: LWD Dist: Not Applicable FSZ: Right Bank: Texture: Fines ✓ Gravel Cobble Boulder Rock Manmade Shape: V - shape Crown Closure Left Bank: Texture: Fines ✔ Gravel Cobble Boulder Rock Manmade Shape: V - shape 1-20% Right Bank: Rip.Veg: Shrubs Stage: Shrub/herb stage Left Bank: Rip.Veg: Stage: Shrub/herb stage Instream Veg: None ☐ Algae ☐ Moss ☐ Vascular ✔ FISH Site Number Capture Number of Length fished Total Voltage Species Total Minimum Maximum Method **Events** (m) Time Fish Length (mm) Length (mm) 589 EF 150 1 300 sec 800 NFC 0

Morice North Planning Area

100	1/2	ALSO .	Pi /					PR	OJE	CT.				-0. 1 33		ine .			
P	Proje Stream Natroject Watersh): BULI	KLEY RI	IVER						00	7	Project C	Code			5270		
1-00			18.0	5 378	M. S. Filt		(87.0)	WAT	ERS	HED	l-V		10/15		70	1	- 11: S	1	1
G	azetted Name	e:									Lo	cal Nam	e.						
Field	ILP Map# UTM (Z.E.N) UTM (Z.E.N)	: 093L.0 : 9.6217	25 26.6017	311	LP#: 36		NID M	000-000 ap #: 09		N	ID #: 50 Site Lo)589 g: 150		nch #	: ethod: MA	1.0 P		Site #: 5	589
	Da	te: 200	2/09/14	1	Time: 12	:45		Agency:	C172	C	rew:	JH/JA			Fish Crd?	· V	1	ncomple	ete:
	- Th (2)	22,000	W W	S-210	93 M	CONTRACT OF THE PARTY OF THE PA	- 3/4/6/3	100	ANN				-3/1/7/		Tion ord			Toompic	,
		Mtd			T	1 2.00	1/2		and the same of	1 42 13				1			Name of	40	
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	ool Depth (m):		0.50	0.60	0.40	0.40	0.60	1.00					0.58	۱ ۱	Method II			С	
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18,	Wb Depth:	.8	.7	.8	Avg	g: 0.77	N	Method:	T	St	age: L	ПМ	VH			v: 🔲		Tribs.:	
	COVER			Tota	al: A								(2)	_					
Ē	Type:	SWD	LV		В	11	Loc		ov. I	0.7	1 000	214/41/01	OCHOR						
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-	Loc: P/S/O:						V			<u> </u>					_ A _				
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	LB SHP		327	PAGE AND								RB SHP							
	Texture	FV	G	C	B	R 🗌 A						Texture	FV	G	C	B	R	A	
	RIP	: S										RIP	S						
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	Temp:						11-11-	5. +1				eq #:					5.00	10.5	
	pH:							od: T4				ond.: 60					Met	hod: S	3
	Flood Signs:							od: GE			T	urb.: T	ПМ	П	L C	~	Met	hod: G	E
	r icoo oigiio.	110110					Metric	u. GE											
101		7/1/4	100	- 1			= / M	ORP	HOL	OGY	No. W			Ů,	30 2	- hH		100	
	Bed Material:	D	ominant	:F		Subdom	: NA				01	B1	B2 E	В3	D1 D	2 D	13		
	D95:	1.00	D (cm)	: 1.00		Morph	: RP		ietupe	ANCE		TI			ПП	711			
	Pattern:	SI						L	INDICA	TORS	04	00	00 4	-	25 0				123
	Islands:									, 5, 10	C1	C2	C3 (C4	C5 S	1 S	2 S	3 S4	S5
	Coupling:																1		
	Confinement:																		
	FSZ:								В	ars:	NV	SIDE		DIAG	S A	MID	SPA	N	BR
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300		0.660			3		HAE	BITA	T QL	JALIT	Υ		4	AF.	14			77 10	11/1
	Name									Co	omment	s			15				
	rWinter Habita	ıt	Low.																
	aring Habitat		Low.																
Spa	wning Habitat		Low.																
114	1		The second	10	WITE .			PH	ото	S	THE SE			1/19	of Many	C2-1	1 11 15	50 (1)	
Pho			c Lg	- 1	Di							(Commen	nts	- amile				
R: 59	F: 14	ST			L		_			abitat with									
R: 59	F: 15	ST	TD)	Dow	nstream	photo o	f stream a	and RM	Α.							

Morice North Planning Area

ILP Map #

ILP#

Site

1.0

Reach #

093L.025

3618

400000	COMMENTS
Section	Comments
CHANNEL	Confined section at bottom of Reach.
CHANNEL	Should be minnow trapped to confirm fish presence / absence. Minnow trap upstream lakes.
CHANNEL	NFC - no barriers observed in Recci. Stream / wetland habitat upstream.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

1.0

093L.025

					1			WA	TER	BOD	Y			25/61		10年末期包			
1277	zetted Nar				S. JE 11 Q						Loc	al:							
F							-0000-000-00												
14	/aterbody		000-00	00000-000	000-00000-	0000-	-0000-000-00		·000-000 Лар #: (25		ILP#:	3618	Re	each #: 1			
	Project		5270					12. 10	nap ir.	750L.02	Lake/St	ream:		77.7	e From				
Fish Permit #:			145269 Date:			: 200	02/09/14	To: 2002/09/14			Agency: C172			Crew: JH/JA Resample:			ple:		
5.1	W - 8006	16-1	(1)	S. Sur.		10.747	S	ITE	/ M	ETH	O D		January Company	11/05 J	- 3		(100 mag)		
Site#	NID Ma	р	NID#		UTM:Zone/East/No			MTD/NO		Temp	Cond Tu	Turl	oid Comment						
589	093L.02	5	5058	9	GI				1	7	60	C	50						
43			4.0	(5 - 57 L) W		1000	A. (GEA	RS	ETT	INGS		71170111						
Site#	MTD/N	0	H/P	Date In	In Time In D		Date Out	Time	Time Out				Comment						
589	EF 1		1	2002/09/	14 12:4	5	2002/09/14	13:	15										
- por		Trans.		1/0=1	C.	EL	ECTRO	FIS	HER	SPI	CIFI	CA	TIONS	- S. S.	4				
Site#	MT	MTD/NO		H/P	Encl	Sec		Length		Width	Voltage		Frequenc	y Pul	se	Make	Mode		
589	EF		1	1	0		300	150.0		2.0	8	00	1	5		SMITH ROOT	12B		
	M-PIN-	100	3	6.40	W. 3	-17.1	F	ISH	SUI	MA	RY	101	-0 7-140	T AY					
Site#	MT)/NO		H/P	Species	Sta	age Age	ge Total		Lg	th (Min/M	ax) FishAct		Comment					
589	EF		1	1	NFC				0										



Site #589, Upstream photo of habitat within site. Roll #59, Frame #14, Date: 2002/09/14



Site #589, Downstream photo of stream and RMA. Roll #59, Frame #15, Date: 2002/09/14

Morice North Planning Area

Reach #	ILP Map #	ILP#
1.0	093L.025	3619

		STR	EAM	REF	ERE	NCIN	G	1.00	A S	या जीत	, "	7
Gazetted Nam	ie:					Local Na	ame:					
Watershed Co	de: 000-000000-0000	0-00000-0000-0000-00	0-000-0	00-000-	000-000		ILP N	Map #: 093L.02	5	ILI	P#:	3619
- N			h Vie	REA	СН	al la fiel			Lanese	0.50		2 7
Reach #: 1.0 Length (km): . Gradient (%): 6 US Elev (m): 9 Bars: None	29 6.9 Co	UTM(Zone/East/No Coupling: Decoupled onfinement: Occasiona Islands: NONE		Ma f Rij	gnitude: Order	: 1 : 1 egetation		0		Type: Zone: ter: Abs		d
图 (4.70)				SIT	E					0.00	W-	
Site #: 5: Site Length (n	7.5 1 10 10 10 10 10 10 10 10 10 10 10 10 1	UTM UTM 9.621664.60174	33			ncy: C17	* 100	Crew: JH/ Environmenta	***	Section 2	2002/09 errace)	/14
			C	HAN	NEL	7 (A)	· 建设等之间	100000			J. 100	· No.
No Vis.Ch.: Dewatered: Stage: Low Med	Intermittent:	Channel Width (m): Wetted Width (m): Bankfull Depth (m):	Avg 0.00 0.00 0.00	Min 0 0 0	0 0 0	0 0	P	Gradient %: ool Depth (m): Turbi	Avg 11.67 0.00	Min 8 0 Turbid	Max 16 0	# 3 0
High	Temp (C):	pH:		(Conducti	vity:		Turbi	100	derate[clear
	The State Care		MOF	RPHC	LOG	Υ			alle i	16.21	To the	
Bed Material: Su Channel Patte Coupli Confineme Morpholo	ubdominant: ern: ing: ent:	D95 (cm): D (cm): Islands:		DISTU INDIC		E_01	B1 C5	B2 B3 S1 S2		D2 D S4		oan 🗌
La Santa				COV		31 04				JJJ.		
Total Cover: LWD: LWD Dist: Right Bank: Left Bank:			SWD	Cobble	Bou		Rock	Manmade Manmade	v	Cre	FSZ own Clos	
	Rip.Veg: Rip.Veg:	Stage Stage			-146	Instre	eam Veg		lgae 🗌	Moss [Vasc	cular 🗌

Morice North Planning Area

Reach#

ILP Map #

ILP#

Site

3619 590 1.0 0931 025 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name: Local Name: ILP Map#: 093L.025 ILP#: 3619 NID Map #: 093L.025 NID #: 50590 Reach #: 1.0 Site #: 590 Field UTM (Z.E.N): .. Method: Site Lg: 110 Method: MAP Access: H GIS UTM (Z.E.N): 9.621664.6017433 Ref. Name: Date: 2002/09/14 Time: 13:20 Agency: C172 Crew: JH/JA Fish Crd?: Incomplete: CHANNEL Mtd width Gadient % Mtd Avg Avg Channel Width (m) 0.00 Method I: 11.0 С 11.67 8.0 Wetted Width (m): 0.00 Method II: 16.0 C Pool Depth (m): 0.00 No Vis.Ch.: 🗸 Intermittent: Wb Depth: Avg: 0.00 Stage: L M H Tribs.: Method: MS Dw: COVER Total: SWD LWD DP CROWN CLOSURE Type: В U OV IV Amount Loc: P/S/O: INSTREAM VEG: N A M V DIST: LWD: LB SHP: RB SHP: FGGCBGRA Texture: F G C B R A C Texture: RIP: RIP: STG: STG: WATER EMS: Reg #: Method: Temp: Cond .: Method: pH: Method: Turb.: T M L C Method: GE Flood Signs: Method: MORPHOLOGY 01 **B1** B2 **B3** D1 D2 D3 Bed Material: Dominant: Subdom: D95: D (cm): Morph: DISTURBANCE **INDICATORS** Pattern: C1 C2 C3 C4 C5 **S1** S2 **S3 S4 S5** Islands: Coupling: Confinement: Bars: DIAG MID BR FSZ: HABITAT QUALITY Name Comments OverWinter Habitat None. Rearing Habitat None. Spawning Habitat None. PHOTOS Photo Foc Lg Dir Comments

Organic barrier with scour pool below.

NCD characteristics - no scour.

16

STD

STD

U

D

R: 59 F:

R: 59 F: 17

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

1.0

093L.025

3619

	COMMENTS
Section	Comments
CHANNEL	NCD / S6.



Site #590, Organic barrier with scour pool below. Roll #59, Frame #16, Date: 2002/09/14



Site #590, NCD characteristics - no scour. Roll #59, Frame #17, Date: 2002/09/14

Morice North Planning Area

ILP# Reach # ILP Map #

1.0 093L.035 3259

AC 指数 10 10 15		STR	EAM	REF	EREN	CING				6150	
Gazetted Name:					L	ocal Name:					
Watershed Code: 000-	000000-00000-00	000-0000-0000-00	0-000-0	00-000-0	000-000	ILP	Map #: 093L.03	35	ILF	P#:	3259
Allow Today			400	REA	CH	10, 19					Web Me
Reach #: 1.0 Length (km): .34 Gradient (%): 13.8 US Elev (m): 1096 Bars: None 🗸 Side	Confin	UTM(Zone/East/Noupling: Partially Comment: Occasional slands: NONE	ouple	Ma Rip	gnitude: Order: 3		d C/D	Sample BGC Open wat	Zone: E		ed
	1 114 -4		Fall	SIT	E	TOTAL STREET	Text is				
Site #: 591 Site Length (m): 200		M 9.620256.60226 M 9.620275.60225				y: C172 cy Name: Tritor	Crew: JH	I/JA al Consul		2002/09 errace)	9/14
The state of the s	ANALES S		C	HAN	NEL	The might		1 SHI	· THE	gla (
No Vis.Ch.: Intern	mittent:		Avg	Min	Max	#		Avg	Min	Max	#
Dewatered:		channel Width (m):	8.37	7.6	9	6	Gradient %:		6	13	4
Stage: Low		Wetted Width (m):	4.97	4.400	5.800		Pool Depth (m)	0.70	0.5	0.9	6
Med 🗸	В	Bankfull Depth (m):	0.83	0.6	1	3	Turb	idity.:	Turbid		Low
High [Temp (C): 7	pH: 6.8		(Conductivit	y: 40		- 1135	oderate	<u> </u>	Clear
	(45 <u>(45)</u>		MOF	RPHC	LOGY		علا عبد تعتب		35		11
Bed Material: Domina Subdomina		D95 (cm): 110 D (cm): 60			Bars: Non	Side S	∠ Diagonal	Mid-	channel		pan 🗌
Channel Pattern: Sinu Coupling: Parti Confinement: Occa Morphology: CP	ally Coupled asionally Confine	Islands: No	ne		RBANCE CATORS C2 C3	O1 B1	B2 B3 S1 S2	D1 S3	D2 D S4	S5	
To Misse			70.7	COV	ER		1 To 1		1 n 1	13 34	1 × 10
Total Cover: Abundant		Type:	SWD	LW	О В	U	DP (OV	IV		
LWD: Few	-	Amount:	Т	Т	D	N	S	N	N		
LWD Dist: Clumped		Location: P/S/O:	/	~			V			FS	Z:
Left Bank: Shape	: V - shape Text : Mixed C/D	ture: Fines Gra Stag	avel 🗸 e: Matur	Cobble Cobble e forest e forest	✓ Boulde	er Rock	Manmade Manmade g: None] Algae [Cro		sure 20% scular
			3000	FIS	H	建筑市工	TOP 12		- L''	6	
Site Number Capture Method		Length fished (m)	Tota Tim	100	Voltage	Species	Total Fish	Minim Length			imum th (mm)
591 EF	1	200	390 s	sec	1	RB	4	100)	1	20

Morice North Planning Area

Reach#

ILP Map #

ILP#

Site

1.0

093L.035

3259

	YE	'S	e E				PR	OJE	СТ			11.15		Ziline A	100 mg (100)	Œ
Proje Stream Nan Project Watersh	ne (gaz.): BUL	KLEY R							00	F	roject C	ode:		5270	
	1 4 120	S. 7 (V)	th.		18. 77. 0		WAT	ERS	HED	66.5	1230	(A)		916	不 有能力	
Gazetted Name:										Lo	cal Name	e:				
Watershed Code: ILP Map#:				000-0000 ILP#: 32			000-000- ap #: 093			ID#: 50		Read	ch #:	1.0	Site #: 5	591
Field UTM (Z.E.N): GIS UTM (Z.E.N):				٨	Method:	GPU			Re	Site Le ef. Name	100		Method: M		Access: H	
Dat	e: 200	2/09/14		Time: 14	:00		Agency:	7		rew:	JH/JA		Fish Cr	d?: 🗸	Incomple	ete:
	31 J			5-16	oth, W	Vale 1	CH	ANN	EL	Ray, -		07-3.5		WUE B	-1-10	
Louis unam 7 h	Mtd	width	width	_	width	width	width	width	width	width	width	Avg			ent % Mtd	Avg
Channel Width (m): Wetted Width (m):	T	7.60 4.80	9.00 5.00	8.60 4.40	8.00 4.60	8.80 5.20	8.20 5.80					8.37 4.97	Method		13.0 C	9.00
Pool Depth (m):	T	0.60	0.90	0.80	0.80	0.60	0.50					0.70	Iwethod	0.0	7.0 0	1
Wb Depth:	1.0	.9	.6	7 Ave	g: 0.83		Method:	т	S.	age: I	ПМ	HI	No Vis.	Ch.:	Intermittent: _	=
COVER	1.0		-	tal: A	g. 0.00		victiou.		0.	age. L		V		O	THOS.	
Type:	SWE	1 11	ND.	В	U	I DF		ov T	IV	1 CR	OWN CL	OSURE				
Amount:	T		T	D	N	S		N	N	1		-20%				
Loc: P/S/O:	7									INS	TREAM	VEG:	NVA	TMT	V	
RIP: STG:				В							RIP				RA	
地 :"是,"对"加"	5 15	100		4 .99	- HER	100	W	ATE	R	Tr.	0	S. 725	Aug.	10/10		
EMS:						27.0					eq #:					
Temp: pH:							od: T4				ond.: 40				Method: S	:3
Flood Signs:		debris					od: GE			3	Turb.: T	□ м		C	Method: G	E
		- 107	2010	17.17.15 S.	115.75		ORP	HOL	OGY	1,639.00	7000	* - 3 -	10.3%	6 mes	X3005	
B. 101.1.1			31.4	Manager 1	37.			11.0.2	V V I	01	B1	B2 I	B3 D1	D2 D	03	
Bed Material:	110.0	Dominar D (cm	nt: B n): 60.00)	Subdom						ПП	ПП		TIL		
		D (cit	17. 00.00		Morpi	i. Or		ISTURE INDICA	TORS	-04		00	24 05	04 0		
Pattern: Islands:									., 0,10	C1	C2	C3 (C4 C5	S1 S	32 S3 S4	4 S5
Coupling:																
Confinement:															20117	
FSZ:								В	ars:	N	SIDI	-V	DIAG	MID	SPAN	BR
land V	- SAL		Winds	清楚		HA	BITA	TQI	JALI	TY	14 / - 1		r el e	1200		
Name								-	C	ommen	ts					
OverWinter Habita	at			ith deep p												
Rearing Habitat				sociated				d by ac	roo sub-	tente -		ad floats	natura	-		
Spawning Habita	-	Low -	associa	ted with	pools, co	ver, flow		OTO		urates, a	access a	no nashy		(a		
Ohot- I				17.5	No.	1			61,14		184 15	0		in if		
Photo R: 59 F: 18		oc Lg STD	+		Dir U	I WI) / debri	s iam wi	th plunge	e pool at		Commer	its			
R: 59 F: 19		STD	-		D			_	of fish ca			_				

Morice North Planning Area

ILP Map #

ILP#

Site

1.0 093L.035

3259

Section	Comments
CHANNEL	No barriers observed in Recci flight. Fish access possible into next reaach based on observations. Solid red in Reach 2 as well
CHANNEL	Low density ~2 fish / 50 m.
CHANNEL	Flashy high energy system. Gradient may increase upstream of site.
CHANNEL	RB captured 100-120 mm.

FDIS Fish Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

1.0

093L.035

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	Proje W		: 460-	000000-00				0-000	-000-0	00-00		Loca 5	al:	ILP	#: 3	3259 F	Reach #: 1	4
	Pr	oject ID	5270)								Lake/Str	eam:	S		Lake Fro	m Date:	
	Fish F	Permit #	14	5269	Da	ate: 2002	2/09/14		To:	2002	2/09/14	Age	ency:	C172	Cre	ew: JH/JA	Resar	nple:
De la	100				100		1	SI	TE	/ M	ETH	O D					San Line	
Site#	N	ID Map	NIE)# (JTM:Zone	/East/No	rth/Mtho	1	MTD/N	101	Temp	Cond	Tur	4000			mment	
591	09	3L.035	505	91			G	PU	EF	1	7	40	(;				
			18		100		A		EAI	R S	ETT	NGS				in the state of	(100 年)// /	H ¹
Site#	M	TD/NO	H/P	Date	n Tir	ne In	Date O	ut	Time C	Out					Com	ment		
591	E	F. 1	1	2002/09	/14 1	4:00 2	2002/09/	/14	14:30	0								
- 6				No.	C	. ELE	CTR	OF	ISH	ER	SPE	CIFI	C A	TION	S			object (
Site#	2.0	MTD/N	10	H/P	End	cl S	Sec	Le	ength		Width	Volt	age	Frequ	ency	Pulse	Make	Mode
591	E	F	1	1	0		390	2	0.00		8.0			5			SMITH	12B
1	N.	130	1	3 . "	nu s	77	1 12	FI	SH	SU	MMA	RY	17.5	10 75		(3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	April 100	1000
Site#		MTD/N	10	H/P	Species	Stag	ge	Age	1	Fotal #	# Lgt	h (Min/Ma	ax)	FishAct			Comment	
591	E	F	1	1	RB	J	- 3	3+		4	10	00 1	20	R				
	1	-" -1	30		(44)		IND	11	DUA	AL.	FISH	DA:	ΓA	10年,元四			***	
Site#	МТ	D/NO	H/P	Species	Length	Weight	Sex	Mat		Ag r/Smp	je ol#/Age	Vch#		enetic /Smpl#	Roll#	Frame#	Comn	nent
591	EF	1	1	RB	100		U	U		T	T							
591	EF	1	1	RB	120	11.	U	U										
591	EF	1	1	RB	100		U	U			7		6					
591	EF	1	111	RB	100	5 1 1 1	U	U				1		100	100			



Site #591, LWD / debris jam with plunge pool at base. Roll #59, Frame #18, Date: 2002/09/14



Site #591, Downstream photo of fish capture pool - RB. Roll #59, Frame #19, Date: 2002/09/14

Morice North Planning Area

Reach # ILP Map #

1.0 093L.035

ILP# 3275

STREAM REFERENCING **Gazetted Name:** Local Name: 3275 ILP Map #: 093L.035 ILP#: REACH Biased Reach #: 1.0 UTM(Zone/East/North): 9.620654.6023005 Sample Type: BGC Zone: ESSF Coupling: Partially Couple Magnitude: 31 Length (km): .38 Confinement: Frequently Confin Order: 3 Open water: Absent Gradient (%): 11.6 US Elev (m): 1095 Islands: NONE Riparian Vegetation: Mixed C/D Bars: None ✓ Side ☐ Diagonal ☐ Mid-channel ☐ Span ☐ Braid ☐ Landuse: Not Specified SITE Field UTM 9.670436.6022845 Agency: C172 Crew: JH/JA Site #: 592 Agency Name: Triton Environmental Consultants (Terrace) GIS UTM 9.620492.6022922 Site Length (m): 120 CHANNEL Min Max # Avg Min Max # Avg No Vis.Ch.: Intermittent: 6.400 Gradient %: 5.67 5 6 3 Tribs.: Channel Width (m): 5.23 8 Dewatered: Pool Depth (m): 0.40 0.300 0.600 6 Wetted Width (m) 2.49 1.8 Low Stage: Bankfull Depth (m): 3 0.97 0.9 1.1 Low Turbidity .: Turbid Med V Moderate Clear V High Temp (C): 8 pH: 6.9 Conductivity: 110 MORPHOLOGY Side V Diagonal Mid-channel Span D95 (cm): 80.00 Bars: Non Bed Material: Dominant: Boulders Braid Subdominant: Cobble D (cm): 30.00 Channel Pattern: Sinuous DISTURBANCE Islands: None **INDICATORS** Coupling: Partially Coupled C4 C5 S1 S2 **S3 S4 S5** C1 Confinement: Frequently Confined Morphology: CP Cascade Pool COVER Type: LWD В DP OV IV Total Cover: Abundant N S D T T T Amount LWD: Few Location: P/S/O: FSZ: LWD Dist: Clumped Shape: V - shape Texture: Fines ☐ Gravel ✓ Cobble Boulder Rock Crown Closure Right Bank: Texture: Fines ☐ Gravel ✔ Cobble Boulder Rock Manmade 1-20% Shape: V - shape Left Bank: Stage: Mature forest Rip.Veg: Mixed C/D Right Bank: Instream Veg: None V Algae Moss Vascular Stage: Mature forest Rip.Veg: Left Bank: FISH Total Minimum Maximum Capture Number of Length fished Total Voltage Species Site Number Fish Length (mm) Length (mm) Method **Events** (m) Time 120 EF 100 540 sec RB 4 100 592 1

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

1.0

093L.035

3275

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- CF-98	1 1	m Tables	× = -9	E 1873		1785	WAT	ERS	HED		700		100	SINIA D				
Gazetted Name	:									Loc	cal Nam	e:						
Watershed Code: ILP Map#	: 093L.0	035	11	LP#: 32	75	NID M	000-000- ap #: 09:			ID#: 50		Rea	ch #:		1.0		Site #: 59	92
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				- NP (m)	y	-1	СН	ANN	EL	Ž. 3.		- No. 1	1		, in	3-3		
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Channel Width (m):	Т	5.00	5.80	6.20	5.00	4.80	4.60	6.40	4.00	4.00	4.00	5.23	4 -	Method I:		5.0	C	5.67
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Wb Depth:	.9	1.1	.9	1	: 0.97	,	Method:	T	St	age: L	□ м	V H		Dv	v: 🔲	Tri	ibs.:]
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Туре:	_		WD	В	U	DF		OV	IV	-		OSURE						
Loc: P/S/O:	_		S	D	T	T		T	N	1		1-20%		АП		v =		
RIP STG						S	, al. W	ATE	R	A	and the same	: M : MF	*333		830	The same		
EMS:										R	eq #:							
Temp:							od: T4			C	ond.: 11	0				Meth	od: S3	
pH:		مامامام					od: P2			- 1	urb.: T	ПМ		ПС	~	Meth	od: GE	Ē.
Flood Signs:	Rafted	debris					od: GE											
MR HALL		4-		EL		- N	ORF	HOL	OGY			Fred -		- 7				
Bed Material:		Dominar	nt: B		Subdom	: C				01	B1	B2	B3	D1 D)2 D	3		
D95:	80.0	D (cm	n): 30.00		Morph	: CP		DISTUR				Ш	Ш	Ш		Ш		
Pattern:								INDICA	TORS	C1	C2	C3	C4	C5 S	51 S	2 S3	S4	S5
Islands:																		
Coupling:																		
Confinement: FSZ:								В	ars:	N	SID	E	DIAG		MID	SPAN		BR
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Name		1					0.40		(Commen	ts							
OverWinter Habita			ntial in po															
Rearing Habitat			associat															
Spawning Habita	it	Low -	associat	ed with g	gravels, I	imited b				flashy na	ature.		-	- n	000			
	31			3/	The way		P	ото	ે	41			11375	for the contract of the contra	100		3	
Photo		oc Lg)ir	-						Comme	nts					
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Morice North Planning Area

ILP Map# Reach #

ILP#

Site

1.0

093L.035

3275

	COMMENTS
Section	Comments
CHANNEL	No barrier observed in Recci - potential fish access to upstream reach based on over-flight observations.
CHANNEL	RB captured ~120 mm, ~2 / 50 m.

FDIS Fish Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

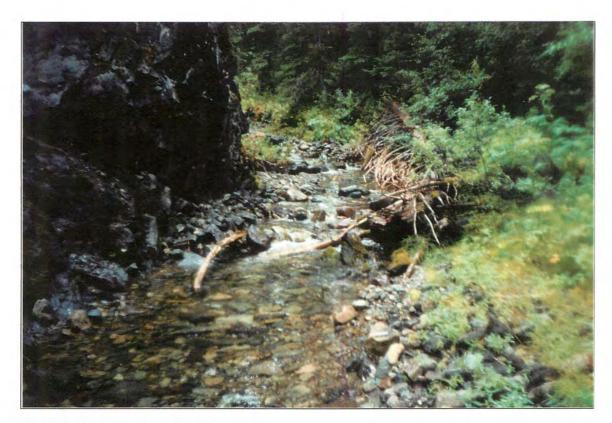
Watershed Code:

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

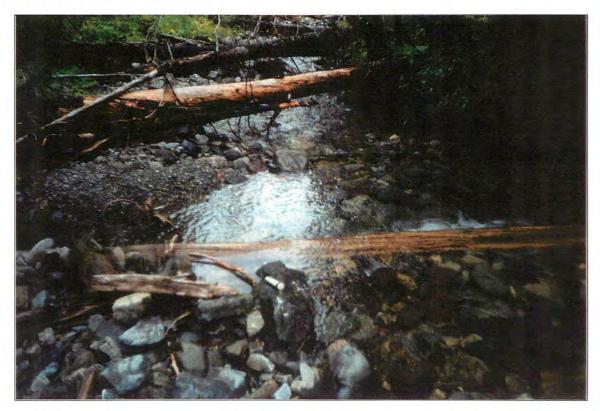
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093L.035

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	Projec		460-	000000-00				0-000-		000-00		Loca	ıl:	ILP	#: 3	275	Reach #:	r Z
	Pro	ject ID:	5270	1							L	ake/Str	eam:	S		Lake Fro	om Date:	
	Fish P	ermit#:	14	5269	Da	ate: 200	2/09/14		To: 20	02/09/	14	Age	ncy:	C172	Cre	w: JH/JA	Resar	mple:
6.7	E IN THE		110		描述		10.75	SI	TE /	MET	НО	D	137	الم		A 18		
Site#	NI	D Map	NIC)#	JTM:Zone	/East/No	rth/Mth	d I	MTD/NO	Tem	пр	Cond	Tur	bid		C	omment	
592	093	3L.035	505	92			1	SPU E	F 1	8		110	C					
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Site#	M	TD/NO	H/P	Date	In Tir	me In	Date C	ut 7	ime Out	T					Comr	ment		
592	EF	1	1	2002/09	9/14 1	4:45 2	2002/09	/14	15:10									
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Site#		MTD/N	10	H/P	End	ol s	Sec	Ler	ngth	Wid	th	Volt	age	Frequ	ency	Pulse	Make	Mode
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133		1	-	1860		(1)		FIS	SHS	UMN	IAR	Y			3284 33	1 30	THE THE	and the second
Site#	1	MTD/N	10	H/P	Species	Sta	ge	Age	Tota	al#	Lgth	(Min/Ma	ax)	FishAct			Comment	
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- 13		, "		THE RES	THE CAN		INE	IVI	DUAL	- F1	SH	DA	TA	N = 11	100	-		A 11 8 4
Site#	MTI	D/NO	H/P	Species	Length	Weight	Sex	Mat		Age mpl#/A	ge	Vch#		enetic /Smpl#	Roll #	Frame#	Com	ment
592	EF	1	1	RB	100		U	U	7			-			1			
592	EF	1	1	RB	120		U	U										
592	EF	1	1	RB	100		U	U										
592	EF	1	1	RB	110		U	U							1 4			



Site #592, Upstream photo of confined section. Roll #59, Frame #20, Date: 2002/09/14



Site #592, Downstream photo of functioning LWD and D95. Roll #59, Frame #21, Date: 2002/09/14

FDIS Reach Card

Morice North Planning Area

Reach # ILP Map # ILP # 3.0 093L.026 3678

		PROJEC	T	
Stream Name (gaz.):	RFFHI within the Morice Fore BULKLEY RIVER 460-000000-00000-00000-000			Project Code: 5270
		WATERSH	ED	San Waller Street Street Water Street
Reach Watershed Code: ILP Map #: 093L.026 Air Photos LINE: BCC98341_ #: 0	000-000000-00000-00000-0000 ILP #: 3678 Gaz.: Local:	00-0000-000-000-000-000- Reach #: 3.0 Names	000-000	NID Map #: 093L.035 NID #: 1100 UTM(Zone/East/North/Method) 9.620339.6022788 GIS Sample Type: B Wetland:
		SURVEY I	1FO	
Date: 2002/08/27		Agency: C172		Crew: SG/SH
		ATTRIBUT	ES	The state of the s
Length (km): 6.68 DS Elev.: 940 US Elev: 1056	Gradient: 1.74 Order: 3 Magnitude: 192 BGC Zone: SBS	Setting: Open water: Confinement: Coupling:	VF A OC PC	DISTURBANCE O1 B1 B2 B3 D1 D2 D3 INDICATORS
Valley Flat: B Active Floodplain Visible: Channel Pattern: IM	C/D: D : Est. Width:	Ва	311-22	Islands:

	MAPS	
Map Type	Map#	Year
TRIM	093L.035	
TRIM	093M.026	

FDIS Fish Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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3.0

093L.026

Wa Fis Site#	WS Codalerbody Project sh Permit NID Ma 093L.03 MTD/N EF	ID: 5270 #: 145 IP NID 35 5059	6269 # U	0000-0000	00-0000- ate: 200	0000-00 02/09/14 orth/Mth	1 \$1	-000-0 ILP M To:	000-000 ap #: 09 2002/0	93L.026	Lake/Str	eam:	-		Lake Fro	m Date:	
Site# 593 Site# 593 Site#	NID Ma 093L.03 MTD/N EF	p NID 35 5059	# U		11	orth/Mth	SI			09/14	Age	ency:	C170		0.000	72.0	inle:
593 Site# 593	093L.03	0 H/P	3	UTM:Zone	/East/No		446.1	TE	ON SHEET SHEET		-		0172	Cre	ew: JH/JA	Resan	ipie.
593 Site# 593	093L.03	0 H/P	3	UTM:Zone	/East/No		. 1		/ ME	ETH	O D	110	100	T-III		733	
Site# 593 Site#	MTD/N	O H/P	Tillian.				nd	MTD/	NO T	emp	Cond	Turt	oid		Co	mment	
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593 Site#	EF 1		Date				4. G	EΑ	RSE	ETTI	NGS				TANK THE PARTY OF		
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Site#	MT	D/NO	H/P	Species			Age		Total #		h (Min/M	2v)]	FishAc			Comment	
593	EF	1	1	RB	A	ge	3+	+	10	11		30	R	-		Comment	
C 2 13 h	17 175	Was Ship		30,5		INI		DU			DA				THE HE	Arrive in	1
ite# 1	MTD/NC	H/P	Species	Length	Weight	the second	Mat	T	Age	Control of the lateral	Vch#	200	enetic	Roll #	Frame#	Comn	nent
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	EF 1	-	RB	130		U	U										
_	EF 1		RB	120		U	U		9	1000			7.71				
	F 1		RB	120		U	U		4	1	1000				1		
	F 1		RB	110		U	U	-		1							
7 7 7 7	EF 1		RB RB	110	-	U	U	-		1					-		
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Morice North Planning Area

Reach # ILP Map #

3.0 093L.035

ILP# 3315

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Gazetted Name	e .					L	ocal Name:					
Watershed Cod	le: 000-000	000-00000-000	00-0000-0000-00	0-000-000)-000-0	000-000	ILP N	Map #: 093L.0	35	ILP	#:	3315
	1:20	J. 19		R	EA	CH	William	* * * * * * * * * * * * * * * * * * *	3240	57%		
Reach #: 3.0 Length (km): .1 Gradient (%): 1 US Elev (m): 1 Bars: None	1.7 178	Confin	JTM(Zone/East/Noupling: Decoupled ement: Occasiona slands: NONE Mid-channel		Mag Rip	gnitude: Order: 2 parian Veg	2 etation: Mixed Landuse: Not	C/D	Sample Ty BGC Zo Open water	ne: E		d
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17.5	1 2 4 4 5			SIT	E	168 - X			ST.	¥	
Site #: 59 Site Length (m		Field UTM GIS UTI	I м 9.618772.60257	12			y: C172 cy Name: Triton	-17117	7.00	Date: 2 nts (Ter	14.14.14.4	9/14
	1- 5-	m part		CH	IAN	NEL	(1) (1) (1) (1) (1)	100		210		- 7° (il)
No Vis.Ch.:	Intermitt	ent:		Avg	Min	Max	#		Avg	Min	Max	#
Dewatered:	Tri	bs.: C	hannel Width (m):	1.02	0.800	1.4	6	Gradient %		1	1	2
tage: Low			Wetted Width (m):		0.800	1.4		ool Depth (m)	0.15	.100	0.200	6
Med 🗸		В	ankfull Depth (m):	0.23	0.2	0.3	3	Turt	oidity.: T	urbid		Low
High _	Te	emp (C): 11	pH: 7.4		(Conductivit	y: 40		Mod	erate] (Clear
1 17 -1		SPERMINE TO	5000 12 12	MOR	PHO	LOGY	Kara III a	N E WAR		134VII 41 -	1/570	
E-2 2 11.372 (3.47)	Dominant:		D95 (cm): 10 D (cm): 2.			Bars: Non	✓ Side	Diagonal	Mid-ch	annel		pan _ raid _
	ng: Decoup	led	Islands: No	ne I	INDIC	RBANCE	O1 B1	B2 B3	D1 D2			
Morpholog	nt: Unconfi gy: RP	ned Riffle Pool			C1	C2 C3	3 C4 C5	\$1 S2	S3	S4 :	S5	
			3.70	C	OV	ER		J. 15	1		U ₁₁ -	
Total Cover: Ab	undant		Type:	SWD	LWI) В	U	DP	OV I	V		
LWD: No	ne	2	Amount:	N	N	N	S	N	D	N		
LWD Dist: No		e	Location: P/S/O:								FSZ	z: 🔲
	Shape: Ur Shape: Ur Rip.Veg: Sh Rip.Veg:	ndercut Text				Boulde	er Rock	Manmade Manmade None None	Algae 1		vn Clos	0%
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Site Number	Capture Method	Number of Events	Length fished (m)	Total Time		Voltage	Species	Total Fish	Minimum Length (n	A. V. C		imum h (mm
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Morice North Planning Area

Reach#

ILP Map #

ILP#

Site

3.0 093L.035 3315

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STREET, STREET	- Y	"THE REAL PROPERTY.	-000	140	515	Yes de la	WAT	ERSI	HED	100	100	de all all	F 1 98	1 15	10.7	楊楊所能	V. 17	THE T
Gazetted Name Watershed Code ILP Map# Field UTM (Z.E.N) GIS UTM (Z.E.N)	e: 000-00 f: 093L.0 h: h: 9.6187	35 72.6025	712	.P#: 33 .N	315 Method:	00-000-0 NID M	000-000- ap #: 09	000-000 3L.035	NI Re	ID#: 50 Site Lo	g: 140 e:			od: MAF	_	Access:		
Da	ite: 200	2/09/14		ime: 16	:30	- 1	Agency:			rew:	JH/JA		FIS	sh Crd?:	~	inco	mplete:	
A Section	- 10.	11-14	184 15 F	- 1818	101	100	СН	ANN	EL	45/11				1000	1,13,51		-15	
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg	_		Gadie	ent % N		Avg
Channel Width (m):		0.80	0.90	0.80	1.20	1.40	1.00		1			1.02	-	ethod I:	1.0	1.0	_	1.00
Wetted Width (m):	_	0.80	0.90	0.80	1.20	1.40	1.00		100			1.02	Me	ethod II:	27 11		С	
Pool Depth (m):	T	0.10	0.20	0.10	0.20	0.20	0.10					0.15	l No	Vis.Ch.	. 🗆	Intermitte	nt.	
Wb Depth:		.2	14	al: A	g: 0.23		Method:				M		3	Dw		Trib		
Туре	_		VD	В	U	DF	_	ov	IV	1	OWN CL							
Amount			V	N	S	N	-	D	N	1		-20%						
Loc: P/S/O					>					INS	TREAM	VEG:	N	A	M	V V		
STG	P: S B: SHR											: SHR						
			10				W	ATE	R	16-15		-11				W_		
EMS	:					e2.0					eq #:					1000		
Temp							od: T4			С	ond.: 40					Method	d: S3	
	: 7.4						od: P2			7	urb.: T	M	TL	C	~	Method	d: GE	
Flood Signs	: None					Meth	od: GE											
n/4 - 24 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1. 6	ridine		1,000		ORF	HOL	OGY		T	1 4	=21/2	19	W		gen)	
Bed Material D95 Pattern Islands Coupling Confinement FSZ	: 10.0 : IR :: N :: DC :: UN	Dominar D (cm	nt: F i): 2.00		Subdon Morpi	7	I	DISTURE INDICA B		01 C1	B1 C2 SID	C3		D1 D C5 S			\$4	S5
	2 Pag	1	12016	11/14/12	1/3/7/3	HA	BITA	TOI	JALI	TY	30,000	90 S	-3/3-1 -	100		-	3 2.33	-
Name	-1177-	7 25		TO 3005	0 12			10: 20:	23 311	commen	te	1	reifero.			1150.0	200	
OverWinter Habi	tat	Poten	tial in up	stream	lakes					Johnneh	10						-	-
Rearing Habita		_	associat			nallow po	ools.				_	_		_	_		_	
Spawning Habita			limited b							_			-					
	The State	1333	1			-		OTO	S			Se a pros	300		nti -		7	1
Photo	E.	oc Lg	200	- I ene	Dir		31		فلصدق		18, 212	Comme	ents	3.5	150			1
R: 59 F: 22	_	STD	-		U	Uns	stream n	hoto of s	mall cha	nnel at l	nottom o			_			_	_
R: 59 F: 23		STD			D				of small o						-			
R: 59 F: 24		STD			U				vetland a	_	ar randi	19.00						

Morice North Planning Area

Reach# ILP

ILP Map #

ILP#

Site

3.0

093L.035

3315

	COMMENTS
Section	Comments
CHANNEL	Lakes immediately upstream could potentially be fish bearing. No barriers observed in Recci.

FDIS Fish Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

3.0

093L.035

7	WENT			1 124	Rug A			WA	TERI	3 O D	Y		1				
Gaz	zetted	Name:									Loca	al:					
P	roject	Code:	460-0	00000-0	0000-0000	000-00	0-000-000-0	00-000	-000-000	-0							
	WS	Code:	000-0	00000-0	0000-0000	00-000	0-0000-000-0	00-000	-000-000	-000							
W	aterbo	dy ID:						ILP N	Map #: 0	93L.03	5		ILP#:	3315	Read	h#: 3	-
	Proj	ect ID:	5270								Lake/Str	ream:	S	Lak	e From D	ate:	
F	ish Pe	rmit #:	14	5269	D	ate: 2	002/09/14	To	: 2002/	09/14	Age	ency:	C172	Crew: Ji	H/JA	Resan	nple:
100		1 100	74	2.71				ITE	/ M	ETH	O D	NA.	The best of the	Inicial Control			THE STATE OF
Site#	NID	Мар	NID	#	UTM:Zone	/East/	North/Mthd	MTC	O/NO	Temp	Cond	Turt	bid		Comm	ent	
595	093	L.035	5059	95			GPU	EF	1	11	40	С					
- 17	200				(EM (1))	10-1	Α.	GEA	RS	ETT	NGS						1 TO 1
Site#	MTI	O/NO	H/P	Date	In Ti	ne In	Date Out	Time	Out				C	omment			
595	EF	1	1	2002/0	9/14 1	6:30	2002/09/14	17:	:10	. 7.							
					C	. EI	LECTRO	FIS	HER	SPE	CIFI	CA	TIONS	31/12	35.00		
Site#	(led)	MTD/N	0	H/P	En		Sec	Length	1	Vidth	Vol	tage	Frequency	Puls	se	Make	Mode
595	EF		1	1	0	= 1	300	140.0		1.0	8	00	1-1-	5		SMITH ROOT	12B
	10,0		-50	- 11		16	F	ISH	SUA	MA	RY	900	4 38 2 2 3 3			No. 7	2,000
Site#	100	MTD/N	0	H/P	Species	5 8	Stage Ag	ge T	Total #	Lgt	h (Min/M	ax)	FishAct		Cor	mment	
595	EF	40	1	118	NFC				0								



Site #595, Upstream photo of small channel at bottom of reach 3. Roll #59, Frame #22, Date: 2002/09/14



Site #595, Downstream photo of small channel at bottom of reach 3. Roll #59, Frame #23, Date: 2002/09/14



Site #595, Upstream photo of wetland area. Roll #59, Frame #24, Date: 2002/09/14

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0 093L.026

e de la		STR	EAM	REF	ERE	NCIN	IG	1012 ×				
Gazetted Name:						Local N	Vame:				****	
Watershed Code: 00	00-000000-00000	-00000-0000-0000-00	0-000-0	00-000-0	000-000		ILP	Map #: 093L.02	26	IL	P#:	3725
Carry Life	a Feet Miles	1 (21) (1)	L M	REA	CH	Carrier	17 - 5	计。	7		119	J. 19
Reach #: 1.0 Length (km): 1.63 Gradient (%): 4.7 US Elev (m): 831 Bars: None Sid		UTM(Zone/East/N Coupling: Decoupled Infinement: Occasional Islands: NONE Mid-channel	1	Ma f Rip	6015399 gnitude Order parian V	: 11 : 3 egetatio		o	225	Type: Zone: iter: Abs		ed
Maria de la compania del compania del compania de la compania del compania de la compania de la compania del compania de la compania de la compania de la compania de la compania del compa	100		orgal Francis	SIT	E :	" which it			131	1 = 17 ×	3010	
Site #: 596 Site Length (m): 120		JTM 9.630877.60155 UTM 9.630630.60154	330			ncy: C1 ency Nar		Crew: JH/ n Environmenta			2002/09 errace)	9/17
N- 1003 2000	la-ponice	等。[6] 100年美	C	HAN	NEL			41,00	· M	NO THE	200	
No Vis,Ch.: Inf Dewatered: Stage: Low	termittent: 🗸 Tribs.: 🗌	Channel Width (m): Wetted Width (m):	Avg 1.65 0.00	Min 1.5	1.8 0	# 6 0	F	Gradient %: Pool Depth (m):	1.00 0.00	Min 1 0	Max 1 0	2 0
Med High	Temp (C):	Bankfull Depth (m): pH:	0.20	0.2	0.2 Conducti	3 vity:	1	Turbi		Turbid oderate		Low Clear
建成为	47		MOF	RPHC	LOG	Y		7187(0))	150		10	1300
	ecoupled nconfined	D95 (cm): 10 D (cm): 10 ng Islands: No	.00	DISTU	Bars: N RBANCI CATORS C2	E 01	Side B1	B2 B3 S1 S2	- 0.00	D2 C		pan 🗍
				COV	ER							E SA
Left Bank: Sha	policable ape: V - shape ape: V - shape deg: Shrubs	Fexture: Fines Gra Stag	avel 🗸 e: Shrut	Cobble Cobble o/herb st.	Bou Bou age	lder	N Rock Rock		D D		FS2 own Clos	sure

Morice North Planning Area

ILP Map # Reach #

ILP#

Site

1.0 093L.026 3725 596 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name: Local Name: ILP Map#: 093L.026 ILP #: 3725 NID #: 50596 NID Map #: 093L.026 Reach #: 1.0 Site #: 596 Field UTM (Z.E.N): 9.630877.6015583 Method: GPU Site Lg: 120 Method: MAP Access: H GIS UTM (Z.E.N): 9.630630.6015429 Ref. Name: Date: 2002/09/17 Time: 09:30 Agency: C172 Crew: JH/TT Fish Crd?: Incomplete: CHANNEL Mtd width Gadient % Mtd Avg Avg Channel Width (m) T 1.60 1.70 1.60 1.50 1.80 1.70 1.65 Method I: С 1.00 1.0 Wetted Width (m): T 0.00 Method II: C Pool Depth (m): T 0.00 No Vis.Ch.: Intermittent: Wb Depth: .2 .2 Tribs.: Avg: 0.20 Method: T Stage: L M H H Dw: COVER Total: A SWD LWD OV **CROWN CLOSURE** Type: В U DP IV Amount N N D N Loc: P/S/O: INSTREAM VEG: N A A M V LWD: N DIST: NA Texture: F G C B R A Texture: F G G C B R A RIP: S RIP: S STG: SHR STG: SHR WATER EMS: Req #: Temp: Method: T4 Cond .: Method: S3 pH: Method: P2 Turb.: T M L C Method: GE Flood Signs: None Method: GE MORPHOLOGY 01 **B1 B2 B**3 D1 D2 D3 Bed Material: Dominant: C Subdom: G D95: 10.0 D (cm): 10.00 Morph: RP DISTURBANCE INDICATORS Pattern: IR C1 C2 C3 C4 C5 **S5** S1 S2 **S3 S4** Islands: N Coupling: DC Confinement: UN Bars: DIAG MID BR FSZ: HABITAT QUALITY Name Comments OverWinter Habitat None Rearing Habitat Low - none observed, shallow, limited complexity. Spawning Habitat Low - none observed at this time - potential spring spawning - low probability PHOTOS Photo Foc Lg Dir Comments 60 01 STD U Upstream photo of habitat within site.

Downstream photo of habitat within site.

STD

D

R: 60 F 02

Morice North Planning Area

Reach # ILP Map # ILP # Site 1.0 093L.026 3725 596

	COMMENTS
Section	Comments
CHANNEL	Small bedrock knob observed in upstream reach, no barrier / drop present.
CHANNEL	Riffle section for >300 m may limit access.
CHANNEL	Fish could potentially access this reach when flows are present.
CHANNEL	Stream becomes braided upstream of Houston Tommy Creek. No barriers observed in Recci.



Site #596, Upstream photo of habitat within site. Roll #60, Frame #01, Date: 2002/09/17



Site #596, Downstream photo of habitat within site. Roll #60, Frame #02, Date: 2002/09/17

Morice North Planning Area

Reach # ILP Map # ILP #

1.0 093L.026

47.00 Sec. 19-1		STR	EAM	REF	ERE	NCIN	G	The second	1123		The state of	· '' 'a
Gazetted Name:						Local Na	ame:					
Watershed Code:	000-000000-00000	-00000-0000-0000-00	0-000-0	00-000-0	000-000		ILP N	Map #: 093L.02	6	ILI	P #:	3693
		77		REA	C.H	s faire	1 -			0.00		
Reach #: 1.0 Length (km): .85 Gradient (%): 6.8 US Elev (m): 829 Bars: None 🗹 S	Con	UTM(Zone/East/N Coupling: Partially Confinement: Frequentl Islands: NONE Mid-channel	ouple	Mag Rip	gnitude: Order:	2 2 egetation		0		Type: Zone: ter: Abs		d
المراد المراد	997	and Williams	1	SIT	E				Y -11	13 100	96) JAN	r¥E.
Site #: 597 Site Length (m): 1	7,477	JTM 9.631947.60166 UTM 9.631905.60166			-	ncy: C17		Crew: JH/ Environmental		20,000,000	2002/09 errace)	9/17
1 to 11 to 1	The second second		C	HAN	NEL		2-51300	4.50° L		211 3	7 5	
No Vis.Ch.:	Intermittent: 🗸	Channel Width (m):	Avg 1.63	Min 1.4	Max 1.9	# 6		Gradient %:	Avg 7.00	Min 6	Max 8	# 2
Stage: Low 🗸	E	Wetted Width (m): Bankfull Depth (m):		0 0.3	0 0.7	3	Р	ool Depth (m): Turbi		0 Turbid		Low
High	Temp (C):	pH:		RPHO	Conducti	-			М	oderate	1	Clear
Channel Pattern: Coupling:	minant: Cobble Sinuous Partially Coupled Occasionally Confi	D95 (cm): 10 D (cm): 10 Islands: No	0.00	DISTU	Bars: No RBANCI CATORS	on 🗸	B1 4 C5	B2 B3 S1 S2		D2 D	В	pan [
			- W-	COV	ER		WI SE	William III		产者的		118-110-
Total Cover: Abund LWD: Few LWD Dist: Clump		Type: Amount: Location: P/S/O:	SWD T	S		B	U N	DP O		IV N	FSZ	z: 🔲
Left Bank: Sh Right Bank: Rip		Texture: Fines Gr	avel 🗸 avel 🗸 je: Matur je: Matur			der [Rock Rock Rock Rock Rock	Manmade Manmade None A	ilgae [own Clos	0%

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

1.0

093L.026

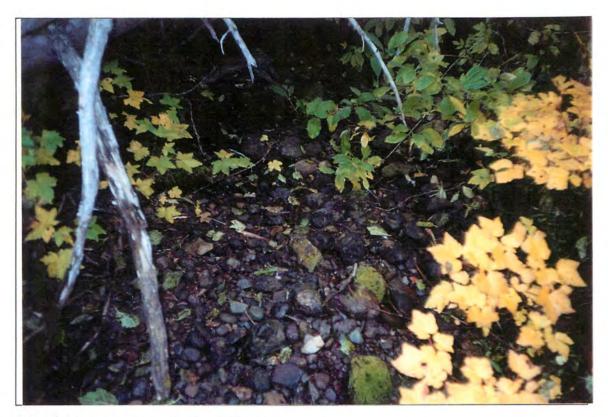
3693

Project Name: RFFHI within the Morice Forest District (Irribs to Morice R.) Stream Name (gasz.): BULKLEY RIVER Project Code: 5270
Sazetted Name: Local Name: Watershed Code: 000-000000-00000-0000-0000-000-000-000
Watershed Code: 000-000000-00000-0000-0000-000-000-000
ILP Map#: 093L-026
Date: 2002/09/17 Time: 10:00 Agency: C172 Crew: JH/TT Fish Crd?: Incomplete:
CHANNEL
Mtd
Channel Width (m): T 1.80 1.60 1.50 1.90 1.40 1.60 1.63 1.63 Method I: 8.0 6.0 C 7.00 Method II:
Wetted Width (m): MS
Pool Depth (m): MS Wb Depth: .5
No Vis.Ch.:
COVER Total: A Type: SWD LWD B U DP OV IV Amount: T S N N N N D N 1 1-20% Loc: P/S/O: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Type: SWD LWD B U DP OV IV Amount: T S N N N N D N Loc: P/S/O:
Amount: T S N N N N D N 1 1-20% Loc: P/S/O:
Loc: P/S/O:
LWD: F DIST: C LB SHP: V RB SHP: V Texture: F G C C B R A R A RIP: M RIP: M STG: MF STG: MF Req #: Temp: Method: T4 Cond.: Method: S3 PH: Method: P2 Turb.: T M L C Method: GE MOR PHOLOGY Bed Material: Dominant: G D95: 10.0 D (cm): 10.00 Morph: RP DISTURBANCE Texture: F G C C B R A R A R RIP: M Texture: F G C C B R A R A R RIP: M Texture: F G C C B R A R A R RIP: M Texture: F G C C B R A R A R RIP: M Texture: F G C C B R A R A R RIP: M Texture: F G C C B R A R A R RIP: M Texture: F G C C B R R A R RIP: M STG: MF STG: MF Texture: F G G C B R A R A R RIP: M STG: MF STG: MF STG: MF DISTURBANCE DISTURBANCE DISTURBANCE Texture: F G G C B R R A R RIP: M RIP: M RIP: M STG: MF
LB SHP: V Texture: F G C C B R A TEXTURE: F G C C B R TEXTURE: F G C C B TEXTURE: F G C C C B TEXTURE: F G C C C B R TEXTURE: F G C C C B TEXTURE: F G C C C B TEXTURE: F G C C C B
Texture: F G C B R A R A RIP: M RIP: M STG: MF WATER EMS: Req #: Cond.: Method: S3 PH: Method: P2 Turb.: T M L C Method: GE MOR PHOLOGY Bed Material: Dominant: G Subdom: C D95: 10.0 D (cm): 10.00 Morph: RP DISTURBANCE
Texture: F G C C B R A R A RIP: M RIP: M STG: MF WATER EMS: Req #: Cond.: Method: S3 PH: Method: P2 Turb.: T M L C Method: GE Flood Signs: None Method: GE MOR PHOLOGY Bed Material: Dominant: G Subdom: C D95: 10.0 D (cm): 10.00 Morph: RP DISTURBANCE
RIP: M STG: MF STG:
STG: MF
EMS: Temp:
EMS: Temp:
Temp:
pH: Method: P2 Turb.: T M L C Method: GE Flood Signs: None MORPHOLOGY MORPHOLOGY Bed Material: Dominant: G D95: 10.0 D (cm): 10.00 Morph: RP Subdom: C DISTURBANCE O1 B1 B2 B3 D1 D2 D3
Morphod: GE
MORPHOLOGY
Bed Material: Dominant: G Subdom: C O1 B1 B2 B3 D1 D2 D3 D95: 10.0 D (cm): 10.00 Morph: RP DISTURBANCE DISTU
D95: 10.0 D (cm): 10.00 Morph: RP DISTURBANCE
DISTURBANCE
Pattern: SI INDICATORS C1 C2 C3 C4 C5 S1 S2 S3 S4 S5
Islands: N
Coupling: PC Confinement: OC
FSZ: Bars: N SIDE DIAG MID SPAN BR
HABITAT QUALITY
Name Comments
Name Comments OverWinter Habitat None observed in site.
Name Comments OverWinter Habitat None observed in site. Rearing Habitat Low - potential during increased flows.
Name Comments OverWinter Habitat None observed in site. Rearing Habitat Low - potential during increased flows. Spawning Habitat Low - associated with gravels only.
Name Comments OverWinter Habitat None observed in site. Rearing Habitat Low - potential during increased flows. Spawning Habitat Low - associated with gravels only. PHOTOS
Name Comments OverWinter Habitat None observed in site. Rearing Habitat Low - potential during increased flows. Spawning Habitat Low - associated with gravels only.

Morice North Planning Area

Reach # ILP Map # ILP # Site 1.0 093L.026 3693 597

	COMMENTS
Section	Comments
CHANNEL	Solid red / fish bearing.
CHANNEL	Stream flows directly into downstream mainstem, no barriers, access possible.



Site #597, Upstream photo of habitat within site. Roll #60, Frame #03, Date: 2002/09/17



Site #597, Downstream photo of habitat within site. Roll #60, Frame #04, Date: 2002/09/17

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0

093L.035

(3)			STR	EAM	REF	EREN	CING					
Gazetted Nar	ne:					L	ocal Name:					
Watershed C	ode: 000-00	000-00000-000	000-0000-0000-00	00-000-000	0-000-0	00-000	ILP	Map #: 093L.0	35	ILF	P#:	3138
300	1 35 70	- SK 18	77	R	REAC	H			-30	St. 3	N. Ale	
Reach #: 2.	0	ı	JTM(Zone/East/N	orth): 9.6	29356.6	6022368	ler-		Sample 1	Type:	Biase	ed
Length (km):	.23		upling: Decouple	Section 1		nitude:	5			Zone: E	ESSF	
Gradient (%):			ement: Occasion	ally Conf		Order: 3		5 M	Open wat	er: Abse	ent	
US Elev (m):	1164	l:	slands: NONE		Rip	arian Veg	etation: Mixed	C/D				
Bars: None	✓ Side	Diagonal	Mid-channel	Span	Br	aid 🗌	Landuse: Not	Specified				
1 - 1 - 1	Hr. II			To the	SIT	E in	2.46 M.				(V- :	
Site #:		7,100	M 9.629257.60223 M 9.629278.60223	172			y: C172 y Name: Tritor	- (-)-01	H/TT al Consult	4.000	2002/09 errace)	9/17
1	To Min the	10		CH	HANI	NEL	1000	V and		The state	IL THE	
No Vis.Ch.:	Intermit	tent:		Avg	Min	Max	#]		Avg	Min	Max	#
Dewatered:	Tr	ibs.:	hannel Width (m):	1.20	1	1.4	6	Gradient %	: 6.00	5	7	2
Stage: Low			Wetted Width (m):	1.25	0.9	1.9	6 F	Pool Depth (m)	0.18	0.100	0.300	6
Med	7	В	ankfull Depth (m):	0.57	0.5	0.6	3	Turt	oidity.:	Turbid		Low
High	Т	emp (C): 7	pH: 7.4		C	onductivity	y: 60		Мо	derate] (Clear
63 5°22				MOR	PHO	LOGY			Vr.	, Tall	13	
Bed Material:	Dominant:		D95 (cm): 50 D (cm): 10		I	Bars: Non	✓ Side	Diagonal	Mid-c	channel		pan 🔲
Channel Pat	ttern: Irregula	r, Wandering	Islands: No	ne I	DISTUR	RBANCE	O1 B1	B2 B3	D1 D	02 D	3	
Coup	ling: Decoup	oled			INDIC	ATORS						
		onally Confine		_	C1	C2 C3	C4 C5	S1 S2	S3	S4	S5	
Morpho	logy: RP	Riffle Pool										
		2.70 (Ch)	100	C	OVE	E R	differ bill	1,5,1%	(Marie	30	(A 1)	
Total Cover: A	Abundant		Type:	SWD	LWD	В	U	DP	OV	IV		
LWD: N	None		Amount:	T	S	N	T	N	D	N		
LWD Dist: N	Not Applicabl	e	Location: P/S/O:	V	>						FSZ	Z: 🗌
Right Bank:	Shape: U	ndercut Text	ture: Fines V Gr	avel C	Cobble	Boulde	Rock	Manmade		Cro	wn Clos	sure
Left Bank:	Shape: U		ture: Fines 🗸 Gr	avel	Cobble	Boulde	er Rock	Manmade	j		1-2	
Right Bank:	Rip.Veg: M	lixed C/D	Stag	e: Mature	forest							
Left Bank:	Rip.Veg:		Stag	e: Mature	forest		Instream Ve	g: None	Algae	Moss	V Vas	cular _
NAME OF THE	6.30		n - n - m		FISI	H .		Miles	15 6	100	3717	
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time		Voltage	Species	Total Fish	Minimo Length (40061		mum h (mm)
598	EF	1	150	205 se	c	800	NFC	0				

Morice North Planning Area

Reach #

ILP Map#

ILP#

Site

2.0 093L.035 3138 598

Project N Stream Name (g Project Watershed C	az.): BULK	LEY RIVER			t (tribs to		R.)	10	Project	Code:	52	70
	المراد والمراجع	4 - Sh	2		WAT	ERS	HED	(E)(S)(S)	COLOR WEST		9/6	12 7 1
Gazetted Name: Watershed Code: 000 ILP Map#: 093 Field UTM (Z.E.N): 9.6: GIS UTM (Z.E.N): 9.6:	L.035 29257.60223	ILP #	0000-0000-00 #: 3138 Method: 0	NID M	000-000- ap #: 09:		NI	Loc ID #: 50 Site Lo	g: 150	each #: Method: MA	2.0 P A	Site #: 598 ccess: H
Date: 2	2002/09/17	Time	e: 11:10		Agency:	- 17		rew:	JH/TT	Fish Crd?	?: •	Incomplete:
		(Pri		100	СН	ANN	EL					3 1 1 1 30 - 3
M	td width	width w	idth width	width	width	width	width	width	width Avg		Gadient 9	% Mtd Avg
Channel Width (m): 1 Wetted Width (m): 1 Pool Depth (m): 1	1.40	1.10 1	.00 1.10 .90 0.90 .10 0.20	0.90 0.30	1.40 1.30 0.20				1.20 1.25 0.18	Method II		0 C 6.00
Wb Depth: .6	5 .5	.6	Avg: 0.57	٨	Method:	Т	St	age: L	□ w > H	No Vis.Ch	n.:	rmittent:
COVER		Total: /										
	WD LW			DF		ov	IV		OWN CLOSUF	RE		
Amount:	TS	N	T	N		D	N	1		NDAD		_
RIP: M STG: MF	Sec. 1.				· · · · · · · · · · · · · · · · · · ·	ATE	R + +		RIP: M STG: MF	G C		
EMS:						=			eq #:			
Temp: 7				Metho	od: T4				ond.: 60		,	Method: S3
pH: 7.4					od: P2					4-1-6		
Flood Signs: Non	е			Metho	od: GE			,	urb.: T N	и 🗆 г 🗆 с	V	Method: GE
	16	S. 1. 3	Till n	N	ORP	HOL	OGY	S. P.	对于		The state	
Bed Material: D95: 50.0 Pattern: IR Islands: N	Dominant D (cm)		Subdom Morph			ISTURE INDICA		01 C1	B1 B2 C2 C3		D2 D3 S1 S2	S3 S4 S5
Coupling: DC Confinement: OC FSZ:						В	ars:	N	SIDE	DIAG	MID S	PAN BR
The second second	1000	12 7006	The state of the s	HAI	BITA	TQL	JALIT	Y	5.并是 " "。可	MINE TO THE		
Name		Sleet Sour	Stoke Fills	S part V			C	omment	s			
OverWinter Habitat	None o	bserved in	site.									
Rearing Habitat			w pools, good									
Spawning Habitat	Low - s	hallow poo	ls, small grave	el patch								
	1 8 V II	3000	243	3.4	PH	ото	S	1198.14	5 N. X			
Photo	Foc Lg		Dir	1					Comm	ents		
R: 60 F: 05	STD		U				abitat wit					
R: 60 F: 06	STD		D	Dow	nstream	photo o	of habitat	within si	ite.			

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

2.0

093L.035

3138

475- 194	COMMENTS
Section	Comments
CHANNEL	NFC

FDIS Fish Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

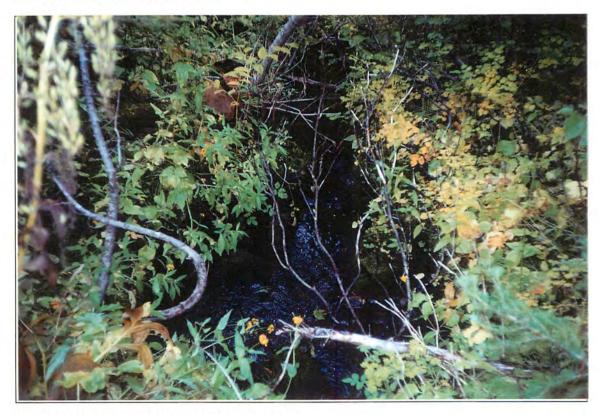
2.0

093L.035

1705 E	11	TE					WAT	[ER	3 O D	Y						
Gaz	zetted Name									Loca	al:					
F	Project Code	: 460-0	0-00000	0000-00000	-0000-0000	-000-00	0-000-0	000-000	0-0							
	WS Code	000-0	0-00000	0000-00000	-0000-0000	-000-00	0-000-0	000-000	000-0							
Waterbody ID:				ILP Map #: 093L.035 ILP #:					ILP#:	: 3138 Reach #: 2 -						
	Project ID:	5270								Lake/St	ream:	S	Lake	From Date:		
Fish Permit #:		14	145269 Date: 20			09/17 To: 2002/09/1			09/17	Agency: C172			Crew: JH/	TT R	esample:	
		Self		A FILE	and the second	S	ITE	/ M	ETH	O D	1		ligation and	p. 90	= //	
Site#	NID Map	NID	#	UTM:Zone/East/North/Mthd			MTD/	NO T	Temp (Turt	bid	Comment			
598	093L.035	505	98	G		GPU	EF	1	7	60	С					
				minate in	TO SERVICE	A.	GEA	R S	ETT	INGS						
Site#	MTD/NO	H/P	Date	Date In Time In Date Out Time O				Out	Comment							
598	EF 1	1	2002/0	9/17 11:	10 2002	2/09/17	11:4	10								
			301	C.	ELEC	TRO	FISH	HER	SPI	CIFI	CA	TIONS		SWASS		
Site#	MTD/N	10	H/P	Encl	Sec	- 1	ength	Width		Vol	tage	Frequency	Pulse	Make	Mod	
598	EF	1	1	0	205	-	150.0		1.0	8	00		5	SMITH	1,445	
	F. F. France				1	F	ISH	SUI	A M A	RY	3					
Site#	MTD/N	10	H/P Species Stage Age Total# L		Lg	th (Min/Max) FishAct			Comment							
598	EF	1	1	NFC				0								



Site #598, Upstream photo of habitat within site. Roll #60, Frame #05, Date: 2002/09/17



Site #598, Downstream photo of habitat within site. Roll #60, Frame #06, Date: 2002/09/17

Morice North Planning Area

Reach # ILP Map #

093L.035

ILP#

2.0

3146

STREAM REFERENCING **Gazetted Name:** Local Name: ILP Map #: 093L.035 ILP #: 3146 REACH Reach #: 2.0 UTM(Zone/East/North): 9.629464.6023941 Sample Type: Biased Magnitude: Length (km): .84 Coupling: Decoupled **BGC Zone:** AT 2 Gradient (%): 2.6 Confinement: Occasionally Conf Order: 2 Open water: Absent US Elev (m): 1330 Islands: NONE Riparian Vegetation: Shrubs Bars: None ✓ Side ☐ Diagonal ☐ Mid-channel ☐ Span ☐ Braid ☐ Landuse: Not Specified SITE Site #: 599 Field UTM 9.629500.6024032 Agency: C172 Crew: JH/TT Date: 2002/09/17 Site Length (m): 250 Agency Name: Triton Environmental Consultants (Terrace) GIS UTM 9.629469.6023909 CHANNEL No Vis.Ch.: Intermittent: Max Avg Min # Avg Min Max # Dewatered: Tribs.: Channel Width (m): 1.67 2.8 6 Gradient %: 1.00 2 Wetted Width (m): 1.67 1 2.8 6 Pool Depth (m): 0.38 0.300 0.5 6 Stage: Low Bankfull Depth (m): 0.30 0.3 0.3 3 Med V Low Turbidity .: Turbid High Temp (C): 7 pH: 7.6 Conductivity: 40 Moderate Clear V MORPHOLOGY Bed Material: Dominant: Fines D95 (cm): 5.00 Bars: Non 🗸 Side Diagonal Span Subdominant: Not Applicable D (cm): 2.00 Braid Channel Pattern: Irregular, Wandering Islands: None DISTURBANCE Coupling: Decoupled **INDICATORS** Confinement: Unconfined C4 C5 SI **S2 S**3 **S4 S5** Morphology: RP Riffle Pool COVER Total Cover: Abundant Type: SWD LWD В DP OV u IV Amount: Z N N N N D N LWD: None Location: P/S/O: LWD Dist: Not Applicable FSZ: Right Bank: Shape: Undercut Texture: Fines ✔ Gravel Cobble Boulder Rock Manmade Crown Closure Texture: Fines ✓ Gravel Cobble Boulder Rock Manmade Left Bank: Shape: Undercut 1-20% Right Bank: Rip.Veg: Shrubs Stage: Shrub/herb stage Left Bank: Rip.Veg: Stage: Shrub/herb stage Instream Veg: None Algae Moss Vascular FISH Site Number Number of Capture Length fished Total Voltage **Species** Total Minimum Maximum Method **Events** (m) Time Fish Length (mm) Length (mm) 599 EF 100 210 sec 800 **NFC** 0

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

			3 32			12-11	FR	UJE			*	1-1	ULE A	100		P	
	roject Nam Name (gaz ershed Cod	.): BULI	KLEY RI	VER						00	1	Project C	ode:			5270	
the state of the	11	1998 1998	- (q) - 34	(Library		-40	WAT	ERS	HED		of Mat	Name of	1200	- January Control		North The State of	10.000
Gazetted Na	ame:									Loc	al Nam	e:					
Watershed C	ode: 000-00	00000-00	000-000	00-0000	0-0000-0	00-000-0	000-000	000-000									
ILP M	ap#: 093L.0	035	11	P#: 31	146	NID M	ap #: 09	3L.035	N	ID#: 50	599	Rea	ch #:		2.0	Site #	: 599
Field UTM (Z.E	E.N): 9.6295	500.6024	032	N	Method:	GPU				Site Lg	: 250		Meth	od: MAI	•	Access: H	
GIS UTM (Z.E	E.N): 9.6294	169.6023	909						Re	ef. Name	e:						
	Date: 200	2/09/17	1	ime: 12	-30		Agency:	C172		rew:	IH/TT		Fi	sh Crd?		Income	olete:
	Butt. 200	200717		1110, 12		25cm 18	1			NOW.	71 17 11	alsexey		SII OIG:		incomp	nete.
	No. American	T. Out	1 10	A Viscenti	1			ANN	_				1				ni i
Channel Width	m): T	width 1.50	width 2.80	width	width	width 2.20	width 1.20	width	width	width	width	1.67	F-10	lethod I:	Gadie	ent % Mtd	
Wetted Width (1.50	2.80	1.30	1.00	2.20	1.20					1.67		ethod II:		1.0 C	
Pool Depth (0.50	0.30	0.50	0.40	0.30	0.30					0.38	1	outou II.			
	-				TILLE		10.00					200		Vis.Ch	.: 🔲	Intermittent:	-
Wb De	pth: .3	.3	.3	Avg	g: 0.30	1	Method:	Т	St	age: L	M	V H		Dv	v:	Tribs.:	
COV	ER		Tota	al: A													
T	ype: SWI	LV	VD	В	U	DF	7	OV	IV	CRO	OWN CL	OSURE					
Amo			1	N	N	N	14	D	N.	1		-20%					
Loc: P/S	6/0:						V			INS	TREAM	VEG:	N	A	M	VV	
Text	SHP: U ture: F v RIP: S STG: SHR	G 🗆	с	В	R 🗆 A						RIP	F 🗸	G	c	В	R A	
	NE WOV	- NO.	0.11/2	NE WA	+-19-2-1		W	ATE	R	2 01	80.00	1.1	- X 3 (K)	A - I MEN	91	Mark Control	
E	MS:									Re	eq #:						
Те	mp: 7					Metho	od; T4			Co	ond.: 40					Method:	S3
	pH: 7.6						od: P2			Т	urb.: T	□ м	m L	пс		Method:	GE
Flood Sig	ins: None					Metho	od: GE								V		
1 - 2 - 11	8000		TE S	774	2	N	ORP	HOL	OGY	2	125		-70	IF ALL	273	- N 6	
Bed Mate	rial:	Dominan	t F		Subdom	· NA				01	B1	B2	B3 [01 D	2 D	3	
D	95: 5.00		2.00		Morph		-	NOTI IDO	ANOF		П	FIL			TIT		
Patte	ern: IR				19.5			ISTURE INDICA		C1	C2	C3	C4 (05 S	1 S2	2 62 6	24 05
	nds: N													,5 S	7 7 7	2 S3 S	S4 S5
	ing: DC																
Confineme																	
F	SZ:							Ba	ars:	NV	SID		DIAG	1	MID	SPAN	BR
- 1	70.7%	1		24	\$ VII :	HAI	BITA	TQL	IALIT	Y		She y	-250	===	R.F.		
Name		1		200		15/CD (1)			Stoller Hill	omment	s		- 3/4				15000
OverWinter Ha	abitat	Potent	ially in so	ome of t	he larger	ponded	areas.						-				
Rearing Hab		Low -	associate	ed with p	pools.												
Spawning Ha	bitat	None o	bserved														
	1 4			-11-		15 m	PH	ото	S -	100	17	- 33/E	30.30	V	201		- 1 - 1
Photo		oc Lg	- 1	D								Comme	nts				
R: 60 F: 07		STD			U	_			etted are		-						
R: 60 F: 08	8	STD		- 1	D	Dow	nstream	photo o	f wetted	area wit	hin wetl	and.					

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

2.0

093L.035

3146

Section	Comments
CHANNEL	Heavy cover made electroshocking difficult due to willow.
CHANNEL	Potential overwintering in upstream lake / pond.
CHANNEL	Channelized wetland.
CHANNEL	NFC

Morice North Planning Area

Reach #

ILP Map#

ILP#

Watershed Code:

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

2.0

093L.035

			No.			W 12		WA	TER	BOD	Y		加斯	العسروب		
Gaz	zette	Name	e :								Loc	al:				
F							0-0000-000-00									
14				0-00000	0000-0000	0-000	0-0000-000-00						"D#	2440	Decel #	
٧,		oody IE oject IE): 5270					ILP	Map #: (J93L.03	Lake/St	ream:	ILP#:	3146 Lake F	Reach #: 2 rom Date:	2 -
F	ish F	ermit #	: 14	5269	Da	te: 2	002/09/17	To	: 2002	/09/17	Age	ency:	C172	Crew: JH/T	T Resar	nple:
	V j	112	化	A Car	We will	5018	S	ITE	/ M	ETH	O D			(A) - P 30 (A)		"""
Site#	NI	D Map	NID	#	UTM:Zone	East	North/Mthd	MTD	ONO	Temp	Cond	Turt	oid	C	Comment	
599	09	3L.036	505	99			GPU	EF	1	7	40	С	عندر الو			
	4						Α.	GEA	RS	ETT	INGS	1	and the state of		6 N 46 P	
Site#	M	TD/NO	H/P	Date	In Tim	e In	Date Out	Time	Out				Co	omment		
599	EF	1	1	2002/0	9/17 12	:30	2002/09/17	13:	10							
13	7		(E)	1	G.	EL	ECTRO	FIS	HER	SPE	CIFI	CA	TIONS		Total mode	. The
Site#		MTD/	NO	H/P	Encl		Sec I	ength	F.] (- U	Width	Vol	tage	Frequency	Pulse	Make	Mode
599	E	F]	-1	1	0		210	100.0		2.0	8	00	1	5	SMITH	12B
THE S	=		9/			4	€ F	ISH	SUI	AMN	RY.			S - 192	2400	
Site#		MTD/	NO	H/P	Species	S	stage Ag	е	Total #	Lg	h (Min/M	ax)	FishAct		Comment	
599	E	FT	1	1	NFC				0	7	-					

Morice North Planning Area

Reach # ILP Map # 093L.025

ILP#

2.0

			STRE	AMR	EFE	REN	CING		- MIE			*
Gazetted Na	me:					L	ocal Name:					
Watershed C	Code: 000-00	0000-00000-00	000-0000-0000-000	-000-000-	000-00	0-000	ILP	Map #: 093L.02	25	ILF	P#:	3599
5. 13/4 T	100			RI	EAC	H			100	, and	助手。	4 (a)
Reach #: 2	2.0		UTM(Zone/East/No	rth): 9.628	3237.60	024100			Sample	Type:	Rando	om
Length (km) Gradient (%) US Elev (m)): 7.3): 1227	Confin	oupling: Partially Conement: Frequently (slands: NONE			nitude: Order: 4 rian Veg				Zone: ter: Abse	AT ent	
Bars: None	✓ Side	Diagonal	Mid-channel	Span _	Bra		Landuse: Not	Specified				
			(A)	- 1	ITE			生活的微块			T	
Site #:	0.7	Field UTM GIS UT	И М 9.628426.602311	0		27.0	y: C172 cy Name: Tritor	Crew; JH. Environmenta			2002/09 епасе)	9/17
			The Fig. 5 Miles Was	CH	ANN	EL			100	A. 3		1158
No Vis.Ch.:	Intermit	tent:		Avg N	Min	Max	#		Avg	Min	Max	#
Dewatered:	☐ Tr		channel Width (m):	36 9 / S. III 5 1	_	5.300	6	Gradient %:	8.00	7	9	2
Stage: Low			Wetted Width (m):		400	4.2		Pool Depth (m):	0.48	0.300	0.9	6
Med	~	В	Bankfull Depth (m):	0.33	0.3	0.4	3	Turbi	dity.:	Turbid		Low
High		emp (C): 6	pH: 7.4		Co	nductivit	y: 60		Mo	oderate		Clear
				MORP	HOI	OGY		3/2 1		==0		
1223311031104	: Dominant: Subdominant:		D95 (cm): 75.0 D (cm): 30.0		В	ars: Non	Side V	Diagonal	Mid-	channel		pan 🔲
	attern: Sinuou		Islands: None		STUR	BANCE	O1 B1	B2 B3	D1 1	D2 D	3	
	ment: Freque			c	1 (22 C3	3 C4 C5	S1 S2	53	S4	S5	
Morpho	ology: CP	Cascade Pool										
Maria .		1, 47 12	2000年	C	OVE	R	元·		- WIN	- 189		
Total Cover:	Abundant		Type:	SWD	LWD	В	U	DP C	V	IV		
LWD:	Eow	1	Amount:	T	D	T	N	S	r	N		
LWD Dist:			Location: P/S/O:		1			V			FSZ	7: 🗆
Right Bank:	Shape: V	chana Tavi	ture: Fines Grav	el Co	bble	Boulde	er Rock	Manmade		Cer	own Clos	
Left Bank:	Shape: V		7000 10000 7	el Co		Boulde		Manmade		Cit	1-20	
Right Bank:	Rip.Veg: M			Mature fo		,						
Left Bank:	Rip.Veg:			Mature fo			Instream Veg	g: None 🗌 A	lgae 🗌	Moss	✓ Vas	cular [
Pakasa	3 3 43			· Assign F	ISH	10 H 10 10	MEAN!		1-30.61	a appression		
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time		oltage	Species	Total Fish	Minim Length	The second secon		mum h (mm)
600	FF	1	210	520 sec		800	DV	8	90	Auto a		20

Morice North Planning Area

Reach # ILP Map #

2.0

093L.025

ILP#

3599

Site

PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Project Code: 5270 Stream Name (gaz.): BULKLEY RIVER WATERSHED Local Name: Gazetted Name: Site #: 600 ILP#: 3599 NID Map #: 093L.035 NID#: 50600 Reach #: 2.0 ILP Map#: 093L.025 Field UTM (Z.E.N): .. Method: Site Lg: 210 Method: MAP Access: H GIS UTM (Z.E.N): 9.628426.6023110 Ref. Name: Date: 2002/09/17 Time: 13:50 Agency: C172 Crew: JH/TT Fish Crd?: V Incomplete: CHANNEL Mtd width width width width Gadient % Mtd Avg width width width width width width Avg Channel Width (m) 4.48 Method I: 9.0 C 8.00 5.10 3.80 4.20 5.30 4.60 3.90 Wetted Width (m) 4.20 3.60 Method II: C 2.40 3.80 4.10 4.00 3.10 Pool Depth (m): 0.50 0.90 0.40 0.50 0.30 0.30 0.48 No Vis.Ch.: Intermittent: Tribs.: Wb Depth: .4 .3 .3 Stage: L M W H Dw: Avg: 0.33 Method: T COVER Total: A SWD LWD В U DP OV IV CROWN CLOSURE Type: N S N 1-20% Amount Loc: P/S/O INSTREAM VEG: N A M V DIST: C LWD: F LB SHP: V Texture: F G C B R A Texture: F G G C B R A RIP: M RIP: M STG: MF STG: MF WATER EMS: Req#: Temp: 6 Method: T4 Cond.: 60 Method: S3 Method: P2 pH: 7.4 Turb.: T M L C Method: GE Flood Signs: Rafted Debris Method: GE MORPHOLOGY D3 01 B1 **B**2 D1 D2 **B**3 Bed Material: Dominant: C Subdom: G D (cm): 30.00 D95: 75.0 Morph: CP DISTURBANCE **INDICATORS S5** C1 C3 C5 S1 S2 **S3 S4** C2 C4 Pattern: SI Islands: N Coupling: PC Confinement: FC BR MID SPAN Bars: SIDE DIAG FSZ: HABITAT QUALITY Comments Name OverWinter Habitat Associated with Deep pools. Rearing Habitat Moderate - associated with cover, LWD, D95 and deep pools. Spawning Habitat Moderate - associated with gravels, flows, cover, resting and access. PHOTOS Comments Photo Foc Lg Dir U Upstream photo of habitat within site. 09 STD 60 F R: Downstream photo of habitat within site. R: 60 10 STD D F

Morice North Planning Area

ILP Map # Reach #

ILP#

Site

2.0

093L.025

3599

Section	Comments
CHANNEL DV capt	tured 90-120 mm.

Morice North Planning Area

Reach#

ILP Map #

ILP#

Watershed Code:

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

2.0

093L.025

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	Pro	WS Code erbody ID	e: 460- e: 000-	000000-00				00-000	-000-		-000	Loc	al:	ILP	#: ;	3599	Reach #: 2	2
		Project ID	: 5270)								Lake/St	ream:	S		Lake Fro	om Date:	
	Fish	Permit #	: 14	15269	D	ate: 200	2/09/17		То	2002/	09/17	Age	ency:	C172	Cr	ew: JH/TT	Resar	nple:
		X.		a whi	事に コ	(J. 7) ".		SI	TE	1 M	ETHO	O D		11 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -	e ve	地開始		- 70
Site#	T	NID Map	NIE	0#	UTM:Zon	e/East/No	rth/Mth	d T	MTD	NO I	emp	Cond	Turt	oid T		C	omment	- St - 15051
600	_	093L.035		500	1			GPU	EF]	1	6	60	С					
W 1.		Tay of the	# 15	12 - F T	1/2 = 4/3			. 0	EA	RS	ETTI	NGS		3.1	HI-	1770	· · · · · · · · · · · · · · · · · · ·	
Site#		MTD/NO	H/P	Date	In Ti	me In	Date C	out I	Time	Out I		S MANUAL STATES		5.00	Com		ACCEPTAGE CONTROL OF THE PARTY	
600	\top	EF 1	1	2002/09			2002/09	-	14:			_	_	_	Com	morn		
		Link			C	ELE	CTI	ROF	151	IER	SPE	CIFI	CA	TION	S			
Site#	T	MTD/I	NO	H/P	En	cl	Sec	Le	ength	T v	Vidth	Vol	tage	Frequ	uency	Pulse	Make	Mode
600		EF	1 .	1	0	(-11)	520	2	10.0		4.0	80	00	-		5	SMITH	12B
90.7	88			X	15 25	1155	3531	FI	SH	SUN	MA	RY			723	T XXX	ROOT	3.50
Site#	T	MTD/I	VO	T H/P	Specie	s Sta	ge T	Age	T	Total #	Lath	(Min/M	ax)	FishAc		_h =====ue	Comment	= j
600		EF	1	1	DV	J	-	3+		8	9		20	R	1		Commont	
3	78	V 1.		·		=N PI	INC	11	DU	AL F	ISH	DA	TA	553		Car Charles	5 7 7	
Site#	N	ITD/NO	H/P	Species	Length	Weight	Sex	Mat	_	Age tr/Smpl		Vch#		enetic Smpl#	Roll#	Frame#	Comn	nent
600	EF	111	1	DV	100	17.17	U	U		T	T							
600	EF	1	1	DV	90		U	U			1	- 3						
600	EF	1	1	DV	120		U	U		3	1						_	
600	EF	115	1	DV	100		U	U		1								
600	EF		1	DV	90		U	U		1								
600	EF		1	DV	120		U	U										
600	EF		1	DV	90		U	U					DE4	16.0				
600	EF	1	1	DV	90		U	U			1	-	100					



Site #600, Upstream photo of habitat within site. Roll #60, Frame #09, Date: 2002/09/17



Site #600, Downstream photo of habitat within site. Roll #60, Frame #10, Date: 2002/09/17

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0 093L.035 3146

		STR	EAM	REF	EREN	CING		31 - 31	MAKE	· 15
Gazetted Name:					L	ocal Name:				
Watershed Code: 000-0	00000-00000-00	000-0000-0000-00	00-000-0	00-000-	000-000	ILP	Map #: 093L.0	35	ILP#:	3146
	in analysis and	Hand Will		REA	CH		42-12-12			2
Reach #: 1.0 Length (km): .91 Gradient (%): 23.3 US Elev (m): 1308 Bars: None 🗸 Side	Confir	UTM(Zone/East/N oupling: Coupled nement: Frequent/ Islands: NONE Mid-channel		Ma Rij	gnitude: Order: 2	3 etation: Mixe Landuse: No	d C/D	Sample Type BGC Zone Open water: A	ESSF	ed
	202	in the state of th	di juli	SIT	E	KITSEN F	The state of the s	THE A	W. S	= 11
Site #: 601 Site Length (m): 200	Field UTI GIS UT	M FM 9.628786.60228	151			y: C172 cy Name: Trito	Crew: JH		e: 2002/09 (Terrace)	9/17
Bolis in the	(*	- シャイ	C	HAN	NEL	TOWN THE	10000000000000000000000000000000000000	(A) 4 (A)		V 20
	iittent: Tribs.: C	Channel Width (m): Wetted Width (m):		Min 2,400 0,800	3.3 1.4	6 6	Gradient %: Pool Depth (m):	Avg Min 17.50 16 0.35 0.30	20	# 4 6
Med _	Temp (C): 6	Bankfull Depth (m): pH: 7.3			1 Conductivity	. 12.0	Turb	idity.: Turb Modera		Low ☐ Clear ✔
Bed Material: Dominar Subdominar		D95 (cm): 90 D (cm): 40	.00	PHC	Bars: Non		Diagonal	Mid-chann		pan [
Channel Pattern: Sinuo Coupling: Coupl Confinement: Frequ Morphology: CP	ed	Islands: No	ne		RBANCE CATORS C2 C3	O1 B1 C4 C5	B2 B3 S1 S2	D1 D2 S3 S4	D3 S5	
	V	24-27-62		COV	ER	Garage Land			Sim white	
Total Cover: Abundant LWD: Few LWD Dist: Clumped Right Bank: Shape:	V - shape Tex		SWD T	LWI D	T	U N Rock		DV IV T N	FS:	
	V - shape Tex Mixed C/D	Stag	avel e: Mature e: Mature	e forest		Rock Rock	Manmade	Algae 🗌 Mos		0%
Site Number Capture Method	Number of Events	Length fished (m)	Tota Time		H Voltage	Species	Total Fish	Minimum Length (mm)		imum th (mm)
601 EF	1	200	350 s	ec	700	DV	2	100	1	00

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site 601

1.0

093L.035

3146

PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) 5270 Stream Name (gaz.): BULKLEY RIVER Project Code: WATERSHED Local Name: Gazetted Name: ILP Map#: 093L.035 ILP#: 3146 NID Map #: 093L.035 NID #: 50601 Reach #: 1.0 Site #: 601 Field UTM (Z.E.N): .. Method: Site Lg: 200 Method: MAP Access: H GIS UTM (Z.E.N): 9.628786.6022851 Ref. Name: V Incomplete: Date: 2002/09/17 Time: 15:00 Agency: C172 Crew: JH/TT Fish Crd?: CHANNEL Avg Mtd width Avg Gadient % Mtd Channel Width (m) T 2.40 3.10 2.80 2.70 3.30 3.10 2.90 Method I: 16.0 17.0 C 17.50 Wetted Width (m): T 0.90 0.80 0.90 1.30 1.40 1.20 1.08 Method II: 17.0 20.0 C Pool Depth (m): 0.40 0.30 0.40 0.40 0.30 0.30 0.35 No Vis.Ch.: Intermittent: Wb Depth: .6 1.0 .4 Avg: 0.67 Dw: Tribs.: Method: T Stage: L V M H COVER Total: A **CROWN CLOSURE** SWD LWD В DP OV IV Type D N S N 1-20% Amount Loc: P/S/O INSTREAM VEG: N A M V V LWD: F DIST: C LB SHP: V RB SHP: V Texture: F G C B R A Texture: F G C B B R A G RIP: M RIP: M STG: MF STG: MF WATER EMS: Req #: Temp: 6 Method: T4 Cond.: 50 Method: S3 pH: 7.3 Method: P2 Turb.: T M L C Method: GE Flood Signs: Rafted debris Method: GE MORPHOLOGY 01 **B1 B2 B3** D1 D2 D3 Dominant: B Subdom: C Bed Material: D95: 90.0 D (cm): 40.00 Morph: CP DISTURBANCE **INDICATORS** Pattern: SI C1 C2 C3 C4 C5 SI S2 **S3 S4 S5** Islands: N Coupling: CO Confinement: FC SPAN BR Bars: NV SIDE DIAG MID FSZ: HABITAT QUALITY Comments Name OverWinter Habitat Potential in deeper pools. Rearing Habitat Low - associated with plunge pools, D95 and LWD. Spawning Habitat Low - limited by gradient and coarse substrates. PHOTOS Photo Foc Lg Dir Comments STD U 60 F 11 Upstream photo of cascade / pool habitat. R: 60 F 12 STD D Downstream photo of typical habitat within stream.

Morice North Planning Area

Reach # ILP

ILP Map #

ILP#

Site

1.0

093L.035

3146

Section	Comments
SITE CARD	Additional gradient measurements are: 19, 20, 18.
CHANNEL	Debris jams likely limit upstream access.
CHANNEL	Site upstream of GPS point 628700 / 602280.
CHANNEL	Fish were captured in low gradient section at bottom of reach.
CHANNEL	Some 20% gradient shots but cascade / pool habitat and wide channel widths.
CHANNEL	Potential access ~200 m upstream.
CHANNEL	DV captured 20 m upstream of confluence.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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1.0

093L.035

100	7 100						K Da	V	VATER	BOD	Y				THE THE BU		
	Proj.	VS Code	: 460-					-000-	-000-000-0	00-000	Loca	al:					
		rbody ID roject ID						,	LP Map #:	093L.03	Lake/Str	eam:	ILP S	#: 3	B146 I Lake Fro		1 -
	Fish	Permit #	: 14	5269	Da	ate: 2002	2/09/17	ī	To: 200	2/09/17	Age	ency:	C172	Cre	ew: JH/TT	Res	ample:
110	10	1000	15		100	1000		SI	TE / A	METH	O D		713	70	777		
Site#	_	IID Map 93L.035	NIE 506		JTM:Zone	e/East/No		_	MTD/NO	Temp	Cond	Tur			Co	omment	a lext
601	10	93L.U35	500	01	STATE OF			PU G	EAR	6 SETT	50	C		The second section	- 150	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	4 14 17
Site#	IN	ATD/NO	H/P	Date	In Tir	me In	Date Ou	t i	Time Out	x) = (%) &	N90	41254		Com			
601	E	F 1	1	2002/09			2002/09/	_	16:00		Acor						
	1	3/4		10,000	C	ELE	CTR	0 F	ISHEF	SPE	CIFI	CA	TION	S			
Site#	- 1	MTD/N	10	H/P	End	cl S	Sec	Ler	ngth	Width	Volt	age	Frequ	ency	Pulse	Make	Model
601		EF	1	1	0		350	20	0.00	3.0	70	00		-1	5	SMITH ROOT	12B
	USI)		18 1	30.00	140			FIS	SH SU	MMA	RY		II	1		和 数 0 7	
Site#		MTD/N	10	H/P	Species	Stag	ge	Age	Total	# Lg	h (Min/M	ax)	FishAct			Comment	
601	10	EF	1	1	DV	J		+	2			00	R	J. E.			
74	100	Della		70	600 F	1811	IND	VI	DUAL	FISH	DA	TA		S Spells	THE FAIR		
Site#	M	TD/NO	H/P	Species	Length	Weight	Sex	Mat		ge pl#/Age	Vch#		enetic /Smpl#	Roll #	Frame#	Con	nment
601	EF	1.1	1	DV	100		U	U									
601	EF	1	1	DV	100		U	U									



Site #601, Upstream photo of cascade / pool habitat. Roll #60, Frame #11, Date: 2002/09/17



Site #601, Downstream photo of typical habitat within stream. Roll #60, Frame #12, Date: 2002/09/17

FDIS Reach Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

7.0

093L.056

and the state of t	The second section of a self-		
		PROJECT	
Stream Name (gaz.):	BULKLEY RIVER	orest District (tribs to Morice R.)	Project Code: 5270
		WATERSHED	
Reach Watershed Code: ILP Map #: 093L.056 Air Photos LINE: BCC98341_ #: 0	000-000000-00000-00000 ILP #: 2445 Gaz.: Local:	0000-0000-000-000-000-000-000 Reach #: 7.0 Names	NID Map #: 093L.055 NID #: 10 UTM(Zone/East/North/Method) 9.629051.6044471 G Sample Type: B Wetland:
	· · · · · · · · · · · · · · · · · · ·	SURVEY INFO	
Date: 2002/08/27		Agency: C172	Crew: SG/SH
		ATTRIBUTES	
Length (km): 2.59 DS Elev.: 1039 US Elev: 1109 Valley Flat: N Active Floodplain Visible: Channel Pattern: IM	Gradient: 2.7 Order: 3 Magnitude: 16 BGC Zone: SE C/D: Est. Width:	S Coupling: PC Bars:	DISTURBANCE O1 B1 B2 B3 D1 D2 INDICATORS
M-A	PS	av al	200000000000000000000000000000000000000
Man Type I Mar	n# I Voor		

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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	WT = 7			\$60°			76.LL		WA	TER	BOD	Y		ratia.		N #5		(年)
Gaz	zetted	Name	э:									Loc	al:					
F							000-0000-0											
14				000000	00000-	-00000-00	000-0000-0	00-00				-0		W D. #.	0445			
V		ody II oject II): 5270						ILPK	лар #:	093L.0	Lake/St	ream:	ILP#: S	2445 Lak	ke From		•
F	ish P	ermit #	: 14	5269		Date:	2002/09/1	9	То	: 2002	2/09/19	Ag	ency:	C172	Crew: Ji	H/SG	Resar	nple:
34			775	17				S	ITE	/ M	ETH	O.D	(See Ja	The state of	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			10 × 1
Site#	NI	D Map	NIC	#	UTM:	Zone/Eas	st/North/Mt	hd	MTD	/NO	Temp	Cond	Tur	bid		Com	ment	
602	093	3L.056	506	02	9 6	29851	6043593	GPU	EF	1	6	50	L					
E1.				Note to			described.	Α.	GEA	RS	ETT	INGS						37
Site#	M	D/NO	H/P	Dat	e In	Time Ir	Date	Out	Time	Out		and the second		C	comment			
602	EF	1	1	2002/	09/19	09:00	2002/0	9/19	09:	40				ayle a				
Miles.	- 5%					C. E	LECT	RO	FIS	HER	SP	CIFI	CA	TIONS		#4-11	April Mark	1 F - 10
Site#		MTD/	NO	H/F		Encl	Sec	TI	Length		Width	Vol	tage	Frequency	y Pul	se	Make	Model
602	E	F	1	1	T. I	0	761	1-	200.0		5.0	8	00		5		SMITH ROOT	12B
350		1000	r	12-34	List A	VIII CE		, F	ISH	SU	MMA	RY	5 16	Note Time	Lilly regis	407.0		
Site#		MTD/	NO	H/P	Spe	ecies	Stage	Ag	e	Total	# Lg	th (Min/M	ax)	FishAct			comment	
602	E	F	1	1	NE	FC				0								

Morice North Planning Area

Reach # ILP Map #

ILP#

14.0

093L.056 2445

The Addition of the St.	- TE 14	SIREAM	N E	EKEN	CING	2.20.0000	- 10th - #s			
Gazetted Name:				L	ocal Name:					
Watershed Code: 000-000000	-00000-00000-0000	-0000-000-000-0	00-000-	000-000	ILF	Map #: 093L.05	6	ILP	#:	2445
The state of the s	100 T 4 T 1		REA	СН	////*	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			in S	
Reach #: 14.0	UTM(Zone	e/East/North): 9	.628305	.6042382	100		Sample 1	Туре:	Biase	ed
Length (km): .59	Coupling: P	artially Couple	Ma	gnitude:	1		BGC 2	Zone: E	SSF	
Gradient (%): 7.8	Confinement: F	THE RESERVE OF THE PERSON OF T		Order: 1	1	0	pen wat	er: Abse	ent	
US Elev (m): 1284	Islands: N	IONE	Rij	parian Veg	etation: Mixe	ed C/D				
Bars: None 🗸 Side 🗌 Di	agonal Mid-cha	annel 🗌 Span	В	raid	Landuse: No	ot Specified				
	《 之 三 汉	点类建立。	SIT	E				ed of the con-		
Site #: 603	Field UTM 9.62803	32.6042433		Agenc	y: C172	Crew: JH/	П	Date:	2002/09	9/19
Site Length (m): 200	GIS UTM 9.62819	93.6042442		Agend	cy Name: Trito	on Environmental	l Consult	ants (Te	rrace)	
	ALC: KEEN		HAN	NEL	CHAIR S				(00)	
No Vis.Ch.: Intermittent:		Avg	Min	Max	#		Avg	Min	Max	# -
Dewatered: Tribs.:	Channel W	fidth (m): 1.40	1.200	1.600	6	Gradient %:	9.75	9	11	4
Stage: Low	Wetted W		1.200	1.600	6	Pool Depth (m):	0.37	0.300	0.5	6
Med	Bankfull De	epth (m): 0.57	0.5	0.6	3	Turbi	dity.:	Turbid		Low
High 🗸 Temp	(C): 6 p	H: 7.6	(Conductivit	y: 20			derate		Clear
	V 3 40	MOF	RPHC	LOGY	Artist Comment	1 2 4 2 1 2 1 1	FIRST CO.	191	HIT .	Jan/Mg
Bed Material: Dominant: Cob	ble D95	(cm): 60.00		Bars: Non	✓ Side	Diagonal	Mid-c	channel	S	pan 🗌
Subdominant: Gra		(cm): 30.00				- 10/10				raid 🗌
Channel Pattern: Sinuous	Isla	ands: None	DISTU	RBANCE	O1 B1	B2 B3	D1 [02 D	3	
Coupling: Partially Co	upled		INDIC	CATORS				JIE		
Confinement: Frequently	Confined		C1	C2 C3	3 C4 C	5 S1 S2	S3	S4	S5	
Morphology: CP Ca:	scade Pool									
	S	V.	COV	ER		7		115-1	53	
Total Cover: Abundant		Type: SWD	LWI	О В	U	DP O	V	IV		
LWD: Few	A	mount: T	S	T	N	D 1	r	N		
LWD Dist: Clumped	Location:	P/S/0: 🗸	V	~		V			FS	Z: 🗌
Right Bank: Shape: V - sh	ape Texture: Fines	Gravel 🗸	Cobble	Boulde	er Rock	Manmade		Cro	wn Clo	SUITE
Left Bank: Shape: V - sh	de s		200			Manmade		0.0	21-4	
Right Bank: Rip.Veg: Mixed	Partie and the second second	Stage: Matur		-					-	14.4
Left Bank: Rip.Veg:		Stage: Matur			Instream V	eg: None 🗌 A	lgae 🗌	Moss (/ Vas	cular 🗌
	E - A		FIS	H	F-177 - 178 - 1818		15 20	31-3A	8 100	
Site Number Capture N	umber of Length	fished Tot		Voltage	Species	Total	Minim	um	Maxi	imum
Method	Events (n	n) Tim	ne			Fish	Length	(mm)	Lengt	th (mm)
603 EF	1 20	00 580 5	sec	800	NFC	0				

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

14.0

093L.056

2445

		16.5° 1	111/100				PR	OJE	CT					A VI		7
Proje Stream Nar Project Watersh	me (gaz	.): BUL		VER						00	-	Project C	ode:		5270	
S SECTION STATES	ALE B	15-1-	1,2			ribe year	WAT	ERS	HED		NO NO					11
Gazetted Name	:									Lo	cal Nam	e:				
Watershed Code	: 000-00	00000-00	000-000	00-0000	-0000-0	0-000-0	000-000-	000-000)							
ILP Map#	: 093L.0)56		LP#: 24	145	NID M	ap #: 09:	3L.055	N	ID#: 50	0603	Read	ch #:	14.0	Site #:	603
Field UTM (Z.E.N)				٨	lethod:	GPU				Site L	2. 1. 2. 2.		Method: I	MAP	Access: H	
GIS UTM (Z.E.N)	: 9.6281	93.6042	442						Re	ef. Name	91					
Da	te: 200	2/09/19		Time: 10:	:00		Agency:	C172	C	rew:	JH/TT		Fish C	rd?: 🗸	Incompl	lete:
是一张 TE TE TE			1 (10)		The first	100	CH	ANN	EL	×117,24	S 1 31 51		1	No.		
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg		Gadi	ent % Mtd	Avg
Channel Width (m):	Т	1.60	1.50	1.30	1.30	1.50	1.20					1.40	Metho	od I: 10.0	9.0 C	
Wetted Width (m):	_	1.60	1.50	1.30	1.30	1.50	1.20					1.40	Metho	d II: 9.0	11.0 C	
Pool Depth (m):	Т	0.30	0.40	0.30	0.30	0.50	0.40					0.37	No Vis	.Ch.:	Intermittent:	
Wb Depth:	.5	.6	.6	Avg	: 0.57	1	Method:	T	St	age: L	ПМ	TH.		Dw:	Tribs.:	
COVER			Total	al: A												
Туре	SWE) LV	ND	В	U	DF		ov T	IV	CR	OWN CL	OSURE				
Amount	_		S	T	N	D	2116	T	N	2		1-40%				
Loc: P/S/O										INS	TREAM	VEG:	N A	MV	V 🗀	
LWD LB SHP Texture RIP	e:V e:F□	G 🗸	c \Box	B	R 🗆 A						RIP	: F □ :M	G ☑ C	В] R 🗌 A 🗆]
SIG	: MF										STG	: MF				
		27	nye -				W	ATE	R	·						×
EMS:										R	eq #:					
Temp:						1-0-0-0	od: T4			C	ond.: 20				Method: 5	33
Flood Signs:	7.6 None						od: P2 od: GE			1	urb.: T	M	LV	C	Method: (3E
1 todd olgrid.	110110															
u						N	ORF	HOL	OGY			Windson #	19.10年近	100		*
Bed Material:		Dominar	24.02		Subdom					01	B1	B2 E	33 D1	D2 D	3	
D95:	60.0	D (cm): 30.00		Morph	: CP		ISTURE			Ш	Ш	HIL		11	
Pattern:								INDICA	TORS	C1	C2	C3 (C4 C5	S1 S	2 S3 S	64 S5
Islands: Coupling:																
Confinement:																
FSZ:								В	ars:	NV	SID	E	DIAG	MID	SPAN	BR
XXXX = 8.00 M/S0.00		W 1967			1. da -	НА	RITA	TOI	JALI	TV	· 1	31.			A Plant	J = 113 3
Name	PAGE N	7	A MARKET		il illinii	一种			457	ommen	n le	1 1				
OverWinter Habita	at	Poten	tial in de	ep pools						Ommen	15					
Rearing Habitat			iated wit			95 and o	cover.									
Spawning Habita	at	Assoc	iated wit	h gravel:	s, cover	and poo										
	机温度	factor with		The Committee of the Co		包部	P	ото	S	0 <u>/</u> 88	1111	1 70 16				
Photo		oc Lg)ir							Commer	nts			
R: 60 F: 13 R: 60 F: 14		STD			U D	_			function of cascad			with funct	tioning LWI)		
		1000	-		-	DOV		· piloto t	ousual	- i pool	· · · · · · · · ·		TALL STAFF			

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site 603

14.0

093L.056

	COMMENTS
Section	Comments
CHANNEL	NFC

Morice North Planning Area

Reach #

ILP Map #

1104

Watershed Code:

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14.0

093L.056

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		d Name	1.5.37	000000-0	00000-00	0000-000	0-000-000-0	00-000	0-000-0	00-0	Loc	F.A					
				000000-0	00000-00	0000-000	0-000-000-0										
v		body ID oject ID						ILP	Map #:	093L.05	66 Lake/Str	ream:	ILP#:		Reach #: 14 om Date:		
F	ish F	Permit #	: 14	5269		Date: 2	002/09/19	To	o: 200	2/09/19	Age	ency: C	172	Crew: JH/TT	Resar	mple:	
1 /		(s. 0)48		5.34	THE REAL PROPERTY.		S	ITE	1 1	METH	O D	753	10 miles	11		911	
Site#	N	ID Map	NID	NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment													
603	09	3L.054	506	03			GPU	EF	11	6	20	L					
W 3	16	-111	V		W(0.2		Α.	GE/	AR S	SETT	INGS	11/19	Valley Age	Sallywar 1	Strategy Strategy	The same	
Site#	M	TD/NO	H/P	Date	In	Time In	Date Out	Time	e Out		44		Co	omment		No. of the last	
603	E	F 1	1	2002/0	9/19	10:00	2002/09/19	11	:00								
73-1				338		C. EL	ECTRO	FIS	HER	SPE	CIFI	CAT	IONS			5 9.1	
Site#		MTD/N	10	H/P	E	Encl	Sec I	Length		Width	Vol	tage	Frequency	Pulse	Make	Model	
603	E	F	1	1		0	580	200.0	K -	1.5	80	00	-1-	5	SMITH ROOT	12B	
	110		15		2.7		F	ISH	SU	MMA	RY	Way to 15	Children Co.	群 一块 頭		10 - P	
Site#	T	MTD/N	10	H/P	Spec	ies S	tage Ag	Age Total # Lgth (Min/Max) FishAct Comment				Comment					
603	E	F	1	1	NFC				0								



Site #603, Upstream photo and functioning LWD. Roll #60, Frame #13, Date: 2002/09/19



Site #603, Downstream photo of cascade / pool habitat with functioning LWD. Roll #60, Frame #14, Date: 2002/09/19

Morice North Planning Area

Reach # ILP Map #

ILP#

13.0

093L.056

	Stanie III	STR	EAM R	EFEREN	ICING	7-60 - 11 Marie		10 to
Gazetted Name:					Local Name:			
Watershed Code: 000	-000000-00000	-0000-0000-0000-00	00-000-000-0	000-000-000	ILP	Map #: 093L.	056 IL	.P#: 2445
			RE	EACH	Who I have	W 357 T		
Reach #: 13.0		UTM(Zone/East/N	orth): 0.627	7000 6042770		A STATE OF THE REAL PROPERTY.	Sample Tunes	Random
Length (km): .27		Coupling: Partially C		Magnitude:	2		Sample Type: BGC Zone:	
Gradient (%): 7.4		finement: Occasion		Order:			Open water: Abs	E2227
US Elev (m): 1238		Islands: NONE		Riparian Ve	getation: Mixed	C/D		
Bars: None 🗸 Side	Diagonal	Mid-channel	Span [Braid 🗌	Landuse: Not	Specified		
WELL TEN	, F	7.00 St. 1	\ S	ITE	Approximation of the state of t			45 JAW - 100
Site #: 604 Site Length (m): 100	Field L GIS	JTM UTM 9.627902.60428	302		cy: C172 cy Name: Tritor	- 115/11/2	IH/TT Date: ntal Consultants (T	2002/09/19 errace)
TO STATE OF	15 TEV 200	With the second	CH	ANNEL	1,5,7	200 P	E 6 - 400	
No Vis.Ch.: Inter	mittent:		Avg N	In Max	#		Avg Min	Max #
Dewatered:	Tribs.:	Channel Width (m):		2 2.5	6	Gradient 9	%: 10.00 10	10 2
Stage: Low		Wetted Width (m):		2 2.400		Pool Depth (n	n): 0.38 0.300	0.5 6
Med	- L	Bankfull Depth (m):	0.27	0.2 0.3	3	Tu	rbidity.: Turbid	Low
High 🗸	Temp (C): 6	pH: 7.6		Conductivi	ity: 20		Moderate	Clear
19H T4 19 19 19 19 19	1.5		MORP	HOLOG	Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		() () () () () () () () () ()
Bed Material: Domini Subdomini	ant: Boulders ant: Gravels	D95 (cm): 100 D (cm): 50		Bars: No	n 🗸 Side	Diagonal	Mid-channe	Span Braid
Channel Pattern: Sind	ious	Islands: No	ne Di	STURBANCE	O1 B1	B2 B3	D1 D2 I	03_
Coupling: Part			- 11	NDICATORS				
Confinement: Free			C	1 C2 C	3 C4 C5	S1 S:	2 S3 S4	S5
Morphology: CF	Cascade P	ool						
1.765-		9 6	CC	VER	THE WATER	0,000 P		
Total Cover: Abundant		Type:	W.1.	LWD B		DP	OV IV	
LWD: Few		Amount:	Т	D T	N	S	TN	
LWD Dist: Clumped		Location: P/S/O:				V V		FSZ:
Right Bank: Shape	V - shape T	exture: Fines Gr	avel V Col	bble Bould	ler Rock	Manmade	Cı	rown Closure
Left Bank: Shape	: V - shape T	exture: Fines Gr	avel 🗸 Co	bble Bould	ler Rock	Manmade		21-40%
	: Mixed C/D		e: Mature fo		1			
Left Bank: Rip.Ve	j:	Stag	e: Mature fo	rest	Instream Ve	g: None	Algae Moss	Vascular
7-15 RI-3		y w popular	- China Const	ISH		agille un	100	10
Site Number Captur Metho	7 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
604 EF	1	100	340 sec	800	NFC	0		

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

093L.056 2445 604 13.0

	Proje tream Nan ct Watersh	ne (gaz.)	: BULF	KLEY RI	VER			t (tribs t	o Morice	R.)	00	F	Project C	ode:			5270	
W-V518-0	11.0		H. Parille	n-10-		/A) = 0 :	× 1**	WAT	ERS	HED	70 PI	1385	- N	77 1/2	Gj.	(v		
Waters Field UT	ted Name: hed Code: ILP Map#: M (Z.E.N): M (Z.E.N):	000-000 093L.05	56	U	_P #: 24			000-000- ap #: 09		N	Loc ID #: 50 Site Loc ef. Name	g: 100	e: Read		13. d: MAP		Site #	
	Dat	te: 2002	2/09/19	1	ime: 11:	00	-3	Agency:	C172	C	rew:	JH/TT		Fish	Crd?:	~	Incomp	plete:
	全型	19	0			10 E 3		CH	ANN	EL	40	11.2		1 10	4. The	· 6		
		Mtd	width	width	width	width	width	width	width	width	width	width	Avg			Gadie		
Channel \			2.10	2.40	2.00	2.50	2.00	2.20					2.20	Me	thod I:	10.0	10.0 C	
	Vidth (m):	T	2.00	2.00	2.00	2.40	2.00	2.20		457	1		2.10	Met	hod II:	3.4	C	
Pool D	Depth (m):	T	0.30	0.30	0.50	0.30	0.40	0.50	200	69-1			0.38	1	. 50.54	12.5		
V	Vb Depth: COVER Type:	.2	.3 LV		Avg al: A	U 0.27	DF	Method:	ov T	St IV	age: L		OSURE		Dw:	: 🗆	Tribs.:	
	Amount:	T	1)	T	N	S		T	N	2	2	1-40%					
1	oc: P/S/O:						1				INS	TREAM	VEG.	NI	ALI	M Fa	V	
#V	RIP STG					* 57		· W	ATE	R		RIP STG						
	EMS:								NO CONTRACTOR	and the same of	P	eq #:						
							Math	-d- T4				ond.: 20					Method:	62
	Temp:							od: T4			C	ona.: 20					method:	53
-	pH:							od: P2			7	urb.: T	M	LI	C		Method:	GE
FIC	ood Signs:	Rafted	iebns				Meth	od: GE										
			Sho.	500	(0)	South	N.	ORF	HOL	OGY		1	, ,	110	9410	Dan't	- " " " " " " " "	122 1
Bed	d Material:	r	ominan	t:B		Subdom	n: G				01	B1	B2 1	B3 D	1 D2	2 D	3	
	D95:	100.0	D (cm): 50.00		Morph	: CP		DICTUO	MANOE					THE	ILE	71	
						10.00		1	DISTURE		-	00	00	~ ~			0 00	04 05
	Pattern:								INDION	TONO	C1	C2	C3	C4 C	5 S1	1 S:	2 S3	S4 S5
	Islands:																	
	Coupling:																	
Cor	nfinement:								P	ars:	N	SID	F	DIAG		IID	SPAN	BR
	FSZ:								Ь	ars.	NV	310		DIAG	IV.		OF AIN	DI
	F 0.0	N TOWN		Section 1		100	HA	BITA	TQ	JALI	TY	1		1-3	视频		155	
3000000	Name	ال الدي	1			((1)		1500	11 11	(Commen	ts	ALE DESI	WC 875	-5/6/2			
	nter Habita	at	Potent	ial in po	ols.													
	ng Habitat					function	ing LWE	D, D95.										
	ing Habita			100					ND cove	r.						_		
0. 264	11/	100	115.00	13/10		1000	100		ОТО			- X - 2V	1/3/72	(10.00)		W 1		
Photo		E.	c Lg		-)ir		F 5 00	100	SSEC.	1	4 2 2	Comme	nte				
R: 60 F	: 15		TD	-		D	Do	instrant	n photo o	of cases	le / nool	habitat				_		
R: 60 F			TD	-		U			hoto of c									
	1 ,0	0			-	-	Obs	a cam p		Locaue I	Pour Ha	SHORT WILL	an one.					

Morice North Planning Area

Reach #

ILP Map #

ILP#

13.0

093L.056

145	604	
	861	T

	COMMENTS
Section	Comments
CHANNEL	NFC.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

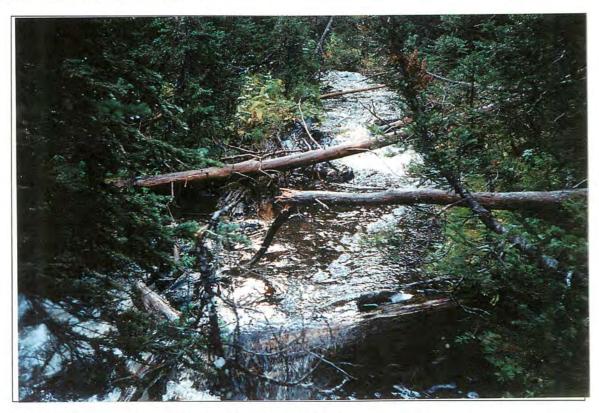
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093L.056

	19									WAT	ERE	OD	Y			du -			
Gaz	zette	d Nam	e:										Loc	al:					
F	- 7							00-0000-000											
				00-0	00000-00	0000-0	0000-000	00-0000-000											
W		body I								ILP Map	p #: 09	93L.05			ILP#:	2445	Reach #:	13	
	Pr	oject I	D: 5	2/0									Lake/St	ream:	S	Lake	From Date:		
F	ish F	ermit	#:	145	5269		Date: 2	2002/09/19		To:	2002/0	9/19	Age	ency:	C172	Crew: JH/	П	Resam	ole:
4 100	100		100		A 71	100	5.NF = 4	A TORN	SI	ITE /	ME	ТН	O D	167	STATE OF THE			(el con	
Site#	IN	D Maj		NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment															
604	09	3L.05	5 :	5060	04	1		G	PU	EF 1	1	6	20	L					
			A TO	70				A	., C	BEAR	SE	TT	NGS	Cit & T		- 1		32.0	NEW THE
Site#	M	TD/NC	Н	/P	Date	ln	Time In	Date Ou	ıt	Time O	ut		200000000000000000000000000000000000000	11011-	C	omment			
604	E	1	Ţ,	1	2002/09	/19	11:00	2002/09/	19	13:00			17-						
		TOP				100	C. E	LECTR	OF	ISH	ER-	SPE	CIFI	CA	TIONS	400	(T . 112	
Site#	T	MTD	/NO		H/P		Encl	Sec	Le	ength	N	/idth	Vol	tage	Frequency	Pulse	Ma	ke	Mode
604	E	F		33	1		0	340	1	0.001		2.0	8	00	1-1-	5	SMI		12B
10-1		*	1-1	1			2/8/	or filter	FI	SHS	NU	MA	RY		24,00				
Site#	T	MTD	/NO		H/P	Spe	cies S	Stage	Age	To	otal #	Lgt	h (Min/M	ax)	FishAct	Comment			
604	F	F	1		1	NF	C	1000			0	1		_					



Site #604, Downstream photo of cascade / pool habitat within site. Roll #60, Frame #15, Date: 2002/09/19



Site #604, Upstream photo of cascade / pool habitat within site. Roll #60, Frame #16, Date: 2002/09/19

Morice North Planning Area

Reach # ILP Map #

ILP#

7.0

093L.026

			STR	EAM	REF	EREN	ICIN	G				S)
Gazetted Na	me:					(J	Local Na	ame:				
Watershed C	ode: 000-00	0000-00000-00	0000-0000-0000-00	0-000-0	000-000-	000-000		ILP	Map #: 093L.02	26	ILP#:	3678
					REA	CH	, - W . T		1.0			SI MI-1
Reach #: 7 Length (km) Gradient (%) US Elev (m) Bars: None	: 3.77 : 2.6 : 1293	Confi	UTM(Zone/East/N oupling: Decoupled nement: Frequently Islands: NONE	d	Ma Rij	.6031746 gnitude: Order: parian Ve	4 getation		0	Sample Type BGC Zone pen water: A	: ESSF	sed
	i			12 21 \$ 1	SIT	E			X 可能 3	321-231	elin a	
Site #: Site Length	222		M 9.620152.60304 FM 9.620151.60304				cy: C17		Crew: SG Environmenta		te: 2002/ (Terrace	
	in the second		1 10 10 10 10 10 10 10 10 10 10 10 10 10	C. C	HAN	NEL		71 = 2			N. Way	
No Vis.Ch.:	Intermit			Avg	Min	Max	#			Avg Mi	n Max	#
Dewatered:	Tr		Channel Width (m):	7.52	6.800	8.600	6		Gradient %:	1.75 1.	7	4
Stage: Low			Wetted Width (m):	7.52	6.800	8.600	6	F	Pool Depth (m):	0.33 0.20	00 0.550	0 6
Med		A	Bankfull Depth (m):	0.20	0.2	0.2	3		Turbi			Low
High	✓ T	emp (C): 5	pH: 7.7			Conductiv				Modera	ite	Clear
The state of the state of	1 Y Y			MOF	RPHC	LOG	Yakirana.					7-1 2/1
Confine	pling: Decoup ment: Freque plogy: RP	ntly Confined Riffle Pool			C1	CATORS C2 C	3 C4	C5	\$1 S2	S3 S4	S5	
e_ 40				779	COV	ER		t				
Total Cover: I	Moderate		Type:	SWD	LWI) В		U	DP C	V I IV	7	
LWD: I	Few	_	Amount:	N	N	D		T	N S	S N	3	
LWD Dist:	Clumped		Location: P/S/O:								☐ F	SZ:
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: S Shape: S Rip.Veg: C Rip.Veg:	loping (g Tex	ture: Fines Gra Stag		Cobble Cobble re forest re forest		er F	Rock Rock Rock Rock Rock	Manmade Manmade Manmade Manmade Manmade Manmade	sigae 🗌 Mos		-20%
		Was Past	(i) (i) (ii)		F	EATU	RES	1				100
NID Map	NID Typ		Method Lg	Meth		Phot			AirPhot			TM (Z/E/N
	70339 F	5.0	GE	HC	R:	60 F	: 17	La		#:	9.62	0227.6029
	Celle bearing	- D 7		reek								
	Falls barrier	in Reach 7 of I	Houston Tommy Ci	W. 47 C								
Comments:				in the co	FIS						HANN Y	
	Falls barrier Capture Method	Number of Events		Tota Tim	al	H Voltage	Spe	ecies	Total Fish	Minimum Length (mm		ximum gth (mm)
Comments:	Capture	Number of	Length fished		al ie sec		N	ecies FC				ximum

Morice North Planning Area

Reach #

ILP Map#

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Watershed Code:

7.0

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ogli.	"=(-y ₀);	<u> </u>	1	Lie V		The second		1850	WA	TE	RBOI	Y			10		×					
F	WS /aterbo	Code: Code: dy ID:	460-0 000-0				000-0000-0 000-0000-0		0-000	-000-0				ILP#:	3678	Reach #:	7 -					
F	ish Pe	rmit #:	14	5269		Date:	2002/09/19	9	То	: 200	2/09/19	Age	ency:	C172	Crew: SG/SH	JH/ Resa	mple:					
181	(×)		" =	San Vill		WENTER	- 计标识数	S	ITE	1.1	METH	OD	San Is	(1)		SVET TICK	T :=					
Site#	NID	Мар	NID	#	JTM:Z	one/Eas	t/North/Mth	nd	MTD	/NO	Temp	Cond	Tur	bid	Co	omment						
605	0931	.045	5060	05 9	62	0150	6029710	GPU	EF	1	5	50	C									
339	0931	045	203	39		-		GPU	EF	1	4.5	30	L									
1.0			1	Note Of	1 1			A . II (GEA	R	SETT	INGS	16	100 O								
Site#	MT	O/NO	H/P	Date	n	Time In	Date (Out	Time	Out			×	C	Comment							
339	EF	1	1	2002/09	/19	13:30	2002/0	9/19	13:	45												
605	EF	1	-1-	2002/09	/19	13:30	2002/0	9/19	14:	15												
v1)			Manie Manie			C. E	LECT	ROI	FIS	HEF	SP	ECIFI	CA	TIONS	1977	2. E. STE	1357.10					
Site#		MTD/N	0	H/P	7 (1)	Encl	Sec	L	ength		Width	Volt	age	Frequency	Pulse	Make	Mode					
339	EF		1	1		0	469	4,1	350.0		7.0	80	00	60	6	SMITH	12B					
605	EF		1	1		0	650		100.0	1	5.0	60	00	T V	15	SMITH ROOT	12B					
all A	14.74		4	100	=(1111)-			F	SH	S U	MMA	RY	er e	2 公路市		TX NEW						
Site#	1	ATD/N	0	H/P	Spec	cies	Stage	Age	1	Total	# L	th (Min/M	ax)	FishAct	1274 F	Comment	-3					
339	EF		1	1	NF	C				0												
605	EF		1	1	NFO	C				0	E I											
		61 65 6 - 4		7 To 1	1		2 155.0	7 37	CO	MM	ENT	S										
	Sec	tion								dispute -		Comm	ents									
V	NATE	RBODY	1	Site	605 co	omment:	Roll 60 #	17 is p	hoto d	of dow	nstream	falls ~5 m	falls	~300 m down	stream of UTM	l. Falls are fea	tured on S					

Morice North Planning Area

Reach # ILP Map #

IIP#

1.0 093L.035

n San Aye	TE 122 (40)	white or	The Street	100	SITE				1	Īu,	
Site #	7.00		JTM 9.621042.6 UTM 9.621074.6				y: C172 cy Name	Crew: Ji Triton Environment		ate: 2002 s (Terrace	331.15
Any -				C	HANN	IEL	50/529	Stranger of the	St DA	ES.O	
No Vis.Ch.	. Interm	ittent:		Avg	Min	Max	#		Avg N	in Max	#
Dewatered:		ribs.:	Channel Width	(m): 6.82	5.300	8.100	6	Gradient %	7.00	6 8	2
Stage: Low			Wetted Width		3	5.6	6	Pool Depth (m)	: 0.53 0.	100 0.7	6
Med		L	Bankfull Depth	(m): 0.43	0.4	0.5	3	Turt	oidity.: Tu	bid	Low
High		Temp (C): 5	pH: 7	.2	Co	onductivit	y: 40		Mode	planting.	Clear
				MOI	RPHO	LOGY			100	30-10/	the same
Bed Materia	al: Dominan Subdominan	t: Boulders t: Cobble	D95 (cm)	: 100.00 : 40.00	Е	ars: Non		Side 🗹 Diagonal	Mid-cha	nnel 🗌	Span Braid
Confine	attern: Sinuo upling: Partial ement: Frequ oology: CP	ly Coupled		: None	DISTUR INDICA C1		01 3 C4	B1 B2 B3 C5 S1 S2	D1 D2 S3 S	D3 4 S5	
11-1-		No.	the transfer	A A	COVE	R	a tella	新加州			
Total Cover:	Abundant		Ту		LWD	В			VI VC		
LWD:	Few	-	Amou		S	T		T D	TN	-	
LWD Dist	Clumped		Location: P/S	/O:	V	V	V			F	SZ:
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: I Rip.Veg: I			Gravel ✓ Gravel ✓ Stage: Matur Stage: Matur			er R	ock Manmade ock Manmade]] Algae [] M	Crown C	-20%
	100 4 25 5	11.01	7011	THE THE	FE	ATU	RES		10-		-1
NID Map	NID Ty	pe Hgt	Method	Lg Meti	nod	Photo		AirPho	ito		TM (Z/E/N
093L.035	59606 F	5.0	GE	HC		60 F:	19	Li	#:		0904.6029
Comments	s: Barrier										
T. W.			11/4/ 53		FISH	5 m /	100		19 19 17	N. Carrie	
Site Number	Capture Method	Number Events		ed Tot	700	oltage	Spe	cies Total Fish	The second secon		
343	EF	1	300	498 :	sec	900	NF	C 0			
606	EF	1	200	660 s	sec	800	NE	C 0			

Morice North Planning Area

Reach # ILP Map #

ILP#

Site 606

000-000-000-000 1.0 093L.035 3357

	3000	100		100	775	(元)	PR	OJE	СТ		100					
Proj Stream Na Project Waters	me (gaz	.): BUL	KLEY R	IVER				to Morice		00	i	Project C	ode:		5270	
200	1.				Marin 1	11 -2 11	WAT	ERS	HED						- 水道 - 博	
Gazetted Name Watershed Code ILP Mape Field UTM (Z.E.N GIS UTM (Z.E.N	e: 000-00 #: 093L.0 !): 9.6210)35)42.6029	1009	LP#: 33		NID M		93L.035	N	Lo IID #: 50 Site Le ef. Name	g: 200		ch #: Method	1.0 f: MAP	Site Access:	∌#: 606 H
Di	ate: 200	2/09/19		Time: 14	:40	100	Agency			Crew:	JH/TT		Fish	Crd?:	Incor	mplete:
			16.20				CI	IANN	EL	the contract of			1910 - 1	100	Literature (J
	Mtd	width	width	width	width	width	width		width	width	width	Avg			the delication of the last of	ftd Avg
Channel Width (m)		5.40	5.30	6.80	8.10	7.80	7.50	_			_	6.82		hod I: 8.0	6.0	C 7.00
Wetted Width (m)		4.80	4.20	5.60	5.00	5.00	3.00					4.60	Meth	nod II:		С
Pool Depth (m)	: T	0.40	0.50	0.50	0.60	0.70	0.50		_			0.53	No V	is.Ch.:	Intermitter	nt:
Wb Depth	.5	.4	.4	7 Ave	g: 0.43	1	Method:	T	S	tage: L	ПМ	VH	7	Dw:	Tribs	
COVER		-	Tot	al: A												
			-			1 0		OV. 1	67	T co	OMAL OL	OCUPE				
Type	_	_	ND S	B	U	DF	_	OV	IV N	1		OSURE				
Loc: P/S/C					V				IA	1				M		
	P: M G: MF			1 12			V	VATE	R	hiles i	STG				11/2	411
EMS	3:									R	eq #:					
Temp	: 5					Meth	od: T4			C	ond.: 40				Method	: S3
pH	1: 7.2					Meth	od: P2	5-		1	Turb : T	ПМ	пт	CO	Method	GF
Flood Signs	: None					Meth	od: GE							_ V		
	380			2 - A	n Compa	N	OR	PHOL	OGY) · · · ·	150	11 3		1.0	Fact ()	
Bed Materia D95 Pattern Islands Coupling Confinement FSZ	i: 100.0 i: SI i: N i: PC i: FC	Dominar D (cm	nt: B h): 40.00		Subdon Morph		1	DISTURI INDICA		01 C1	B1 C2 SID	C3 (B3 D1 C4 C5 DIAG		D3 S2 S3 SPAN	S4 S5
REF WELL	- 3/3	- 25	375	1973	33.00	7 31	FE	ATUR	ES	1000			13	美國77	N 25 15	
NID Map NID	Type	Hgt	Metho	od I	Lg N	Method	THE COLUMN	Photo	OLD HEALTH	6.49	AirP	hoto		UTM	(Z/E/N)	Method
093L.035 59606	F	5.0	GE		-	HC	R: 6	60 F:	19	Li		#:			4.6029066	GIS
Comments: Barrier																
7 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A112-	10.50	11.50/19		6 700	HA	BITA	TQI	JALI	TY		6.00	3 5 1	元·标图 - 1		
Name	1000	23/11/-	AND OF	100	914	1000		No House	100	Commen	ts		1-12			4, 23.4
OverWinter Habi	tat	Assoc	iated wi	th plung	e pools.		_			- 311411011			_			
Rearing Habita						D, D95,	plunge	pools an	d good o	cover.						
Spawning Habit								ld be limi			nd coars	e substr	ates.		-	

Morice North Planning Area

ILP Map # Reach #

ILP# 3357 Site

1.0 093L.035

1	EX.			(1000年基度以上)。(2)	建筑和产业	PHOTOS						
	Photo			Foc Lg	Dir	Comments						
R:	60 F: 19 STD		STD	U	Upstream photo of falls on trib ~400 m downstream of site UTM.							
R:	60	F:	20	STD	U	Upstream photo of typical habitat within site.						
R:	60	60 F: 21 STD		STD	D Downstream photo of typical habitat within site.							
	1 (4)	12.00			They we	COMMENTS						
		Sec	tion			Comments						
		CHAN	NNEL	Downstream	Downstream falls ~5 m approximately 400 m downstream of site UTM.							
		CHAN	NEL	NFC	NFC							

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

1.0

093L.035

	1	e Green		(A)			100 mm	WA	TEF	RBOD	Y	2		ANT :	五数			
Gaz	etted	Name:									Loc	al:						
F	roject	Code:	460-0	60-000000-00000-00000-0000-0000-000-000														
	WS	Code:	000-0	000000-0	0000-0000	-0000-	0000-000-00	0-000	-000-0	000-000								
W		dy ID:														1/2		
	Proje	ect ID:	5270								Lake/St	ream:	S	Lake	From D	ate:		
F	ish Pe	rmit #:	14	5269	Da	Date: 2002/09/19			To: 2002/09/19			Agency: C172			Crew: SG/SH Resample:			
0,3	-1/8	-579V	13		2001	West .	S	ITE	1.1	METH	OD	fal.	ail .	4 100				
Site#	NID	Мар	NID# U		UTM:Zone/East/North/Mthd			MTD/NO		Temp	Cond	Turt	oid	Comment				
606	0931	035	506	06			GPU	EF	1	5	40	C						
343	0931	035	20343				GPU	EF 1		5	40 L							
W. A.	7-1	100 T			. IM	C11 201	Α. (BEA	R	SETT	INGS	0.0			99		130	
Site#	MTE)/NO	H/P	Date	In Tim	e In	Date Out	Time	Time Out Comment									
343	EF	1	1	2002/0			2002/09/19	7.4.	16:45									
606	EF	1	1	2002/0			2002/09/19	16:										
	183			9817	С,	ELE	ECTRO	FIS	HEF	RSPI	ECIFI	CA.	TIONS		185			
Site#	1	MTD/N	0	H/P	Encl		Sec L	ength		Width	Vol	tage	Frequenc	y Pulse	е	Make	Mode	
343	EF		1	= 1	0		498	300.0	0.00		.5 900		60	6		SMITH ROOT	12B	
606	EF	4	1	1	0	1 -	660	200.0	I	6.0	8	00	1-1	5		SMITH ROOT	12B	
		W		11		phi n	F	SH	SU	MMA	RY			X15:	97-	97/		
Site#		MTD/N	0	H/P	Species	Sta	ge Age	9	Total	# Lg	th (Min/M	ax)	FishAct		Cor	mment		
343	EF		1	1	NFC	1			0									
606	EF		1	1	NFC		1		0		- 1							



Site #606, Upstream photo of falls on trib \sim 400 m downstream of site UTM. Roll #60, Frame #19, Date: 2002/09/19



Site #606, Upstream photo of typical habitat within site. Roll #60, Frame #20, Date: 2002/09/19



Site #606, Downstream photo of typical habitat within site. Roll #60, Frame #21, Date: 2002/09/19

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0 093L.035

3350

STREAM REFERENCING **Gazetted Name: Local Name:** ILP Map #: 093L.035 ILP#: 3350 Reach #: 1.0 UTM(Zone/East/North): 9.621548.6027376 Sample Type: Length (km): .90 Coupling: Partially Couple Magnitude: **BGC Zone: ESSF** Gradient (%): 31.8 Confinement: Confined Order: 1 Open water: Absent US Elev (m): 1655 Islands: NONE Riparian Vegetation: Shrubs Bars: None 🗸 Side 🗌 Diagonal 🗌 Mid-channel 🗌 Span 🔲 Braid 🔲 Landuse: Not Specified Field UTM 9.621085.6027511 Site #: 607 Agency: C172 Crew: JH/TT Date: 2002/09/20 Site Length (m): 150 GIS UTM 9.621068.6027489 Agency Name: Triton Environmental Consultants (Terrace) CHANNEL No Vis.Ch.: Avg Intermittent: Min Max # Avg Min Max Channel Width (m): Dewatered: Tribs.: 1.62 1.4 Gradient %: 1.9 6 24 27.00 32 4 Wetted Width (m): Pool Depth (m): 0.33 1.62 14 1.9 6 0.300 0.400 6 Low Bankfull Depth (m): 0.20 0.2 0.2 3 Med V Turbidity.: Turbid Low High Temp (C): 4 pH: 6.9 Conductivity: 60 Moderate Clear V MORPHOLOGY Bed Material: Dominant: Boulders D95 (cm): 90.00 Side Diagonal Mid-channel Bars: Non 🗸 Span Subdominant: Gravels D (cm): 40.00 Braid ___ Channel Pattern: Sinuous Islands: None **INDICATORS** Coupling: Partially Coupled Confinement: Frequently Confined C1 C2 C3 C5 SI \$3 C4 **S2** \$5 Morphology: CP Cascade Pool COVER Total Cover: Moderate Type SWD LWD B u DP IV Amount T S N D T N LWD: None Location: P/S/O: LWD Dist: Not Applicable FSZ: Shape: V - shape Texture: Fines ☐ Gravel ✔ Cobble ✔ Boulder ☐ Rock ☐ Manmade ☐ Right Bank: Crown Closure Left Bank: Texture: Fines Gravel Cobble Boulder Rock Manmade Shape: V - shape 1-20% Right Bank: Rip.Veg: Shrubs Stage: Shrub/herb stage Left Bank: Rip.Veg: Instream Veg: None ☐ Algae ☐ Moss ✔ Vascular [Stage: Shrub/herb stage FISH Site Number Capture Number of Length fished Total Voltage **Species** Total Minimum Maximum Method **Events** (m) Time Fish Length (mm) Length (mm) 607 EF 150 275 sec 700 NFC 0

Morice North Planning Area

	1 3			W 38						PR	OJE	ст	100 100 200 101 100 200		5 W- 1	1000	14.	
	P		am N	oject Nam ame (gaz shed Cod): BUL	KLEY RI	VER						00	P	roject C	ode:		5270
1075	ig _a	100	200	E TIA						WAT	ERS	HED			A Marie	(A)	5. 解下	
			d Cod	ne: de: 000-00 o#: 093L.0			00-0000 LP#: 33			000-000 ap #: 09			Loc ID #: 50	cal Name	: Read	ch #:	1.0	Site #: 607
		итм	(Z.E.I	N): 9.6210 N): 9.6210	85.6027	511		Method:					Site Lo	g: 150	1100	Method:		Access: H
			C	ate: 200	2/09/20	ń	ime: 07:	:50		Agency:	C172	(Crew:	JH/TT		Fish	Crd?: ✓	Incomplete:
- 4)		3-1	- 养阿			My = 3	3,05	(1)	5	CH	ANN	EL	1		Miles	19050	The state of	
				Mtd	width	width	width	width	width	width	width	width	width	width	Avg		Gad	lient % Mtd Avg
	_	nel Wi			1.80	1.60	1.90	1.50	1.50	1.40	1-1	-		5-7	1.62	Meth	od I: 24.0	
	_	ted Wie			1.80	1.60	1.90	1.50	1.50	1.40					1.62	Metho	od II: 28.0	32.0 C
L	P	ool Dep	pth (m): T	0.30	0.30	0.40	0.30	0.30	0.40				1 1	0.33			Yanna (17)
Г		Wb	Depti	h: .2	.2	.2	Avg	: 0.20	N	Method:	Т	St	age: L	ПМ	V H	No Vi	s.Ch.:	Intermittent: Tribs.:
		C	OVE	3		Tota	al: M									_		
	F		Тур	e: SWE	LV	VD	В	U	DP	1	ov T	IV	CR	OWN CL	OSURE			
		-	Amour	nt: T		Г	S	N	D		T	N	1	1	-20%			
	Loc: P/S/O:			V				V				INSTREAM VEG: N A M V					V	
			RI		G 🗸	c 🔽	В	R 🗌 A						RB SHP: Texture: RIP: STG:	F 🗆 s	G ⊘ C	₽ В [RA
	3		in 100		1-11-11	1 7, "			-, 1	W	ATE	以 無利		75-5	7411		n and deposit of	
			EMS										Req #:					
	Temp: 4								100-100-	od: T4			Cond.: 60 Meth					Method: S3
	pH: 6.9 Flood Signs: Rafted				dahrie				Method: P2 Method: GE					urb.: T	Method: GE			
		11000	Olgin	s. Halled	debila						W.O.I	004		to pokenie				
		31.31	2 10				-1-1		N. S. IV	URF	HOL	UGY				ALIE		
		Bed M	-	Commence of	Dominan	-		Subdom					01	B1	B2 E	33 D1	D2 [03
			D9	5: 90.0	D (cm	: 40.00		Morph	: CP		ISTURE		Ш					
		F	Patter	n: SI								TORS	C1	C2	C3 C4 C5 S1 S2 S3 S4 S5			
			sland															
			oupling															
	Confinement: FC FSZ: Bars: N✓ SIDE DIAG MID SPAN BR								SPAN BR									
95 - 30								the top to the second				orac sand						
M	=300	,		2.3		30 1			HAE	BITA	TQL			5 W		1	- A	Sport of
_	Ove	Nan erWinte	_	itat	Comments None observed in site.													
-	_				Low - associated with small plunge pools only.													
_							patches of gravels only limited by gradient and coarse substrates										_	
		- 1	70		W. J.		100		200		ото			Parcelle.				
المحمد	Ph	oto		Fo	ic Lg	120	Di	ir					Wilder Co.		`ommor		The man	
R:	60	F:	22		TD	-	L		Unst	Comments Upstream photo at edge of slide trail.								
R:	60	F:	23		TD				_		photo a			ail.				
			_						_									

Morice North Planning Area

Reach # ILP Map # ILP # Site 1.0 093L.035 3350 607

	COMMENTS
Section	Comments
CHANNEL	Cascades, falls and gradients >30% in mid portion of reach 2 block all upstream access.
CHANNEL	NFC

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

 $000\hbox{-}000000\hbox{-}00000\hbox{-}00000\hbox{-}0000\hbox{-}0000\hbox{-}000\hbox{-}000\hbox{-}000\hbox{-}000\hbox{-}000$

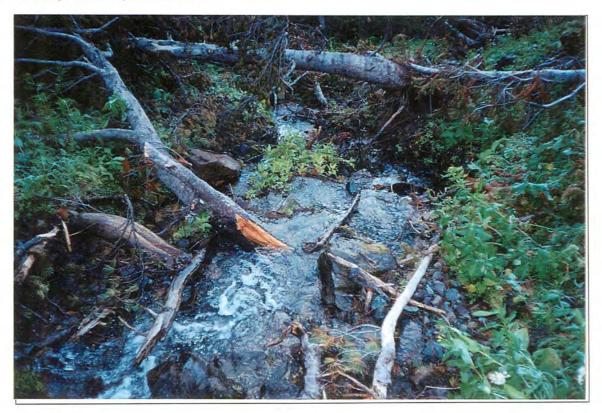
1.0

093L.035

	The state of	W 30 X		1 V 37 3		100	WAT	ERE	3 O D	Υ				1-22114		
Gaz	zetted Name									Loca	al:					
F	Project Code	460-	0-00000	0000-00000	-0000-0000-	000-00	0-000-0	000-000	0-0							
	WS Code	000-	0-00000	0000-00000	-0000-0000-	000-00	0-000-0	000-000	-000							
W	aterbody ID						ILP M	ap #: 0	93L.03	35		ILP#:	3350	Reach #:	1 -	
	Project ID	5270								Lake/Str	ream:	S	Lake	From Date:		
F	ish Permit#	14	5269	Date	2002/09/	20	To:	2002/	09/20	Age	ency:	C172	Crew: JH/	TT R	esample:	
- y. W	11 2		The state of	M. W. W.	ARK W	S	ITE	/ M i	ETH	O D				1.105%	1	23
Site#	NID Map	NID	#	UTM:Zone/E	ast/North/M	lthd	MTD/	NO T	Гетр	Cond	Turt	oid		Comment		
607	093L.035	506	07	3		GPU	EF	1	4	60	С	41 1				
	加 题》。				态表现的	A. (GEA	R SI	ETT	INGS	100		學士 40%			
Site#	MTD/NO	H/P	Date	In Time	In Date	Out	Time (Out				C	omment			
607	EF 1	1	2002/0	9/20 07:5	50 2002/	09/20	08:2	20								
-	115	- 10		C.	ELECT	RO	FISH	IER	SPI	CIFI	CA	TIONS	1 11/20		- tr. "In	- 166, b.
Site#	MTD/N	10	H/P	Encl	Sec	I	ength	V	Vidth	Vol	tage	Frequency	Pulse	Make	2 1	Mode
607	EF	1	1	0	275		150.0		1.5	70	00	T-	5	SMITH		12B
	, I	10 3		The A	6 3 4	\ F	ISH	SUN	MA	RY		all Cares		ALERON L		- Y e
Site#	MTD/N	10	H/P	Species	Stage	Ag	e	Total #	Lg	th (Min/M	ax)	FishAct		Comment		
607	EF	1	1	NFC			10	0			- 5					



Site #607, Upstream photo at edge of slide trail. Roll #60, Frame #22, Date: 2002/09/20



Site #607, Downstream photo at edge of slide trail. Roll #60, Frame #23, Date: 2002/09/20

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0

093L.035

lesson in the		50 Jan 1	STR	EAM	REF	EREN	CING					1
Gazetted Name:						L	ocal Name:					
Watershed Code	: 000-000	000-00000-00	000-0000-0000-00	0-000-00	0-000-	000-000	ILP	Map #: 093L.0	35	IL	P#:	3349
	1 - 2 F				REA	C H						To the
Reach #: 3.0		The second second	UTM(Zone/East/N	orth). 9 6	21215	6027127	21 (0.00/2/1)		Sample	Type	Biase	d
Length (km): .81			oupling: Partially C			gnitude:	1		F-12 30 10 17	Zone:		u
Gradient (%): 22.	0		nement: Frequently	C. C. C. C.		Order: 1	2		Open wa			
US Elev (m): 156	54	- 1	slands: NONE		Rij	parian Veg	etation: Mixed	C/D				
Bars: None 🗸	Side [Diagonal [Mid-channel	Span	□в	raid 🗌	Landuse: Not	Specified				
STONE SET IN		1-100		6,73	SIT	E			*-1	E ji i i		\$ 1, 1, 1
Site #: 608 Site Length (m):			M 9.620791.60276 M 9.620890.60273				y: C172 cy Name: Tritor	2002010	-/TT		2002/09	/20
ene Lengur (III).	120	0.00	W 0.020000.00270		HAN	NEL	y Name. Tho	Livioninen	ai Consu	itanto (1	cirace)	
No Vis.Ch.:	Intermitt	ent:	19	Avg	Min	Max I	# 1		Avg	Min	Max	#
Dewatered:	000000000000000000000000000000000000000		channel Width (m):	1.33	1.100	1.5	6	Gradient %		20	29	4
Stage: Low			Wetted Width (m):	1.33	1.100	1.5	6 F	ool Depth (m		0.100	0.200	6
itage: Low Med ✓		В	Bankfull Depth (m):	0.57	0.5	0.6	3	Tord	oidity.:	Turbid		Low
High [Te	emp (C): 4	pH: 6.9		(Conductivity	y: 50	,		oderate		lear 🗸
				MOR	PHO	LOGY					新田家	
Bed Material: D	ominant:	Boulders	D95 (cm): 80.	.00		Bars: Non	✓ Side	Diagonal	Mid-	channel	☐ sp	oan [
Subd	ominant:	Cobble	D (cm): 40.	.00							Br	aid _
Channel Pattern	: Sinuous	9	Islands: Nor	ne		RBANCE	O1 B1	B2 B3	D1	D2 D	3	
	: Partially				INDIC	CATORS						
Confinement	Contract of the second				C1	C2 C3	C4 C5	S1 S2	S3	S4	S5	
Morphology	CP	Cascade Pool		L								
			W. S. 125.	C	OV	ER	1 1 1 1 1 1 1 1 1 1	et in - " the sent of	P 250	(金小)		
Total Cover: Mode	erate		Type:	SWD	LWI		U		OV	IV		
LWD: None	9	_	Amount:	T	T	D	T	S	T	N		
LWD Dist: Not A	Applicable		Location: P/S/O:		~	V		V			FSZ	2: 🔲
Right Bank: S	Shape: Ur	ndercut Text	ture: Fines Gra	evel V	Cobble	✓ Boulde	Rock	Manmade	1	Cre	own Clos	sure
	Shape: Ur	ndercut Text	ture: Fines Gra	avel V	Cobble	✓ Boulde	Rock	Manmade	1		1-20	0%
Right Bank: Ri	p.Veg: Mi	xed C/D	Stage	e: Mature	forest			· volume				
Left Bank: Ri	p.Veg:		Stage	e: Mature	forest		Instream Veg	g: None	Algae	Moss	✓ Vaso	cular [
	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	- 517 (r - w			FIS	H		6345	A Field		3 - 4	
THE RESIDENCE OF THE PARTY OF T	apture lethod	Number of Events	Length fished (m)	Total Time		Voltage	Species	Total Fish	Minim	1000	Maxi	mum n (mm)
608	EE	4	120	160 ee	oc -	600	NEC	0		o content		Con Se

Morice North Planning Area

Reach #

ILP Map#

ILP#

Site

	1914	一些糖				January.	PR	OJE	СТ					- Yank			1
Proj Stream Na Project Waters	me (gaz	.): BUL	KLEY R	IVER	rice Fore					00		Project C	ode:			5270	
AND THE PART				r and the same	NAME OF STREET	100	WAT	ERS	HED		and the second		of the same		5		
Gazetted Name Watershed Code ILP Map Field UTM (Z.E.N GIS UTM (Z.E.N	e: 000-00 #: 093L.0): 9.6207)35 791.6027	/640	LP#: 33		NID M	000-000 lap #: 09		N	ID#: 50	g: 120		ch #: Metho	3.0 od: MAP		Site # Access: H	
Da	ate: 200	2/09/20		Time: 08	:35		Agency:	C172	C	crew:	JH/TT		Fis	h Crd?:	~	Incomp	olete:
			v elden	Senior Me	7-6	3.35	CH	ANN	EL		VEN V	31/4	DAME:		1	A2://	West of
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg		Г	Gadien	nt % Mtd	Avg
Channel Width (m)	T :	1.50	1.30	1.40	1.20	1.10	1.50					1.33	Me			29.0 C	
Wetted Width (m)	T	1.50	1.30	1.40	1.20	1.10	1.50					1.33	Met	thod II: 2	27.0	20.0 C	
Pool Depth (m)	T	0.10	0.10	0.20	0.20	0.10	0.20				-	0.15					_
				1			- TV		100		- 0.	F- U.S.	No	Vis.Ch.:	Ir	ntermittent:	
Wb Depth	.5	.6	.6	Avg	g: 0.57	1	Method:	T	St	age: L	M	VH		Dw:	Ш	Tribs.:	
COVER			Tot	al: M													
Туре	SWE) L	ND	В	U	DF		ov T	IV	CR	OWN CI	OSURE					
Amount	_		T	D	Т	S		T	N	1		-20%					
Loc: P/S/O	7				V	~				INS	TREAM	VFG:	N	АПМ	Le V		
	P: M B: MF										STG						
						1 20	W	ATE	R		STEP.	TO THE					10
EMS Temp pH Flood Signs	: 4 : 6.9					Metho	od: T4 od: P2 od: GE			С	eq #: ond.: 50 Furb.: T	_ M] L	c 🗸	1	Method:	
-		1976		-	O ENGINEE	N	ORF	HOL	OGY	91.7	THE STATE	-1	WHENT	in The	iles /	5 120	
Bed Material D95 Pattern Islands Coupling Confinement: FSZ:	: 80.0 : SI : N : PC : FC	Dominar D (cm	nt: B i): 40.00		Subdom Morph	ı: C	T.	DISTURE	BANCE	01 C1	B1 C2 SID	C3 (DIAG	1 D2 5 S1	D3	S3 S	S4 S5
		gir.	体製	all		HAI	BITA	TQU	JALI.	ΓY		- 12 C					
Name									C	ommen	ts						
OverWinter Habit		_	- gradier														
Rearing Habitat Spawning Habitat			 gradier gradier 														
Spawning Habita	11	INONE	- gradier	it too nig	III.		DI	OTO	6	-25-	erio (*co	VISTON AND AND AND AND AND AND AND AND AND AN			-		
1000	1189	STEW STEW		SIE		1		ото	3			T. The	5	JAM			
Photo		oc Lg)ir							Commer	its				
: 60 F: 24		STD			Ú	_			igh gradi								
60 F: 25	9	STD		-	D	IDou	unctream	nhoto o	of high ar	adjont #	roughou	ıt.					

Morice North Planning Area

Reach # ILP Map #

ILP#

Site 608

3.0

093L.035

	COMMENTS
Section	Comments
CHANNEL	Downstream barrier on mainstem.
CHANNEL	NFC

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

3.0

093L.035

5.648	, ,						4-14-1	WA	TER	BOD	Υ			J. Same		100
Gaz	zetted	Name:									Loc	al:				
F	roject	Code:	460-0	00000-0	0000-0000	0-000	0-0000-000-00	00-000	-000-00	0-00						
			000-0	000000-0	0000-0000	0-000	0-0000-000-00	1077	15 E 10 E				2 = 2	2.00		
W		dy ID: ect ID:	5270					ILP	Map #:	093L.03	Lake/St	ream:	ILP#:	3349 Lake F	Reach #: 3 rom Date:	3
F	ish Pe	rmit #:	145	5269	Da	te: 20	002/09/20	To	200	2/09/20	Age	ency:	C172	Crew: JH/T	T Resar	mple:
- 3		10 1		19 1	对他		S	ITE	. I M	ETH	O D		a la salua	1 2 1 mile	Harwin D.	
Site#	NID	Мар	NID	#	UTM:Zone	East/l	North/Mthd	MTE	O/NO	Temp	Cond	Turt	oid	(Comment	
608	093	035	5060	98			GPU	EF	1	4	50	С				
-15772 T	1			30-10	The Maller	i in 3h	Α.	GEA	RS	ETT	INGS	12.07				
Site#	MT	O/NO	H/P	Date	In Tim	e In	Date Out	Time	Out					Comment		
608	EF	1	1	2002/0		:35	2002/09/20	1 7 7 7	:05							
	-Vi				C.	EL	ECTRO	FIS	HER	SPE	CIFI	CA:	TIONS			
Site#		MTD/N	0	H/P	Enc		Sec L	ength	eide,	Width	Vol	tage	Frequenc	y Pulse	Make	Model
608	EF		1	_1	0	_1] 0	160	120.0	4 1	1.2	6	00		5	SMITH	12B
10	4	- /		ī .*		V 13	F	ISH	SU	MMA	RY	Obs. of				
Site#		MTD/N	0	H/P	Species	S	tage Ag	e [Total	# Lg	h (Min/M	ax)	FishAct		Comment	
608	EF		1	1	NFC				0				0.00			



Site #608, Upstream photo of high gradient throughout. Roll #60, Frame #24, Date: 2002/09/20



Site #608, Downstream photo of high gradient throughout. Roll #60, Frame #25, Date: 2002/09/20

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0 093L.035

St. Val.	**************************************		STR	EAM	REF	EREN	CING -	1,51,215		110
Gazetted Name						L	ocal Name:			
Watershed Cod	le: 000-000	0000-00000-00	000-0000-0000-00	0-000-0	00-000-	000-000	ILP	Map #: 093L.	035 11	P#: 3332
		性	THE REPORT OF THE PARTY OF THE	- 12 m	REA	CH				
Reach #: 3.0 Length (km): 1.9 Gradient (%): 13 US Elev (m): 15 Bars: None 🗸	3.0 591	Confir	UTM(Zone/East/Noupling: Coupled nement: Confined Islands: NONE	orth): 9.	Ma	gnitude: Order:		os	Sample Type: BGC Zone: Open water: Ab	
	3 - 7	- III	A STATE	40	SIT	E		No. 1 Tell Well		31372 V.
Site #: 60	10000		M 9.621744.60260 M 9.621739.60260	734			y: C172 cy Name: Tritor	- 717777	H/TT Date: tal Consultants (*	2002/09/20 [errace)
			19/	c	HAN	NEL	17 V (1/2)			
No Vis.Ch.: Dewatered: Stage: Low	Intermit	ibs.:	channel Width (m): Wetted Width (m):		Min 2.3 2	Max 5.800		Gradient % Pool Depth (m		Max # 14 2 0.600 6
Med ✓ High ☐	Te	emp (C): 4	Pankfull Depth (m): pH: 6.9			0.6 Conductivit	• / / / /	Tur	bidity.: Turbid Moderate	
	Dominant: dominant:		D95 (cm): 125 D (cm): 50	5.00		Bars: Non		Diagonal	Mid-channe	Span Braid
Channel Patter Couplin Confinemer Morpholog	g: Coupled nt: Confine	d	Islands: No	ne [RBANCE CATORS C2 C3	O1 B1 B C4 C5	B2 B3 S1 S2		03 S5
				2 478	COV	ER		Off a spirit	S. Park St. J.	Traple 3
Total Cover: Mod LWD; Nor LWD Dist: Not	ne	e	Type: Amount: Location: P/S/O:	SWD N	T	B S	U N	DP D	OV IV	FSZ:
Left Bank: Right Bank: R	Shape: V Shape: V Rip.Veg: Sh Rip.Veg:	- shape Text	ture: Fines Gra Stag	avel 🗸 avel 🗸 e: Shrub e: Shrub	Cobble /herb st	✔ Boulde	1	Manmade Manmade		rown Closure 0% Vascular
To 100 (188)	7,5		E SUIDE	767	FIS	H		201-110		
	Capture Method	Number of Events	Length fished (m)	Tota Time		Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
609	EF	1	300	530 se	ec	800	NFC	0		

Morice North Planning Area

Reach# ILP M

ILP Map #

ILP#

Site

3.0 093L.035

3332

	- JF - J		Market .		n-water	Wile y	PR	OJE	CT		La Company				<u> </u>		(4)	
Project Stream Nam Project Watershe	e (gaz	.): BUL		VER						00		Project C	ode:			5270		
10000000000000000000000000000000000000	75	- 37	1 # "W. T	113/18	1 14 2 Y R		WAT	ERS	HED	LOSANAL E	87	100		E, 38 %	(°==		-	3 31
Gazetted Name:										Loc	cal Nam	e:						
Watershed Code: ILP Map#:				00-0000 LP#: 33			000-000- ap #: 09			ID#: 50	1609	Rea	ch #:		3.0		Site #: 6	609
Field UTM (Z.E.N):					Method:		op oo	02.000		Site Lo		1,00		hod: MA		٨٥٥		500
GIS UTM (Z.E.N):					neurou.	GFU			R	ef. Name			iviet	ilou. IVIA		ACCE	ess: H	
					640		S or a nor	1.01							(
Date	e: 200	2/09/20	1	Fime: 09	:15		Agency:			crew:	JH/TT		F	ish Crd?	: 🗸		Incomple	ete:
			The Park		P(1) = 10 +	No feet	СН	ANN	EL				1.00	War.		e in the	w Y	
Charact Mildle (a)	Mtd	width	width	width	width	width	width	width	width	width	width	Avg	_		_	ient %	Mtd	Avg
Channel Width (m): Wetted Width (m):	T	2.80	3.20	3.50	2.30	2.90	3.60	5.80	4.10	4.10	4.10	3.53 2.78	I -	Method II: lethod II:		13.0	C	13.50
Pool Depth (m):	T	0.50	0.60	0.60	0.50	0.40	0.40					0.50	Liv	ietilod II.		_		1
							7.0	202			500			o Vis.Ch			nittent:	
Wb Depth:	.4	.4	.6	Avg	g: 0.47		Method:	τ	St	age: L	M	VH		Dv	v: 🔲		Tribs.:	
COVER			Tota	al: M														
Type:	Type: SWD LWD B U DP OV IV CROWN CLOSURE Amount: N T S N D N N 0 0%																	
Loc: P/S/O:	N			1000	N	1		N	N		V			المحالة				
200.17070.						1				INS	IREAM	VEG:	и	A	M	v 🗀		
RIP: STG:											STG			c v				
	一个情	6		Ser -	9.50	e Hilli	W	ATE	R	Maryer,		1.14	4 =	W	nan-		2 2 3 -	
EMS:										Re	eq #:							
Temp: 4							od: T4			Co	ond.: 80					Me	thod: S	3
pH: 6 Flood Signs: N							od: P2			I	urb.: T	M	L	ПС	V	Mef	thod: G	E
1 1000 Cigila. I	10110																	
					23.1	N.	ORP	HOL	OGY	- ph/1=		oly: ou		100	7.74	×1-	1	* * * * * * * * * * * * * * * * * * * *
Bed Material:	I	Dominan	nt: B		Subdom	: C				01	B1	B2 I	33	D1 D)2 D	03		
D95: 1	25.0	D (cm): 50.00		Morph	: CP		ISTURE										
Pattern: S	31							INDICA'	TORS	C1	C2	C3 (24	C5 S	1 S	2 S	33 S4	4 S5
Islands: f															JIE	316	310	
Coupling: (
Confinement: C								В	ars:	N	SID	E	DIAG		MID	SPA	N	BR
		***				HAI	BITA	TQL	IALI	TY	T. 19				98789 T		20 V.	
Name		7 400	7.31= 200000	A.O. SERVI		70.70	Language and		C	omment	S				(A)			
OverWinter Habitat			tial in poo															
Rearing Habitat		_	lated with		-													- 4
Spawning Habitat		Low -	associate	ed with s	mall gra	vel patcl				strates.		TON!	0000	9230 00000			O/Marchine	
	- 100	2.2			te de de la composition della	in year		ото	3			50, 10, 2 pt	A	± (1)	W. 1006			
Photo 62 F: 01A		c Lg		D				ab t	(b.+)	. 100		Commer	its					
62 F: 01A 62 F: 0A	_	TD	-	- 1)	_			f habitat abitat wit		te.		_					
T-0.00 / 4.5 (Call Line Table)						Opo	- amitibu			, onco.								

Morice North Planning Area

Reach # ILP Map # ILP #

Site

609

3.0 093L.035 3332

	COMMENTS
Section	Comments
CHANNEL	Barriers in downstream reaches block upstream access. Barriers observed in Recci include: falls 4 m, cascades (numerous) and gradient barriers.
CHANNEL	NFC

Morice North Planning Area

Reach #

ILP Map #

ILP#

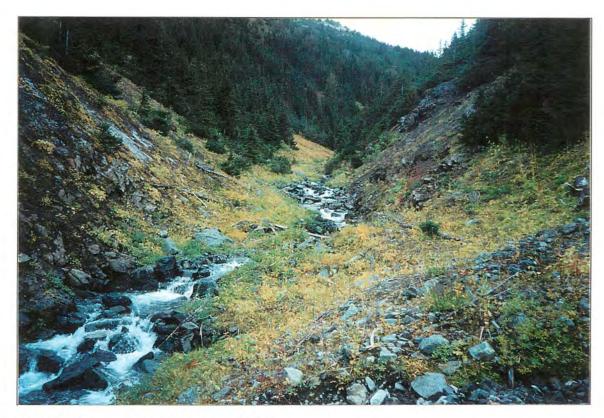
Watershed Code:

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

3.0

093L.035

X	c:Aj			ri i	W.		V 4 . 4	WAT	ERE	3 O D	Y	len-li	C JAVIA			
Gaz	zetted	Name:									Loca	al:				
F					0000-00000											
			24.5	0-00000	0000-00000	-0000-0000	0-000-00			2017			200			
W		ect ID:	5270					ILP Ma	ap #: 0	93L.03	5 Lake/Str	eam:	ILP#:		Reach #: 3 om Date:	-
F	ish Pe	rmit #:	14	5269	Date	e: 2002/09	/20	To:	2002/0	09/20	Age	encv:	C172	Crew: JH/TT	Resar	nole:
-	DOM:	1500	9700		alad o	-1/A/2 ***		ITE	10000	attent.		100			Real A	-
011-11	Luc	5.5	AUD	*	34/4	10000	CLASSING.	THE PERSON	建工工工	WHEN S	11.00	AME .	Dated was			5- 57F
Site# 609		Map L.035	NID 5060	W. S. A. 11 T.	UTM:Zone/E	ast/North/		MTD/N	1 00	emp	Cond	Turb	id	С	omment	
009	093	L.U33	5000	J9		0.76, 3.22	GPU		D C D	4	50 I N G S	С	The second second			201
21. 11				1100 11		MOULE IN			を見る	Links	INGS		(1) (1) (1) (1) (1)		102 250 - 1	Hole
Site#		D/NO	H/P	Date		Control of the Control	te Out	Time C					C	omment		
609	EF) hemoto	1	2002/0			2/09/20	10:00	7. 1	000	ol ei	~		JI - 275 - 2	22/15 12/10/10	
3	11111	17/	110		MARK 2523	AND PERSONAL PROPERTY.		FISH	93000	上级技术	200		TIONS		1	·
Site#	-	MTD/N	0	H/P	Encl	Sec		ength	V	Vidth		tage	Frequency	Pulse	Make	Mode
609	EF		1	1	0	530		300.0		2.0	80	00	- 1-	5	SMITH	12B
					A Comment	10. II 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.	F	ISH	SUM	MA	RY	0.54			3. V 17 17 18	
Site#	-	MTD/N	0	H/P	Species	Stage	Ag	e 1	Total #	Lgt	h (Min/M	ax)	FishAct		Comment	
609	EF		1	1	NFC				0							



Site #609, Upstream photo of habitat within site. Roll #62, Frame #0A, Date: 2002/09/20



Site #609, Downstream photo of habitat within site. Roll #62, Frame #01A, Date: 2002/09/20

Morice North Planning Area

Reach # ILP Map #

IIP#

3.0 093L.035

	(A)		STR	EAM	REF	EREN	CING	ir ng low.		
Gazetted Name:						L	ocal Name:			
Watershed Code:	000-000	000-00000-00	000-0000-0000-00	00-000-00	0-000-0	00-000	ILP	Map #: 093L.	035	LP #: 3275
			A-1/2 100	* . VF	REAC	H	- 01	70 San 35		ETENET
Reach #: 3.0			JTM(Zone/East/N	lorth): 9.6	522691.6	6025366		The state of the s	Sample Type:	Biased
Length (km): 1.24		Co	upling: Partially C	Couple	Mag	nitude:	17		BGC Zone:	ESSF
Gradient (%): 11.1		Confin	ement: Confined			Order: 3			Open water: Ab	sent
US Elev (m): 1449	9	l:	slands: NONE		Rip	arian Veg	etation: Shrub	os		
Bars: None 🗸 S	Side _	Diagonal	Mid-channel	Span	☐ Br	aid 🗌	Landuse: Not	Specified		
		1 1			SIT	English.	addiction of	Turn like	THE COUNTY OF	A. J. P. Com.
Site #: 610 Site Length (m): 2	200	. 4275	1 9.622500.60226 M 9.622497.60244				y: C172 y Name: Tritor		H/TT Date: tal Consultants (*	2002/09/20 Геггасе)
	To See	71.F		CI	HAN	NEL		985 Finds	The Table	
No Vis.Ch.:	Intermitt	ent:		Avg	Min	Max	#		Avg Min	Max #
Dewatered:	Tri	bs.: C	hannel Width (m):	0.98	0.9	1.200	6	Gradient %	6: 6.00 4	8 4
Stage: Low			Wetted Width (m):		0.9	1.200	6 F	Pool Depth (m): 0.20 0.100	0.300 6
Med ✓		В	ankfull Depth (m):	0.50	0.5	0.5	3	Tur	bidity.: Turbic	Low
High	Te	emp (C): 5	pH: 7.4		С	onductivity	y: 40		Moderate	= =
3019	13.85	98881	1940	MOR	PHO	LOGY	Spar State	190°	West and	10 14 200
Bed Material: Do		Cobble Gravels	D95 (cm): 50 D (cm): 10		1	Bars: Non	✓ Side	Diagonal	Mid-channe	Span Braid
Channel Pattern: Coupling:			Islands: No	ne		RBANCE	O1 B1	B2 B3	D1 D2	D3
Confinement:	Occasio	nally Confine			C1	C2 C3	C4 C5	S1 S2	2 S3 S4	S5
Morphology:	RP	Riffle Pool								
					OVE	R	19.57	23		35
Total Cover: Abund	dant		Type:	SWD	LWD	В	U	DP	OV IV	1
LWD: Few			Amount:	1	T	т	T	S	D N	1
LWD Dist: Evenl	y Distrib	uted	Location: P/S/O:	<	V			VOOV		FSZ:
Right Bank: S	hape: V	- shape Text	ure: Fines V Gr	avel 🗸	Cobble	Boulde	Rock	Manmade	T c	rown Closure
	hape: V	A. A. A. S. C.		avel 🗸 (Boulde		Manmade	1	1-20%
Right Bank: Rip	.Veg: St	and the second	12.1	e: Shrub/l	-	ge	(-)			
Left Bank: Rip	.Veg:		Stag	e: Shrub/l	herb sta	ge	Instream Veg	g: None 🗸	Algae Moss	☐ Vascular ☐
	*	7 1 1 1	ST 4158.3	- 3	FISH	id was	* 1 1			The Control
Court of the court	pture ethod	Number of Events	Length fished (m)	Total Time		Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
610	EF	1	200	180 se	ec	800	NFC	0		

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

3.0

093L.035

3275

)/e		di Salah				PR	OJE	CT	196		雅之)	7.50		iu i			
Proje Stream Nan Project Watersh	ne (gaz		KLEY RI	IVER						00		Project C	Code:			5270		
Short Investor	1 10	25 WA	(A)	(V 0) 2	3.50	50000	WAT	ERS	HED	10 m		15 M (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					3	27.5
Gazetted Name							-			Lo	cal Nam	e:			***			
Watershed Code: ILP Map#	: 093L.0	035	11	000-0000 LP#: 32			000-000- ap #; 09			ID#: 50	0610	Rea	ch #:	3	.0	Site	e #: 610)
Field UTM (Z.E.N): GIS UTM (Z.E.N):				N	Method:	GPU			R	Site Lo			Metho	od: MAF	,	Access:	Н	
Dat	te: 200	02/09/20	7	Time: 10:	:15		Agency:	C172	(Crew: .	JH/TT		Fis	h Crd?:	V	Inco	mplete:	
	10	V C		1 2/1 - 1		1162	CH	ANN	EL	Paris 5	34	7 18		Figure	9 n =		dC	
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg			Gadie	ent % A	Atd /	Avg
Channel Width (m):	T	0.90	1.20	1.00	0.90	0.90	1.00					0.98	M	ethod I:	4.0	7.0	_	6.00
Wetted Width (m):	T	0.90	1.20	1.20	1.10	1.00	1.00	3				1.07	Me	thod II:	5.0	8.0	С	
Pool Depth (m):	Т	0.10	0.10	0.20	0.30	0.30	0.20					0.20	No.	Vis.Ch.	.П	Intermitte	ot:	
Wb Depth:	.5	.5	.5	Avg	: 0.50		Method:	T	St	lage: L	ПМ	JH		Dw.		Trib	_	
COVER			Tota	al: A								•						
Type:	SWI	D LW		ВТ	U	DP	,	ov T	IV	1 CR	OWN CI	OSURE						
Amount:	_	1	_	T	T	S		D	N	1		-20%						
Loc: P/S/O:	V				V		V			INS	TREAM	VEG:	N .	A	мп	V		
RIP:		G C	с	В	R 🗍 A						RIP		G 🗸	c \square	В	R		
							W	ATE	R						i ji	2	. 2	
EMS:										R	eq #:							
Temp:							od: T4			C	ond.; 40					Method	d: S3	
pH:							od: P2			Т	urb.: T	M		C	1	Method	: GE	
Flood Signs:	None						od: GE											
w/ 1).	gi/mir	A A A				M	ORP	HOL	OGY	(B)(1-1)		The second				ease api	100	O'TY
Bed Material:		Dominant	t: C		Subdom	i: G				01	B1	B2	B3 D	1 D	2 D3	3		
D95:	50.0	D (cm)	: 10.00		Morph	: RP		ISTURE	ANCE						ILE			
Pattern:	IR							INDICA"		C1	C2	C3	C4 C	5 S	sz	2 \$3	S4	S5
Islands:	N									F	П	TI		TI	11	ПП		П
Coupling:	PC														111			
Confinement: FSZ:								В	ars:	N	SID		DIAG) M	ID_	SPAN		BR
GEORGE TIS		-	X- X+		24-	HAI	BITA	TQL	ALL	TY	71"		3 5	7.00	GO.	to etc.	(Table)	200
Name	علانة	- 1 2		200			1000000	的思想		, T.	n 100			A.	無人		Salara.	
OverWinter Habita	it	Potenti	al in plu	nge pool	ls.					comment					-	_	_	
Rearing Habitat				ed with s		ols.											-	
Spawning Habitat		Low - a	ssociate	ed with s	mall pat	ches of	gravel.											-31
period made the	-	100	5 9	11 8			PH	ото	S	-A1		The same		,				2.91
Photo	F	oc Lg		D	ir							Commer	nts		*			
R: 62 F: 02A		STD		ı		Upst	tream ph	noto of h	abitat fou	und withi	n site.							_ 14
R: 62 F: 03A	5	STD		T.)	Dow	nstream	photo o	f habitat	found w	ithin site							

Morice North Planning Area

Reach # ILP Map #

ILP#

Site

3.0

093L.035

3275

Section	Comments
SITE CARD	Additional gradients taken: 10, 12.
CHANNEL	Sheet flow also observed downstream in sections.
CHANNEL	NFC
CHANNEL	Gradient and cascade / pool habitat downstream may block upstream access. Gradients downstream look to be >20% from hel

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

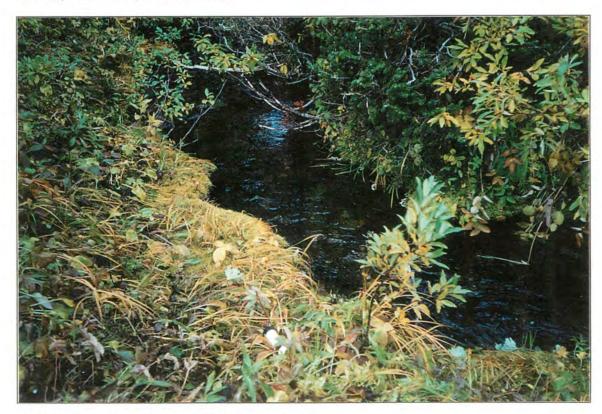
3.0

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0.7		4-3-		Y 1831		WAI	FERB	שטו		THIS CALL				1 - 2 1 1 1 1 1 1	
	zetted Name								Loca	al:					
F					0000-0000-000-										
			000000-000	00-00000-0	0000-0000-000-	000-000-0	000-000-	-000							
W	aterbody ID:					ILP M	ap #: 09	93L.03	5		ILP#;	3275 I	Reach #: 3	3 -	
	Project ID:	5270							Lake/Str	eam:	S	Lake Fro	om Date:		
F	ish Permit #:	14	5269	Date:	2002/09/20	To:	2002/0	9/20	Age	ency:	C172 (Crew: JH/TT	Resar	mple:	
3,		. 13	11 July 19	A 18		SITE	/ ME	TH(O D	E CONTRACTOR OF THE PARTY OF TH		1 The land	4.6		
Site#	NID Map	NID	NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment												
610	093L.035	506	10		GF	U EF	1	5	40	C					
		No.			Α.	GEA	R SE	TTI	NGS	6.2		沙二郎高岭		Emil Estil	
Site#	MTD/NO	H/P	Date In	Time	In Date Out	Time (Out		(Asserted by Section 1)		Co	mment			
610	EF 1	1	2002/09/2	20 10:15	5 2002/09/2	0 10:3	5								
	100	1		C.	ELECTR	DFISH	ER :	SPE	CIFI	CA	TIONS	1 SUTE	10 m 3 - 1	19-1/5	
Site#	MTD/N	10	H/P	Encl	Sec	Length	T W	idth	Volt	age	Frequency	Pulse	Make	Mode	
610	EF	1	1	0	180	200.0		1.0	80	00	1	5	SMITH	12B	
		¥	-40-		Jess en Shortane	FISH	SILM	M A	DV	-11	12-11 M. 193. 194		ROOT		
Site#	MTD/N	10	H/P	Coories T		2500 357	Alt - All set	1000	The state of		Fish Ass			//= _6	
	MIDIN	U	D/P	Species	Stage /	lge T	Total #	Lgtr	(Min/Ma	ax)	FishAct		Comment		



Site #610, Upstream photo of habitat found within site. Roll #62, Frame #02A, Date: 2002/09/20



Site #610, Downstream photo of habitat found within site. Roll #62, Frame #03A, Date: 2002/09/20

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0

093L.035 3252

STREAM REFERENCING **Gazetted Name:** Local Name: ILP Map #: 093L.035 ILP#: 3252 REACH Reach #: 1.0 UTM(Zone/East/North): 9.623059.6022629 Sample Type: Biased Length (km): .91 Coupling: Partially Couple Magnitude: BGC Zone: ESSF Gradient (%): 4.7 Confinement: Occasionally Conf Order: 1 Open water: Absent US Elev (m): 1485 Riparian Vegetation: Shrubs Islands: NONE Bars: None ✓ Side ☐ Diagonal ☐ Mid-channel ☐ Span ☐ Braid ☐ Landuse: Not Specified SITE Site #: 611 Field UTM 9.622333.6022666 Agency: C172 Crew: JH/TT Date: 2002/09/20 Site Length (m): 100 GIS UTM 9.622381.6022636 Agency Name: Triton Environmental Consultants (Terrace) CHANNEL No Vis.Ch.: Intermittent: Min Avg Max # Avg Min Max # Dewatered: Channel Width (m): Tribs.: 1.02 0.600 1.5 6 22.00 Gradient %: 21 23 2 Wetted Width (m): 0.93 0.5 1.3 6 Pool Depth (m): 0.17 0.100 0.300 6 Stage: Low Bankfull Depth (m): 0.53 0.5 0.6 3 Med V Low Turbidity.: Turbid High Temp (C): 5 pH: 7.9 Conductivity: 50 Moderate Clear V MORPHOLOGY Bed Material: Dominant: Boulders D95 (cm): 90.00 Side Bars: Non 🗸 Diagonal Mid-channel Span Subdominant: Cobble D (cm): 30.00 Braid ___ Channel Pattern: Sinuous Islands: None DISTURBANCE **INDICATORS** Coupling: Partially Coupled Confinement: Occasionally Confine C3 C4 C5 S1 S2 **S4 S3 S5** Morphology: CP Cascade Pool COVER Total Cover: Abundant Type: SWD LWD В DP U OV IV Amount S D N LWD: None Location: P/S/O: 1 LWD Dist: Not Applicable ~ ~ FSZ: Right Bank: Shape: Undercut Texture: Fines Gravel Cobble Boulder Rock Manmade Crown Closure Left Bank: Shape: Undercut Texture: Fines Gravel Cobble Boulder Rock Manmade 1-20% Right Bank: Rip.Veg: Shrubs Stage: Shrub/herb stage Left Bank: Rip.Veg: Stage: Shrub/herb stage Instream Veg: None ☐ Algae ☐ Moss ✔ Vascular [FISH Site Number Capture Number of Length fished Total Voltage Species Total Minimum Maximum Method **Events** (m) Time Fish Length (mm) Length (mm)

EF

100

270 sec

800

NFC

0

Morice North Planning Area

ILP Map # Reach #

ILP#

Site

1.0

093L.035

3252

	F .	The state of		447 T		ST STATE	PR	OJE	CT,								
Proj Stream Na Project Waters	me (gaz	.): BUL		VER						00	-	Project C	ode:			5270	
	74		V.			- Je	WAT	ERS	HED	N 70			. 3			1	
Gazetted Name Watershed Code ILP Mape Field UTM (Z.E.N	e: 000-00 #: 093L.0	35	ı	LP#: 32		NID M	000-000- ap #: 09			Lo ID #: 50			ch#:	1. hod: MAP	.0	Site	⊭:611 H
GIS UTM (Z.E.N): 9.6223	81.6022	2636						R	ef. Name	e:						
Da	ate: 200	2/09/20		Time: 10	:45		Agency:	C172	C	rew:	JH/TT		F	ish Crd?:	V	Incor	mplete:
- 1 - J. 1 - J. 1 - 1	1 1/2	and the same		12.	4.13		CH	ANN	EL		W		100	(= 1) () () () ()			
	Mtd	width	width	width	width	width	width	width	width	width	width	Avg			Gadie	ent % M	ftd Avg
Channel Width (m)		0.80	0.60	1.20	1.50	0.90	1.10					1.02	I N	Method I:	21.0		C 22.00
Wetted Width (m)		0.80	0.50	1.30	1.20	0.80	1.00	1.5				0.93	M	lethod II:	7		С
Pool Depth (m)	: Т	0.10	0.30	0.30	0.10	0.10	0.10		1	horse.		0.17	N	o Vis.Ch.:	П	Intermitter	nt: []
Wb Depth	: .6	.5	.5	Avg	g: 0.53		Method:	T	St	age: L	ПМ	VH		Dw:		Tribs	
COVER			Tota	al: A								2					
Туре	: SW) L	WD T	В	U	DF		ov T	IV	1 CR	OWN CL	OSURE					
Amount	t: T	_	Т	T	T	S	_	D	N	1		-20%					
Loc: P/S/C): V				V	V				INS	TREAM	VEG:	N	ADI	V	V	
	e: F P:S S:SHR	G ✓	c 🗸	В	R 🗌 A						RIP	-	G	c 🗸	В	R 🗌 A	
				300		100	W	ATE	R	ALC: N	W.	-1-	12 3				
EMS Temp pH Flood Signs	: 5 : 7.9					Metho	od: T4 od: P2 od: GE			С	eq #: ond.: 50 furb.: T	M	□ t	□ c [Method Method	
		7				7 - N	ORF	HOL	OGY			L. 1-1-1	377	12 3/10	25 %		
Bed Material D95 Pattern Islands Coupling Confinement FSZ	: 90.0 : SI : N : PC : OC	Dominar D (cm	nt: B n): 30.00		Subdom			DISTURE INDICA B		01 C1	B1 C2 SID	C3 (D1 D2 C5 S1	ПГ		\$4 \$5
r 1-10	1 - 24		200	A TOP IN	1/1/2	HA	BITA	TQL	JALI	Y		W.		- 3-10-	1500		
Name		1	-31151		and the same	He hade	19 TE	10	Frank II	ommen	ts			- H-			
OverWinter Habit	tat	Limite	d by grad	dient, ac	cess, co	arse sub	strates.										
Rearing Habita		-	d by grad														
Spawning Habita	at	Limite	d by grad	dient, ac	cess, co	arse sub						4.00					
	-150	1.211.		- Cale of			PH	ОТО	S				PE TIE	. Zanie			
Photo		oc Lg)ir	- 160					_	Commer	nts				
R: 62 F: 04A		TD			U	_			in high g								
R: 62 F: 05A		STD			D	Dow	nstream	photo v	vithin hig	n gradie	nt sectio	n.		3			

Morice North Planning Area

Reach # ILI

ILP Map #

ILP#

Site

1.0

093L.035

-		è	
6	1	1	
	۰		

Jul 1/10, - 21	COMMENTS
Section	Comments
CHANNEL	NFC
CHANNEL	>20% at confluence to downstream trib, 20% / 40 m.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

1.0

093L.035

10		W. 1977	Sap.	100	Treatment of		14	WA	TER	BOD	Y					a = 1	
	963190	Name:									Loc	al:					
F	7000						0000-000 - 00 0000-000-00										
W		dy ID:	000-0	/UUUUU-UI	0000-00000	-0000-1	0000-000-00			093L.03	35		ILP#:	3252	Read	ch#: 1	4
			5270								Lake/St	ream:	S	said"	e From D		
F	ish Pe	rmit #:	14	5269	Date	: 200	2/09/20	То	: 2002	2/09/20	Ag	ency:	C172	Crew: Jh	√ /T	Resan	nple:
3	E T	41 · · · · · · · · · · · · · · · · · · ·		11 -246	16 4 mm	· · · · · · · · · · · · · · · · · · ·	S	ITE	/ M	ETH	O D	36 v-1	The Second	all and			
Site#	NID	Мар	NID	# 1	JTM:Zone/E	ast/No	orth/Mthd	MTD	/NO	Temp	Cond	Turt	bid		Comm	ent	
611	093	L.035	506	11			GPU	EF	1	5	50	С					
113		Mr 11800	33		العالم مادا	11-12	Α. (GEA	R S	ETT	INGS	My H	15 136.7		The state of	21	300
Site#	MTI	D/NO	H/P	Date	In Time	ln	Date Out	Time	Out				C	omment			
611	EF	1	1	2002/09			2002/09/20	11:	200								
			-	115	С.	ELE	CTRO	FIS	HER	SPI	ECIFI	CA	TIONS	1		12 1/25	二二次的
Site#		MTD/N	0	H/P	Encl		Sec L	ength		Width	Vol	tage	Frequency	Puls	e	Make	Mode
611					270						800 5			SMITH	12B		
-		E 11	* al	1		-	F	ISH	SU	MMA	RY	3	7 J. W.	57/900			1 197
Site#	te# MTD/NO H/P Species Stage				ge Age	e	Total #	# Lg	gth (Min/Max)		FishAct		Co	mment	1		
611	EF		1	1	NFC				0								



Site #611, Upstream photo within high gradient section. Roll #62, Frame #04A, Date: 2002/09/20



Site #611, Downstream photo within high gradient section. Roll #62, Frame #05A, Date: 2002/09/20

FDIS Reach Card

Morice North Planning Area

Reach #

ILP Map #

ILP#

4.0

093L.035

		PROJEC		2000年 1000年
Stream Name (gaz.):	RFFHI within the Morice For BULKLEY RIVER 460-000000-00000-00000-0		Project Code	e: 5270
		WATERSH	ED	
ILP Map #: 093L.035 Air Photos	000-000000-00000-00000-0 ILP #: 3247	000-0000-000-000-000-000- Reach #: 4.0 Names	000-000 NID Map #: 093L.0	UTM(Zone/East/North/Method)
#: 0	Gaz.: Local:			9.622571.6022948 GIS Sample Type: B Wetland:
		SURVEY IN	IFO	
Date: 2002/08/27		Agency: C172		Crew: SG/SH
		ATTRIBUT	ES	
Length (km): .52 DS Elev.: 1439 US Elev: 1474	Gradient: 6.73 Order: 2 Magnitude: 3 BGC Zone: ESSI	Setting: Open water: Confinement: Coupling:	MP DISTURBANCE P INDICATOR C1 C2 C1 C2 C2 C2 C2 C2 C3 C4	
Valley Flat: N Active Floodplain Visible: Channel Pattern: SI	C/D: Est. Width:	Ва	Islands: N Ins: N SIDE Di Mass Movement: L Riparian Veg.: NS	IAG MID SPAN Exposed/Eroded: NS Landuse: NS

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

4.0

093L.035

1-11			1000			1977	2.44		WA	TER	BOD	Y	4					175
Gaz	zetted	Name:										Loc	al:					
F	roject	Code:	460-0	000000-0	0-0000	00000-00	000-000-0	000-00	00-000-	-000-00	0-0							
	WS	Code:	000-0	000000-0	00000-0	00000-00	000-0000-0	000-00	00-000-	-000-00	0-000							
W	/aterbo	ody ID:							ILP N	Map #:	093L.03	35		ILP#:	3247	Reach #:	4 -	
	Proj	ect ID:	5270								Parka har	Lake/St	ream:	S	Lake	From Date:		
F	ish Pe	rmit#:	14	5269		Date:	2002/09/2	0	То	: 2002	2/09/20	Ag	ency:	C172	Crew: JH/	П	Resamp	le:
	1 18	1000	NO.	W.V.	* 1		craft in	S	ITE	/ M	ETH	OD						10 Jr.
Site#	NID	Мар	NID	NID# UTM:Zone/East/North/Mthd MTD/NO Temp Cond Turbid Comment														
612	093	L.035	506	12				GPU	EF	1	5	50	C	11 5,				
9	e.		100			3 77 7		Α.	GEA	R S	ETT	INGS		of Arthur of Ac	Barrier Vie			111-34
Site#	MTI	D/NO	H/P	Date	In	Time In	Date	Out	Time	Out				C	omment			
612	EF	1	1	2002/0	9/20	11:15	2002/0	9/20	11:	45			- 1					
1	1==					C. E	LECT	RO	FIS	HER	SPI	CIFI	CA	TIONS	1111		A CONTRACTOR OF THE PARTY OF TH	7
Site#		MTD/N	Ю	H/P		Encl	Sec	1	Length		Width	Vol	tage	Frequency	Pulse	Ma	ke	Mode
612	12 EF 1 1 0 367							120.0		1.5	7	00	1	5	SMI		12B	
100		17 8	115				× × 11/4-1	F	ISH	SU	MMA	RY	1	W = 1115	11/2//		- 132	
Site#		MTD/N	Ю	H/P	Spe	cies	Stage	Ag	e	Total :	# Lg	Lgth (Min/Max)		FishAct		Comme	ent	
612	EF		1	1	NF	C				0								

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0 093L.035

		TE MES	STR	EAMR	EFEREN	CING	Washing.	: 30.		
Gazetted Na	me:				L	ocal Name:				-
Watershed C	ode: 000-000	000-00000-000	000-0000-0000-00	0-000-000-0	00-000-000	ILP	Map #: 093L.0	35	ILP#:	3182
18 July 1-7	() Value3		here was	RE	ACH	Mind of the		4	W. Yan	1.1 M
Reach #: 2. Length (km): Gradient (%): US Elev (m): Bars: None	: .92 : 14.2 : 1588	Co Confin	JTM(Zone/East/N upling: Partially C ement: Frequently slands: NONE Mid-channel	ouple	Magnitude: Order: 2		os	BGC Zon	e: AT	ed
174			The state of the s	S	ITE	186		7. 1/6.	F 72-1	
Site #: Site Length			1 9.624834.60245 M 9.624857.60245	7.1		y: C172 y Name: Tritor				
		inn Mills	1 X 44	CHA	NNEL	44-31	Frank E		ursa si	31 (0)
No Vis.Ch.:[Dewatered:[Stage: Low[Tr	ibs.:	hannel Width (m): Wetted Width (m):	Avg M 2.48 2 2.37 2	2 2.900	# 6 6 F	Gradient %	: 3.50	3 4	# 2 6
Med [High [~	B emp (C): 5	ankfull Depth (m): pH: 7.4	0.33 0.	Conductivit		Turt	Sample Type: B BGC Zone: AT Open water: Absent H/TT Date: 200 tal Consultants (Terrac Avg Min Ma 6: 3.50 3 4 0): 0.53 0.300 0 thidity:: Turbid Moderate Mid-channel D1 D2 D3 2 S3 S4 S5 OV IV T N Crown Algae Moss V		Low Clear 🗸
11100			Paradin as	MORPI	HOLOGY	(V) = 11 -		e gar pr		
Channel Pa Coup Confiner	Subdominant: ttern: Irregula pling: Partially	Boulders r, Wandering	D95 (cm): 90 D (cm): 30 Islands: No	.00 ne DIS	Bars: Non	O1 B1	B2 B3 S1 S2	D1 D2	D3	Span 🗌 Braid 🗍
10P31V			18 19 19 N	CO	VER					
Total Cover: N LWD: N LWD Dist: I		e	Type: Amount: Location: P/S/O:		WD B N S	U	DP D		☐ FS	5Z: 🔲
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: U Shape: U Rip.Veg: S Rip.Veg:	ndercut Text	ure: Fines Gra Stag			er Rock	Manmade Manmade Manmade Manmade Manmade	Algae Mo		osure)% scular [
Ale and		25 115		T FI	SH			7 1 1 1 1 1 1	ie Militariello	1/2 3
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time	Voltage	Species	Total Fish		10 11 11 11 11 11	cimum th (mm)
613	EF	1	220	270 sec	800	NFC	0			

Morice North Planning Area

Reach #

ILP Map #

613

2.0 093L.035 3182

			, ,				PR	OJE					, i''' i''		200		
Proje Stream Nar Project Watersh	ne (gaz.	.): BULI		VER						00	F	Project C	ode:			5270	
	-61%			April 1	THE THE		WAT	ERS	HED	yets (10000	100	15%		
Gazetted Name Watershed Code ILP Map# Field UTM (Z.E.N) GIS UTM (Z.E.N)	: 000-00 : 093L.0 : 9.6248	35 34.6024 57.6024	II 591 541	_P #: 31	182 Method:	NID M GPU	000-000- lap #: 09:	3L.035	N Re	Loc ID #: 50 Site Loc ef. Name	g: 220 e:			2.0 nd: MAP nh Crd?:	· ·	Site #: 61: Access: H	
transfer and the	. 50"	1- 6116	XIEN W		11/10/20	EW	СН	ANN	FL		-2.16	55 16 3		1		TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Mtd	width	width	width	width	width	width	width	width	width	width	Aug		Г	Gadier	nt % Mtd	Ava
Channel Width (m):		2.00	2.20	2.30	2.80	2.70	2.90	Width	width	WIGHT	widui	Avg 2.48	I Me		3.0		3.50
Wetted Width (m):		2.20	2.00	2.00	2.80	2.50	2.70					2.37		thod II:	5.0	C C	3.30
Pool Depth (m):		0.50	0.70	0.30	0.50	0.60	0.60				-	0.53	Me	alou II.			
T doi Bopai (m).	1500	0.00	0.70	0.00	0.00	0.00	0.00					0.55	No	Vis.Ch.:		ntermittent:	
Wb Depth:	.4	.3	.3	Avo	g: 0.33		Method:	T	St	age: L	ПМ	VH	7	Dw:		Tribs.:	
COVER				al: M													
Туре	_		VD	В	U	DF	_	OV	IV		OWN CL						
Amount		- 1	V	S	T	D		T	N	0		0%					
Loc: P/S/O					V		V			INS	TREAM	VEG:	NV	A M	1	/ 🗍	
Texture RIP STG	Lane	G ✓	c 🗸	В	R 🗍 A						Texture RIP STG	_	G 🔽	C 🔽 I	В	R A	
" = 100			S CONTRACTOR	E 184			W	ATE	R	01 10	RUS	e para	This	13347	-1		
EMS:										R	eq #:						
Temp:	5					Meth	od: T4				ond.: 50					Method: S3	
pH:	7.4					Meth	od: P2						-	- 0 -			
Flood Signs:	None					Meth	od: GE			- 1	urb.: T	M		C		Method: GE	
and the second										1000							
					10,145	152.5	NORF	HOL	OGY	27-	- 4	-1			1 M	10 m	5-3
Bed Material:	1	Dominan	t: C		Subdon	n: B				01	B1	B2	B3 D	1 D2	D3	1	
D95:	90.0	D (cm): 30.00		Morph	n: CP		DISTURE	MANCE								
Pattern:	10							INDICA		C1	C2	СЗ	C4 C	5 S1	S2	S3 S4	S5
Islands									dail con		02	C3	C4 C	0 01	32	33 34	30
Coupling:																	
Confinement:																	
FSZ:								В	ars:	NV	SID	E	DIAG	MI	D	SPAN	BR
1 02.										(2)			_				
1 1			FAL	\$ - Feb.		HA	BITA	TQL	JALI	TY	呼ぎ			Fight.	1 TE	700年第7日	Wiles
Name			and a	2.00	4				C	ommen	ts	+ 10		11/1			
OverWinter Habit	at	Poten	tial in de	ep pools	present												
Rearing Habitat		-	iated wit		-					_					-		
Spawning Habita	et	Assoc	iated wit	h small p	pockets	of grave	ls.								-		
	36/1				- W	711-3		ОТО	S	S	150	The same	1	11.50	- 33		
Photo	E.	oc Lg		n n	Dir	H. West					7	Commo	ota	- 1	40		
R: 62 F: 06A		STD	-		U	Ulas	tream n	hoto of h	abitat wi	thin eite		Comme	110				
R: 62 F: 07A		STD			D	_			of habitat				_				
					_	1001	ou can	prioto t									

Morice North Planning Area

Reach # ILP Map # ILP # Site 2.0 093L.035 3182 613

The state of the s	COMMENTS
Section	Comments
CHANNEL	NFC
CHANNEL	Numerous falls, cascades and gradient barriers observed downstream - Reach 1 at confluence has numerous falls >5 m in height.

Morice North Planning Area

Material Code: 000 000000 00000 0000

Reach #

ILP Map #

ILP#

Watershed Code:

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

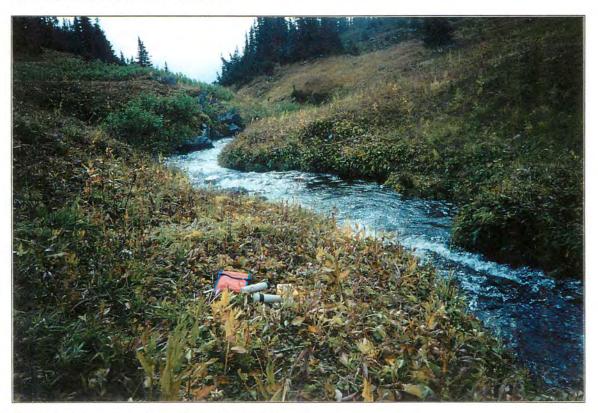
2.0

093L.035

- 18		- 16	1999					WA:	TERI	3 O D	Y	. 64				SF. 33		
Gaz	zette	d Nam	e:								Loca	al:						
F	roje	ct Cod	e: 460-	0-00000	0000-0000	0-0000-	-0000-000-00	0-000-	000-000	0-0								
	W	S Cod	e: 000-	0-00000	0000-0000	0-0000-	-0000-000-00	0-000-	000-000	-000								
W	/ater	oody II	D:					ILP M	tap #: 0	93L.03	5		ILP#:	3182	Reach #:	2 .		
	Pr	oject II	D: 5270	V							Lake/Str	eam:	S	Lake	From Date:			
F	ish F	ermit :	#: 14	5269	Da	te: 200	2/09/20	To:	2002/	09/20	Age	ency:	C172	Crew: JH	тт	Resamp	ole:	
COS		H/	1				S	ITE	I M	ETH	O D		大学性情况	N N E DE	The same of the sa	w.fr = 10		
Site#	NI	D Map	NIC)#	UTM:Zone/	East/No	orth/Mthd	MTD/NO Temp Cond Turbid Comment										
613	09	3L.035	506	13			GPU	EF	1	5	50	С						
0.3		MJ -				15326	A. (GEA	RSI	TT	NGS			de mil		II P	F-1975	
Site#	M	TD/NO	H/P	Date	In Tim	e In	Date Out	Time	Out	SSP-MANNO!	122 2 3 2 8 2		C	omment			12 // 25	
613	EF	1	1	2002/0	9/20 12	:00	2002/09/20	12:2	20					2007-1000-0				
1119		31.00		7-30	C.	EL	ECTRO	FISH	HER	SPE	CIFI	CA	TIONS		多可烷二			
Site#		MTD	NO	H/P	Encl	d ha	Sec L	ength	V	Vidth	Volt	age	Frequency	Pulse	Ma	ke	Model	
613	E	F	1	1	1 0 270		270	220.0		2.5	800		1	5	SMI		12B	
	2 8	101			The same	YI TON	FI	SH	SUN	MA	RY	2	31571, 907	100	75	100		
Site#		MTD	NO	H/P	Species	Sta	ge Age	9	Total #	Lgt	h (Min/Ma	ax)	FishAct		Comme	nt	- Ilbani	
613	E	E	- 1	- 1	NFC				0	1		-						



Site #613, Upstream photo of habitat within site. Roll #62, Frame #06A, Date: 2002/09/20



Site #613, Downstream photo of habitat within site. Roll #62, Frame #07A, Date: 2002/09/20

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0

093L.035 3184

Mary Samuel	7 - 10		STR	EAM	REF	EREN	CING				15.0	当年シ
Gazetted Name:						L	ocal Name:					
Watershed Code:	000-000	000-00000-000	Coupling: Partially Couple Confinement: Confined Islands: NONE Islands:	P#:	3184							
				100	REA	CH	119		3/8/	No.	1: 00	C 418
Reach #: 1.0		ı	JTM(Zone/East/N	orth): 9.6	624858	3.6023666			Sample	Type:	Biase	ed
Length (km): .42		Co	upling: Partially C	ouple	Ma	agnitude:	4		BGC	Zone:	AT	
Gradient (%): 21.4	1	Confin	ement: Confined			Order: 3	3		Open wa	iter: Abs	ent	
US Elev (m): 152	1	Is	slands: NONE		Ri	parian Veg	etation: Shrub	os				
Bars: None 🗸	Side	Diagonal	Mid-channel	Span		Braid 🗌	Landuse: Not	Specified				
E-100 ()				F. A.	SIT	E	9,3%(F)		app.	1975	9 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	150 th
Site #: 614 Site Length (m):2	200			1.5								9/20
15-16-55				C	HAN	NEL	avalle .	Marin Carlo	100			Set 1
No Vis.Ch.:	Intermitt	ent:		Avg	Min	Max	#		Avg	Min	Max	#
Dewatered:	Tri	bs.: C	hannel Width (m):		1.200	1.9	6	Gradient %	7.50	6	9	2
Stage: Low			Wetted Width (m):	1.35	1	1.600	6 F	Pool Depth (m)	0.32	0.200	Biase AT sent 2002/0 Ferrace) Max 9 0.400 S S S S F S F S W Vas	6
Med 🗸		В	ankfull Depth (m):	0.40	0.4	0.4	3	Turt	idity.:	Turbid		Low
High [Te	emp (C): 5	pH: 7.4			Conductivit	y: 50				=	Clear
	50/2		itali isang	MOR	PHO	DLOGY		Yan Time	10 340	(a) in the	2/20	*
	ominant:					Bars: Non	✓ Side	Diagonal [Mid	-channel		pan 🔲
Channel Pattern: Coupling:			Islands: Nor	ne			O1 B1	B2 B3	D1	D2 D	3	
Confinement	: Occasio	nally Confine			C1	C2 C3	C4 C5	S1 S2	S3	S4	S5	
Morphology:	CP CP	Cascade Pool										
	1			(COV	ER	10. 3 0 5 0	"	TIE.			
Total Cover: Mode	erate		Type:	SWD	LW	D B	U	DP 0	OV	IV		
LWD: None			Amount:	N	N	D	S	N	T	N	Biase AT Osent :: 2002/08 Terrace) Max 9 0 0.400 dd ce (
LWD Dist: Not A			Location: P/S/O:				V					z: 🗍
Right Bank: S	hape: Ur	ndercut Text	ure: Fines Gr	Volen	Cobble	☐ Boulde	Pock C	Manmada	7	Ce		cuco
	hape: Ur			-					1	Oit		
	p.Veg: Sh			- Card		territoria de la constantina della constantina d	. [] () (0.00)	1	-1.1			
	p.Veg:						Instream Ve	g: None	Algae	Moss	✓ Vas	cular [
	-	- Sign	- ne -		FIS	H	market in	(A ₁ , -v)	- F N= 1	10.7	12	- 2
	apture ethod	Number of Events	Length fished (m)	Tota Time	1	10 C - 10	Species	Total Fish	Minin	0.00000		mum h (mm)
C44	cuiou	4	000	240	-	000	NEC	1.3	Lengu	Vanis,	Longi	

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

1.0 093L.035 3184 614

Project Nar Stream Name (ga: Project Watershed Co	z.): BULKLEY R				in the second	Project Co	ode:	5270
1 2 1 2 1 2 1 2 1 2 2	E The State of		WA	TERSH	ED		(A) (如如如此)	Sales Marie
Gazetted Name:						ocal Name:	7371 5/1	
Watershed Code: 000-0	00-00000-0000	000-0000-0000-00	0-000-000-0	00-000-000				
ILP Map#: 093L.	035	ILP#: 3184	NID Map #:	093L.035	NID #: 5	0614 Read	ch#: 1.0	Site #: 614
Field UTM (Z.E.N): 9.624	863.6023670	Method: 0	SPU		Site L	_g: 200	Method: MAP	Access: H
GIS UTM (Z.E.N): 9.624	889.6023700				Ref. Nam			
D-1 00	20/20/20	T	9 2 2 2	0.00		1	2,000 F	
Date: 20	02/09/20	Time: 12:30		cy: C172	Crew:	JH/11	Fish Crd?:	Incomplete:
			C	HANNE				
Mtd	width width		width wid		vidth width		Ga	dient % Mtd Avg
Channel Width (m): T	1.20 1.70	1.80 1.90	1.80 1.2			1.60	Method I: 9.0	
Wetted Width (m): T Pool Depth (m): T	1.00 1.50 0.30 0.30	1.40 1.60	1.60 1.0			1.35	Method II:	С
Poor Deptir (iii).	0.30 0.30	0.40 0.30	0.20 0.4	0 1		0.32	No Vis.Ch.:	Intermittent:
Wb Depth: .4	.4 .4	Avg: 0.40	Metho	d: T	Stage: L	MOH	Dw:	Tribs.:
COVER	Tot	tal: M					4	
Type: SW		BU	I DP I	ov I	- C	ROWN CLOSURE		
Amount: N		D S	N		100	0%		
Loc: P/S/O:					2		N A A M	V C
RIP: S STG: SHR		B R A				RIP: S STG: SHR	G ✓ C □ B	RA
	CLERKE	= 1/2		WATER	S			
EMS:						Req #:		
Temp: 5			Method:		C	Cond.: 50		Method: S3
pH: 7.4 Flood Signs: None			Method: I Method: G		7	Turb.: T M	LUC	Method: GE
Flood Signs. None			70170301					
Mary Interest of the 12th			MOF	RPHOLO	G Y	I was halow.	2016年,1日本于17日	第一生 "你
Bed Material:	Dominant: B	Subdom:	С		01	B1 B2 E	33 D1 D2	D3
D95: 60.0	D (cm): 20.00	Morph:	CP	DISTURBAN	ICE			
Pattern: SI				INDICATO	RS C1	C2 C3 C	C4 C5 S1	S2 S3 S4 S5
Islands: N								
Coupling: PC								
Confinement: OC								
FSZ:				Bars	N	SIDE I	DIAG MID	SPAN BR
SIMPSON'S ALL STATE			UADIT	AT OUA	LITY		TV-E-S-S-MAR	Section 2015
		7 3 (10), 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	DAPII	AT QUA	APP PART C			
Name OverWinter Habitat	None observe	d in site			Commer	nts		
Rearing Habitat	None observe	th small pools and	cover					
Spawning Habitat		arse angular substr			_			
	3126 320			HOTOS			- 1/8 SIST(4 P)	
Photo F	oc Lg	Dir	T			Commen	ts	
	STD	D	Downstre	am photo tow	ards helicopte			
R: 62 F: 09A	STD	U	_	with clino at e				

Morice North Planning Area

Reach #

ILP Map#

ILP#

Site 614

1.0

093L.035

	COMMENTS
Section	Comments
CHANNEL	Numerous barriers observed downstream.
CHANNEL	NFC

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

1.0

093L.035

×1.	# \		-20	T T	1		-1.5		WAT	FER	BOD	Y				1 - M					
Ga	zetted	Name										Loc	al:								
F	Projec	t Code:	460-0	000000-0	00000-	-00000-0	000-0000-	000-00	0-000-0	00-00	0-0										
	WS	Code:	000-0	000000-0	00000-	-00000-0	000-0000-	000-00	0-000-0	00-00	0-000										
V	Vaterb	ody ID:							ILP M	ap#:	093L.03	35		ILP#:	3184	Read	ch #:	1			
	Pro	ject ID:	5270									Lake/St	ream:	S	Lak	e From D	Date:				
Fish Permit #: 145269 Date: 2002/09/20						20	To:	2002	/09/20	Ag	ency;	C172	Crew: Jh	JH/TT Resample:							
ALC: Y	1.4%		+100	in C	\$ 15 m	1141	and the sales	S	ITE	/ M	ETH	O D	251			New York		W. 100			
Site#	NIE) Map	NID	NID# UTM:Zone/East/North/Mthd MTD/NO Temp Con								Cond	ond Turbid Comment								
614	093	L.035	506	14				GPU	EF	1	5	50	С								
2000	201		- 10	31/2				Α. 🗈	GEA	R S	ETT	INGS	MAN	1000000							
Site#	MT	D/NO	H/P	Date	In	Time I	n Date	Out	Time (Out	Comment										
614	EF	1	1	2002/0	9/20	12:30	2002/	09/20	12:5	0											
T 70	1.11					C. E	LECT	RO	FISH	IER	SPI	CIF	CA	TIONS	12 12 1	done to		489			
Site#		MTD/N	10	H/P	-10	Encl	Sec	I	ength		Width	Voltage		Frequency	y Puls	se	Make	Model			
614	EF	8	1	1		0	210	-	200.0		1.5	8	00	1	5			12B			
n+	112 6 3	14		0 0		av- ba		and F	Leu	CIII		DV	A C P	Ga Vester ma		- CSAN (-01)	ROOT				
72-0	15		100		218	1	10.1	P.	ISH	200	STERES	F	S.F.W	100	E A						
Site#	_	MTD/N	10	H/P	-	ecies	Stage	Ag	e .	Total #	Lg	th (Min/M	ax)	FishAct		Co	mment				
614	EF		11	1	NF	-C				0	1										



Site #614, Downstream photo towards helicopter. Roll #62, Frame #08A, Date: 2002/09/20



Site #614, Upstream with clino at edge of frame. Roll #62, Frame #09A, Date: 2002/09/20

Morice North Planning Area

Reach # ILP Map #

ILP#

5.0

093L.025

	Y - Y		re strike'r sen'	10	SIT	É 📜	In the same		taxavis	15/05						
Site #:			M 9.625727.60246 M 9.625704.60247	-	Agency: C172 Crew: JH/TT Date: 2002/09/20 Agency Name: Triton Environmental Consultants (Terrace)											
1 11 11	S 100 100		mala la la	C	HAN	NEL	38			Punish.	3 WA					
No Vis.Ch.:	Intermi	ittent:		Avg	Min	Max	#	Avg Min Ma								
Dewatered:	1	ribs.:	channel Width (m):	4.27	3.400	5.6	6	Gradient %	: 18.75	16 22	4					
Stage: Low			Wetted Width (m):	2.98	2.700	3.400	6	Pool Depth (m)	0.45 0.	300 0.60	0 6					
Med		E	Bankfull Depth (m):	0.23	0.2	0.3	3	Turt	oidity.: Tu	rbid	Low					
High		Temp (C): 6	pH: 7,2		C	onductivit	y: 30	Total	Mode		Clear 🗸					
* My 4 =	r-fig-			MOF	RPHO	LOGY		DUWES STORY	1 = 1 M. P.	400	885					
Bed Material	Dominant	t: Boulders	D95 (cm): 100	0.00	7,	Bars: Non	✓ Side	e Diagonal	Mid-cha	nnel 🗍	Span 🗍					
											Braid					
	nent: Freque	ently Confined Cascade Pool			C1 COVE	C2 C3	3 C4	C5 S1 S2	\$3 S	4 S5	147.5					
Total Cover:	Abundant		Type:	SWD	LWD	В	Ιυ	I DP I (ov I iv							
1140	reconstruction of		Amount:	T	T	S	T									
LWD:	vone Vot Applicab	ole I	Location: P/S/O:		V						SZ:					
Right Bank: Left Bank:	Shape: \	/- shape Text	ture: Fines Gra	avel 🗸	Cobble	✓ Boulde	Rock	Manmade _		Crown Cl	losure					
Right Bank:	Rip.Veg: S			-	Cobble herb sta		Rock	Manmade	J.		0%					
Left Bank:	Rip.Veg:	Siliubs			herb sta	0	Instream	Veg: None 🗸	Algae M	oss 🗌 Va	scular [
M. Samuel	15 3000	11/1/1969			FISI	1 3/- 4	10000		0.0	1 5 5	726					
Site Number	Capture Method	Number of Events	Length fished (m)	Tota		Voltage	Specie	s Total Fish	Minimum Length (mr	1.1	ximum gth (mm)					
352	EF	1	250	348 s	ec	600	NFC	0			N. Ville A.					
						000	141.0									

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

5.0

093L.025

3601

	cel				1600		PR	OJE	CT	WIFE.		d with		317		2 7%		367		
Proje Stream Nan Project Watersh		ct (tribs to			00	Project Code:					5270									
		STERE	170 100	(37.5		7 - 7 - 7	WAT	ERS	HED			in the	a to pay	***						
Gazetted Name:		19,00								Lo	cal Nam	e:								
Watershed Code:	: 000-00	00000-00	000-000	000-000	-0000-00	00-000-0	000-000	000-000)											
ILP Map#:	: 093L.0	025	-	LP#: 36	601	NID M	ap #: 09	3L.035	N	ID#: 50	0615	Rea	ch #:		5.0		Site #: 6	615		
Field UTM (Z.E.N):	9.6257	27.6024	666	٨	Method:	GPU				Site L	g: 200		Me	thod: MA	P	Acce	ess: H			
GIS UTM (Z.E.N):	9.6257	704.6024	769						Re	ef. Name	e:									
Dat	e. 200	2/09/20		Time: 13	.00		Agency:	C172		rew:	IH/TT			Fish Crd?			Incomple	oto:		
1 30 X	0. 200	12103120		Time. 10	.00		Mill CO.			New.	01411	Tellie .	V-1900	ristr Ciu:			ricompie	5te		
Sec. 20, 101/1012		1		N 5. 18	41		terrorium	ANN		30.00					- 1100	300		7		
Channel Width (m):	Mtd	width 3.40	width 3.50	width 3.40	width 5.00	width	width 5.60	width	width	width	width	Avg 4.27	-	Method I	_	18.0	Mtd	Avg 18.75		
Wetted Width (m):	T	2.70	2.80	2.90	3.40	3.00	3.10					2.98	4 ⊢	Method II	-	16.0	C	10.75		
Pool Depth (m):	Т	0.50	0.40	0.60	0.40	0.50	0.30					0.45	-	mound in	1 10.0	10.0		1		
								1			770	400		No Vis.Ch	ı.: 🔲		nittent:			
Wb Depth:	.2	.2	.3	Avg	g: 0.23		Method:	1	St	age: L	М	VH		Dv	w: 🔲		Tribs.:	1		
COVER			Tota	al: A																
Type:	ND	В	U	DF		OV	IV	CR	OWN C	OSURE										
Amount:		E	T	S	Т	D	32	N	N	0		0%								
Loc: P/S/O:	V				V	1				INS	TREAM	VEG:	NA	A	M	V				
STG:	SHR											: SHR								
	-44				/#10 m	100	W	ATE	R			March 1				2.25	1			
EMS:											eq #:					2	01710			
Temp: pH:						101-101	od: T4			С	Cond.: 30					Method: S3				
Flood Signs:		debris					od: GE			1	urb.: T	M		ГС	~	Met	thod: G	E		
	31111111					23477														
			03/-		20/2	N	ORP	HOL	OGY		15.	13120		ne Man	-13	- X C.		2.70		
Bed Material:	1	Dominar	nt: B		Subdom	: C				01	B1	B2 E	B3	D1 C)2 D)3				
D95:	100.0	D (cm): 40.00		Morph	: CP	1	ISTURE	BANCE	Ш										
Pattern:	SI							INDICA	TORS	C1	C2	C3 (C4	C5 S	S1 S	2 S	3 S4	4 S5		
Islands:																				
Coupling:														,						
Confinement:								В	ars:	N	SID	FIT I	DIAG		MID	SPA	N	BR		
FSZ:								Ü	ars.	NV	OID		DIAG	Ш.	VIIIO	SIA	44	DIN		
		1 2	Me il	Mary Mary	(11725-415) 5	HA	BITA	T Q	JALI	ΓY	166	100	1		2000			1		
Name									C	ommen	ts									
OverWinter Habita	at	_	tial in plu	-																
Rearing Habitat	-	and the second second	0.00		and cove		ad by -	ndia-t-	and	an enter										
Spawning Habitat	100	000	A	-10		ws, iimit		OTO	and coan	se subst	rates.	1 11	330	10.003.00				*		
Photo T	- 10		N 2 6		Participation of the Control	31.00	F&	0,0	Fore	1694 SE	- 104		_		NOT:		1	2.3		
Photo 62 F: 10A		oc Lg)ir U	Has	tream of	note of h	abitat wi	thin eite		Commer	nts		-					
62 F: 11A		STD	-		D	_			of habitat				_		_					

Morice North Planning Area

ILP Map #

ILP#

Site

5.0

Reach #

093L.025

3601

	COMMENTS
Section	Comments
CHANNEL	Fish can switchback their way up through high gradient section.
CHANNEL	Extremely flashy system with unstable banks and channel.
CHANNEL	DV captured ~100 - 120 mm.

Morice North Planning Area

Reach #

ILP Map #

ILP#

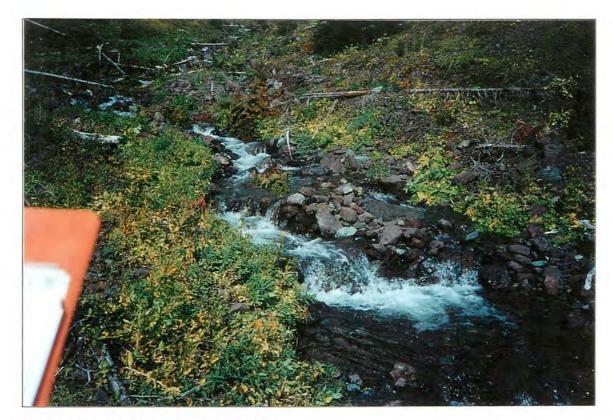
Watershed Code:

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

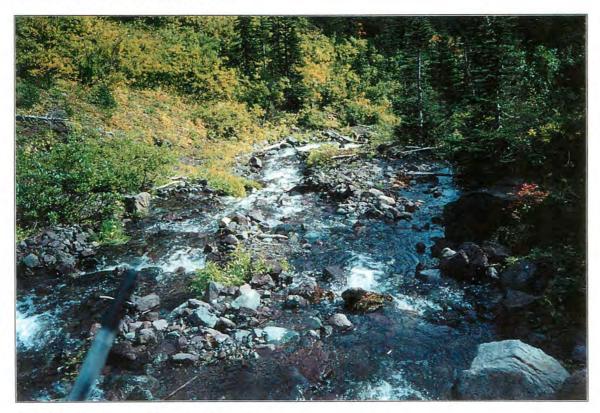
5.0

093L.025

												000 00	0 000		5.0		093L.023	3601
100	3	that being	10 272	100	200	11 - 11		5.4	WA	TEF	RBOD	Y	19	W. P.	5h	MIN C	-440 kills	
(Pro		le: 460 le: 000 D:	9-000000- 9-000000-					0-000	-000-0				ILI	P#:	3601 Lake F	Reach #:	5 -
	Fish	Permit	#: 1	45269		Date: 20	02/09/20	0	To	: 200	2/09/20	Ag	gency	: C172	_	ew: JH/T		mple:
	18		15	10	(L)	AND THE	1 12-26	S	ITE	/ N	ETH	OD	200	15 15 15	9918	1/5/1 NO.	700 TO THE REAL PROPERTY.	
Site#		NID Map		D#	UTM:Zor	ne/East/N	North/Mth	nd	MTD	/NO T	Temp	Cond	Tu	rbid		0	Comment	
615	_	093L.03	_	615				GPU	EF	1	6	30		С			on the second	_
352	- (93L.03	5 20	352				GPU	EF	1	4.5	70		С				
	- 47		SAN I					4. (SEA	RS	ETT	INGS	in the same	182 15		177		
Site#		MTD/NC	H/P	Date	In T	ime In	Date (Out	Time	Out			0.000		Com	ment		EU-SAND
352	_	EF 1	1	2002/0		13:08	2002/0		14:									
615	1	EF 1	1	2002/0		13:00	2002/0		13:									
		118/1		Mar. D		E.	ECT	ROI	FIS	HER	SPE	CIF	ICA	TION	IS			
Site#	-	MTD		H/P		ncl	Sec	_	ength		Width		Itage		uency	Pulse	Make	Mode
352	_	EF	1	1)	348		250.0		3.2	1 6	00	-1-	50	6	SMITH	128
615		EF	1	1			480	- 2	200.0		4.0	6	00		1	5	SMITH	12B
970	1.19	- 64		4. 10. 11		JE y	1 1 1 1 E	FI	SH	SU	MMA	RY	= 1	= 000	PH 915	2 3 10	NOO!	
Site#		MTD	NO	H/P	Specie	s St	age	Age	The second	Total :	# Lat	h (Min/N	lax)	FishAc	t 1		Comment	*/1
352	410	EF	1	1	NFC	-1				0	1		-				Comment	
615		EF	1	1	DV	J				6	10	00	120	R				
VO:	1.1	200				70	The state of the s	NI	DU	AL	FISH	DA	TA	THE TO	ELE HA		7900	
ite#	M	TD/NO	H/P	Species	Length	Weigh	Sex	Mat	-	Ag Str/Smp	je ol#/Age	Vch#		enetic	Roll #	Frame#	Com	ment
615	EF	1	1	DV	100		U	U	1									_
615	EF	1	1	DV	110		U	U		0					1			
615	EF	1	1	DV	100		U	U		1					-0-			
615	EF	1	1	DV	100		U	U		2	-	-				- 4		
615	EF	1	1	DV	120	Ex	U	U	10					10-1				
615	EF	1	1	DV	110		U	U					17			- 1		



Site #615, Upstream photo of habitat within site. Roll #62, Frame #10A, Date: 2002/09/20



Site #615, Downstream photo of habitat within site. Roll #62, Frame #11A, Date: 2002/09/20

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0 093L.035

	- Jeluin	34 23 n	SIR	EAM	KEF	EKEN	CING	3006 0				
Gazetted Na							ocal Name:					
watersned C	ode: 000-00	0000-00000-00	000-0000-0000-00				ILP	Map #: 093L.0	35	ILI	P #:	3178
		1500)		REA	CH	18 46		-	- Maria	1	
Reach #: 2. Length (km): Gradient (%): US Elev (m): Bars: None	: .97 : 19.8 : 1412	Confin	JTM(Zone/East/Noupling: Partially Comment: Confined slands: NONE		Ma Rij	gnitude: Order:	4 3 getation: Mixe Landuse: No	d C/D	Sample 1 BGC Z Open wate	one: I		ed
	57 V2-5 E.V	in the	25 PENS		SIT		NO THE R	W-18-71	ew to the	47 N 37	1000	"
Site #: Site Length	5. 5. 5. 7		M 9.625975.60227 M 9.625939.60227			Agenc	y: C172 cy Name: Trito	Crew: JF n Environment	I/TT al Consult	4.7	2002/09 errace)	9/20
18524		PER NAME	24 May =	C	HAN	NEL	Mark to	10 5 6 8 8	5.000		1105	S 8 30
No Vis.Ch.:[Dewatered:[Intermit Tr	ribs.:	hannel Width (m): Wetted Width (m):	Avg 1.51 1.47	Min 1.3	Max 1.8	# 8 8	Gradient %	3.755	Min 13 0.300	Max 16 0.5	3
Stage: Low [Med [High [ankfull Depth (m): pH: 7.2	0.17	0.1	0.2 Conductivit	3		oidity.:	Turbid derate		Low_Clear ✓
47 3, -4, 1				MOR	PHC	LOGY	144	The state of the s	107	3-35	ENV	(A) - (II)
Bed Material:	: Dominant: Subdominant:		D95 (cm): 80. D (cm): 30.			Bars: Nor	Side [Diagonal	Mid-c	hannel		pan raid
Coup	ittern: Sinuou pling: Couple ment: Freque blogy: CP		Islands: Nor	ne		RBANCE CATORS C2 C:	O1 B1	B2 B3 5 S1 S2	D1 D	2 D S4	S5	
- 1850 W.	Party Str		STATE	Bingle C	OV	ER	17/1/20 210	(F) - H	- 200	market i	64	1
Total Cover: / LWD: I LWD Dist: 0	Few		Type: Amount: Location: P/S/O:	SWD S	LWI	B T	U T	DP C	DV T	IV N	FSZ	z: 🗌
Right Bank: Left Bank: Right Bank: Left Bank:	Shape: U Shape: U Rip.Veg: M Rip.Veg:	Indercut Text	ure: Fines Gra	avel 🗸 (avel 🗸 (e: Mature e: Mature	Cobble forest	✓ Boulde		Manmade Manmade g: None] Algae [own Clos 1-20	0%
			inc. 2. 0.		FIS	H	= 1/4/11	35. F. W.	1-10-11	N		7
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time		Voltage	Species	Total Fish	Minimu Length (imum h (mm)
616	EF	_ 1	150	530 se	ec	600	NFC	0				

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

2.0 093L.035 3178 616 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name: Local Name: ILP Map#: 093L.035 ILP#: 3178 NID #: 50616 NID Map #: 093L.035 Reach #: 2.0 Site #: 616 Field UTM (Z.E.N): 9.625975.6022775 Method: GPU Site Lg: 150 Method: MAP Access: H GIS UTM (Z.E.N): 9.625939.6022718 Ref. Name: Date: 2002/09/20 Time: 14:10 Agency: C172 Crew: JH/TT Fish Crd?: ~ Incomplete: CHANNEL Mtd width width width width width width width Avg Gadient % Avg width width width Mtd Channel Width (m): 1.40 1.60 1.50 1.50 1.60 1.80 1.30 1.40 1.40 1.40 1.51 Method I: 16.0 13.0 C 14.33 Wetted Width (m): 1.40 1.60 1.30 1.50 1.30 1.80 1.50 1.40 1.47 Method II: 14.0 С Pool Depth (m): 0.30 0.30 0.40 0.40 0.30 0.50 0.40 0.37 No Vis.Ch.: Intermittent: Wb Depth: .2 .1 Avg: 0.17 Method: T Stage: L M H Dw: Tribs.: COVER Total: A SWD LWD CROWN CLOSURE В Type: 11 DP OV IV Amount S D 1-20% N Loc: P/S/O INSTREAM VEG: N A M V LWD: F DIST: C LB SHP: U Texture: F G G C B B R A Texture: F G C C B R A RIP: M RIP: M STG: MF STG: MF WATER EMS: Reg #: Temp: 6 Method: T4 Cond.: 110 Method: S3 pH: 7.2 Method: P2 Method: GE Turb.: T M L C Flood Signs: Rafted debris Method: GE MORPHOLOGY 01 **B1** D₁ D2 D3 Bed Material: Dominant: C Subdom: G D95: 80.0 D (cm): 30.00 Morph: CP DISTURBANCE **INDICATORS** Pattern: SI C3 C5 S1 S2 S3 **S4 S5** Islands: N Coupling: CO Confinement: FC BR Bars: SIDE DIAG MID SPAN FSZ: HABITAT QUALITY Name Comments OverWinter Habitat Limited potential - pools observed in site appear to be too shallow. Rearing Habitat Low - associated with small pools, D95, LWD and cover. Spawning Habitat Low - associated with gravel patches and cover - limited by gradient / access. PHOTOS Photo Foc Lg Dir Comments F: 62 12A STD U Upstream photo of habitat within site.

Downstream photo of habitat within site.

14A

STD

D

Morice North Planning Area

Reach # ILP Map # ILP # Site 2.0 093L.035 3178 616

	COMMENTS
Section	Comments
CHANNEL	S6
CHANNEL	NFC NFC
CHANNEL	Gradients in excess of 20% observed downstream during reach 1 and 2 Recci.

Morice North Planning Area

Watershed Code:

Reach #

ILP Map #

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

2.0

093L.035

1.5	405		H)	"" "Re-56			WAT	ERE	3 O D	Y	11				
		: 460-				0-0000-000-00 0-0000-000-00				Loca	al:				
N	/aterbody ID Project ID				10.304.4		ILP Ma	p#: 0	93L.03	5 Lake/Str	eam:	ILP#:	3178 F		2 -
F	ish Permit#	: 14	5269	Da	ite: 2	002/09/20	To:	2002/0	09/20	Age	ency:	C172	Crew: JH/TT	Resar	nple:
1				74.7	0.5	S	ITE.	ME	TH	O D	20				
Site#	NID Map	NID	#	UTM:Zone	/East/	North/Mthd	MTD/N	OT	emp	Cond	Turb	id	Co	mment	198
616	093L.035	506	16			GPU	EF	1	6	110	С				
1518	2.0	-01		35 5,11 1	1	Α.	GEAF	SE	TT	NGS			E 1000		100
Site#	MTD/NO	H/P	Date	In Tin	ne In	Date Out	Time C	Out			ALC: NO.	Co	mment		
616	EF 1	1	2002/0	9/20 14	:10	2002/09/20	15:00								
		10	4	C	EL	ECTRO	FISH	ER.	SPE	CIFI	CA:	TIONS	於原蘭		= 15
Site#	MTD/I	10	H/P	End	1	Sec L	ength	V	Vidth	Volt	age	Frequency	Pulse	Make	Mode
616	EF 1 1 0 530						150.0 1.5 600 I							SMITH ROOT	12B
1000		1 - Si			198	F.	ISH	SUM	MA	RY	50 11 L	San Sale	M.S.A.		200
Site#	MTD/I	O	H/P	Species	S	tage Age	e T	otal #	Lgt	h (Min/Ma	ax)	FishAct		Comment	
616	EF I	- 1	4	NFC				0	_		-				



Site #616, Upstream photo of habitat within site. Roll #62, Frame #12A, Date: 2002/09/20



Site #616, Downstream photo of habitat within site. Roll #62, Frame #14A, Date: 2002/09/20

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

ILP#

2.0

093L.026

	Note the	Park Way	STR	EAMRE	FEREN	CING	- V.A.		
Gazetted Na Watershed (0000-00000-00	000-0000-0000-00	0-000-000-00		ocal Name:	Map #: 0931	026 II	LP#: 3697
	v- = 1%	/2	HAY NABBURY S	RE	ACH				remark all he
Reach #: 2 Length (km) Gradient (%) US Elev (m) Bars: None	: 2.64 : 4.6 : 874	Confir	UTM(Zone/East/Noupling: Partially Conement: Frequently slands: NONE	couple I y Confin	Magnitude: Order: 3			Sample Type: BGC Zone: Open water: Ab	
1088311th	1.11.37	4-26-2	17、劉紫芒二年	SI	TE	102000	The art of	11, 25 miles	斯·哈莱克斯
Site #			M 9.631721.60174 M 9.631660.60174	22		y: C172 cy Name: Trito		JH/DT Date: ental Consultants (*	2002/09/27 Геггасе)
- 11-12 12			A John Ship	CHA	NNEL	* 1		N. Stanffeld	7/30-70
No Vis.Ch.: Dewatered: Stage: Low Med High	□ тг У □	ibs.:	channel Width (m): Wetted Width (m): lankfull Depth (m): pH: 7.4	Avg Min 4.30 3.20 1.27 0.80 0.27 0.2	00 5.6	3	Gradient Pool Depth (THE PERSON SERVICES	Low
	W		4-1- T	MORPH	OLOGY		G. 10 1 1 1 1 1 1	7/6/19/5/	1227 - AC
Channel Pa Cou Confine	Subdominant: attern: Sinuou pling: Partially ment: Occasio plogy: RP	S	D (cm): 30	ne DIS	TURBANCE DICATORS C2 C3	O1 B1	B2 B3	D1 D2 S2 S3 S4	Braid D3 S5
18				CO	VER	2 - 1	- Lieb	3 AVIII -	The Mile
Total Cover: LWD: LWD Dist: Right Bank:	Few			SWD L	WD B	U T	DP S Manmade		FSZ:
Left Bank: Right Bank: Left Bank:	Shape: U Rip.Veg: M Rip.Veg:		Stag	e: Mature fore e: Pole-saplin	st g stage	Instream Ve	Manmade	Algae Moss	1-20% Vascular
NID Man T	NID IT	a l ust l	4.6		FEATU			a Saturd	
The state of the s	NID Typ 60012 CV Bad CV 1 m	e Hgt 1.6 perch - high pr	Method Lg T 20 iority.	Method GE	Photo R: 63 F;	and the last of th	AirP	hoto #:	UTM (Z/E/N 9.631601.601)
	L STORY	7/2/10		FI	SH			.53)(2)(1)	100
Site Number	Capture Method	Number of Events	Length fished (m)	Total Time	Voltage	Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
624	EF	1	100	580 sec	600	DV	10	100	110

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

2.0 093L.026 3697 624 PROJECT Project Name: RFFHI within the Morice Forest District (tribs to Morice R.) Stream Name (gaz.): BULKLEY RIVER Project Code: 5270 WATERSHED Gazetted Name: Local Name: ILP Map#: 093L.026 ILP#: 3697 NID Map #: 093L.026 NID #: 50624 Reach # 2.0 Site #: 624 Field UTM (Z.E.N): 9.631721.6017430 Method: GPU Site Lg: 100 Method: GE Access: V2 GIS UTM (Z.E.N): 9.631660.6017457 Ref. Name: Date: 2002/09/27 Time: 14:00 Agency: C172 Crew: JH/DT ~ Fish Crd?: Incomplete: CHANNEL Mtd width Avg Gadient % Mtd Avg Channel Width (m): 3.40 3.20 5.00 4.70 3.90 5.60 4.30 Method I: 4.0 C 4.50 Wetted Width (m) 0.80 1.30 1.50 1.00 1.90 1.10 1.27 Method II: C Pool Depth (m): 0.30 0.70 0.40 0.20 0.30 0.50 0.40 No Vis.Ch.: Intermittent: Wb Depth: .3 .3 .2 Avg: 0.27 Method: T Stage: L M M H Dw: Tribs.: COVER Total: A SWD LWD Type: CROWN CLOSURE B U DP OV IV Amount S T S D N 1-20% Loc: P/S/O: INSTREAM VEG: N A M V LWD: F DIST: C LB SHP: U Texture: F G G C B R A Texture: F G G C B R A RIP: D RIP: M STG: PS STG: MF WATER EMS: Reg #: Temp: 7 Method: T4 Method: S3 pH: 7.4 Method: P2 Turb.: T M L C Method: GE Flood Signs: Rafted debris Method: GE MORPHOLOGY 01 **B1 B2** D1 D2 D3 Bed Material: Dominant: C Subdom: B D95: 70.0 D (cm): 30.00 Morph: RP DISTURBANCE **INDICATORS** Pattern: SI C1 C2 C3 C4 C5 **S1 S2** S3 **S5** Islands: N Coupling: PC Confinement: OC Bars: SIDE DIAG SPAN BR FSZ: FEATURES NID Map Method Type Hgt Lg Method Photo AirPhoto UTM (Z/E/N) 093L.026 60012 CV 20 GE R: 63 F: 17 9.631601.6017491 GIS Comments: Bad CV 1 m perch - high priority. HABITAT QUALITY Name Comments OverWinter Habitat Potential in a few pools. Rearing Habitat Moderate - associated with small shallow pools and abundant cover. Spawning Habitat Low / Moderate - associated with small gravel patches limited by coarse substrates / lack of pools.

Morice North Planning Area

Reach #

2.0

ILP Map #

093L.026

ILP# 3697 Site 624

	36		in judge			PHOTOS
	Ph	oto		Foc Lg	Dir	Comments
R:	63	F:	17	STD	U	Culvert at road crossing perched 1 m (high priority).
R:	63	F:	18	STD	U	Upstream photo of habitat within site.
R:	63	F:	19	STD	D	Downstream photo of habitat within site.
		FS	Vice and	10 THE T	The Marie	COMMENTS

1	Photo			Foc Lg	Dir	Comments
R: 63	F	: 1	7	STD	U	Culvert at road crossing perched 1 m (high priority).
R: 63	F	1	3	STD	U	Upstream photo of habitat within site.
R: 63	F	1	9	STD	D	Downstream photo of habitat within site.
			Territoria de la compansión de la compan	WATER OF		COMMENTS
	5	Section				Comments
	CH	IANN	L	DV capture	d 100-110 mm.	

Morice North Planning Area

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Reach # ILP Map # ILP#

Watershed Code:

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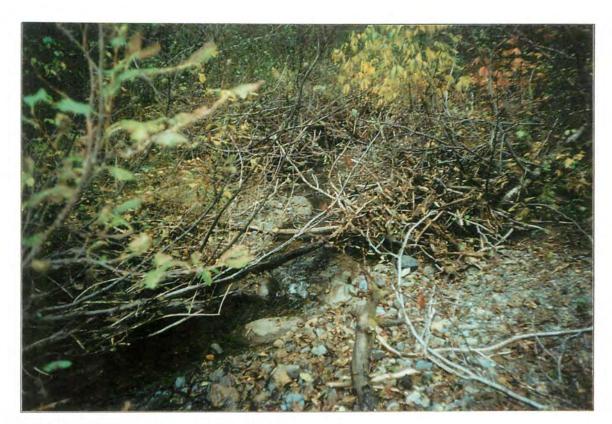
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	Fish	Permit #	: 14	15269	D	ate: 2002	2/09/27		To: 20	002/09	9/27	Age	ency: (0172	Cre	w: JH/DT	Resa	mple:
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ite#	M	TD/NO	H/P	Species	Length	Weight	Sex	Mat		Age		Vch#		netic	Roll #	Frame#	Com	ment
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624	EF	1	1	DV	110		U	U										



Site #624, Culvert at road crossing perched 1 m (high priority). Roll #63, Frame #17, Date: 2002/09/27



Site #624, Upstream photo of habitat within site. Roll #63, Frame #18, Date: 2002/09/27



Site #624, Downstream photo of habitat within site. Roll #63, Frame #19, Date: 2002/09/27

Morice North Planning Area

Reach #

ILP Map #

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FDIS Reach Card

Morice North Planning Area

Reach#

ILP Map #

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	The West of the State of the St	PROJEC	Tolonia		
Stream Name (gaz.):	RFFHI within the Morice Fores BULKLEY RIVER 460-000000-00000-00000-000			Project Code: 5	5270
		WATERSH	ED		
Reach Watershed Code: ILP Map #: 093L.025 Air Photos INE: BCC98341 #: 0	000-000000-00000-00000-0000 ILP#: 3623 Gaz.: Local:	0-0000-000-000-000- Reach #: 1.0 Names	000-000	NID Map #: 093L.025	NID #: 1195: UTM(Zone/East/North/Method) 9.618631.6016157
D. A GOOGLES	254	SURVEY IN	IFO .		Emanate Color
Date: 2002/08/27		Agency: C172			Crew: SG/SH
		ATTRIBUT	ES		
Length (km): 1.13 DS Elev.: 1115 US Elev: 1120	Gradient: 0.44 Order: 1 Magnitude: 1 BGC Zone: ESSF	Setting: Open water: Confinement: Coupling:	VF A OC DC	DISTURBANCE INDICATORS C1 C2	O1 B1 B2 B3 D1 D2 D3 C3 C4 C5 S1 S2 S3 S4 S5
Valley Flat: B Active Floodplain Visible: Channel Pattern: SI	C/D: C Est. Width:	Ва		Islands: N N SIDE DIAG Movement: L	MID SPAN BE

Morice North Planning Area

ILP Map # Reach #

Watershed Code:

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ILP# 3623

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Site#	# MTD/NO H/P Speci					Species	S	tage	Age	e T	Total	# L	gth (Min	/Max)	FishAct		Comm	ent	
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901	MT		2 1 NFC						()									
901	MT		3 1 NFC			NFC					()							

Morice North Planning Area

Reach # ILP Map #

plus 23 not measured

ILP#

000-000000-00000-00000-0000-000-000-000-000-000-000 Watershed Code: 2.0 093L.025 3667 WATERBODY Gazetted Name: Local Waterbody ID: ILP Map #: 093L.025 ILP#: 3667 Reach #: Project ID: 5270 Lake/Stream: L Lake From Date: Fish Permit #: 145269 Date: 2002/10/01 To: 2002/10/02 Agency: C172 Crew: SH/DT Resample: SITE / METHOD Site# NID Map NID# UTM:Zone/East/North/Mthd MTD/NO Temp Turbid Comment 902 093L.025 20902 621174 | 6016463 | GPU | MT 5 902 093L.025 20902 9 621174 6016463 GPU MT 4 902 093L.025 20902 9 621174 6016463 GPU MT 3 902 093L.025 20902 9 621174 6016463 GPU MT 2 902 093L.025 20902 9 621174 6016463 GPU MT 1 A. GEAR SETTINGS Site# MTD/NO H/P Date Out | Time Out Date In Time In Comment 902 MT 1 1 2002/10/01 12:30 2002/10/02 10:45 902 MT 2 1 2002/10/01 12:30 2002/10/02 10:45 902 MT 3 12:30 1 2002/10/01 2002/10/02 10:45 902 MT 4 12:30 2002/10/01 2002/10/02 10:45 1 2002/10/01 902 MT 5 1 12:30 2002/10/02 10:45 B. NET/TRAP SPECIFICATIONS MTD/NO. H/P Net Type Length Depth Mesh Set Habitat 902 MT 0.8 BT 1 902 MT 2 0.7 BT 1 902 MT 3 8.0 BT L 902 MT 4 0.8 BT L 902 MT 5 0.7 BT 1 FISH SUMMARY Site# MTD/NO H/P Species Stage Total # Lgth (Min/Max) FishAct Comment 902 MT LKC 1 .1 37 92 R 902 MT 2 1 LKC J 3 73 80 R 902 MT 3 LKC 1 J 73 1 73 R MT 902 4 1 LKC .1 50 72 108 R 902 MT 5 LKC 1 .1 10 57 83 R 1 northwestern salamander nute INDIVIDUAL FISH DATA Site# MTD/NO H/P Species Length Mat Weight Sex Age Genetic Roll # Frame# Comment Str/Smpl#/Age Str/Smpl# 902 MT LKC 78 1 1 U U 902 MT LKC 78 1 1 U U 902 MT 89 1 1 LKC U U 902 MT LKC 72 U 1 1 U 902 MT LKC 71 U 1 1 U 902 MT LKC 74 1 1 U U 902 MT LKC 80 U 1 1 U 902 MT 1 LKC 76 U 1 U 902 MT LKC 89 1 1 U U LKC 86 902 MT 1 U U 1 LKC 74 902 MT 1 U U 1 902 MT 1 LKC 76 U 1 U 902 MT 1 1 LKC 92 U U

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Morice North Planning Area

Reach #

ILP Map #

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Watershed Code:

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Site#	LMT	D/NO	H/P	Species	Length	Weight	Sex	Mat	J U A	2007	ISH	DA Vch#				Te "	A CARLON
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902	MT	4	1	LKC	80		U	U									
902	MT	4	1	LKC	73		U	U									
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902	MT	4	1	LKC	95		U	U									
902	MT	4	1	LKC	88		U	U									
902	MT	4	1	LKC	72		U	U									
902	MT	4	- 1	LKC	70		U	U						-			
902	MT	4	1	LKC	83		U	U									
902	MT	4	- 1	LKC	87		U	U									
902	MT	4	1	LKC	108		U	U	5.00								
902	MT	4	1	LKC	88		U	U	-								plus 35 not measured
902	MT	5	1	LKC	76	1	U	U									
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902	MT	5	1	LKC	72		U	U									
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Morice North Planning Area

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ILP Map # Reach #

ILP#

Watershed Code:

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-81	11				No.	31			WA	TEF	RBOL	Y		100			
-		Code	460-				0000-0000-0					Loc	al:				
W	/aterbo		5270						ILP	Мар #:	093L.0	25 Lake/St	ream:	ILP#:		Reach #: se From Date:	3 -
F	ish Pe	rmit #:	14	5269		Date:	2002/10/0	1	To	200	2/10/02	Ag	ency:	C172	Crew: S	H/DT	Resample:
174	300	77	1			- 泰州		S	ITE	-/ N	METH	OD	DATE:	Fig. W	树 梅花。	A. 2 M. M. M.	SV (principle)
Site#	NID	Мар	NIC	#	UTM	:Zone/Ea	st/North/Mi	hd	MTE	O/NO	Temp	Cond	Turi	bid		Comment	
903	0931	025	209	03 9	16	325504	6016082	GPU	MT	3							
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Site#	MTE	O/NO	H/P	Date	In	Time	n Date	Out	Time	Out		TENTO AND SELECTION	-		Comment		**********
903	GN	1	1	2002/1	0/01	11:48	2002/1	0/02	09	30							
903	MT	1	1	2002/1	0/01	12:00	2002/1	0/02	09:	45							
903	MT	2	1	2002/1	0/01	12:00	2002/1	0/02	09:	45							
903	MT	3	1	2002/1	0/01	12:00	2002/1	0/02	09:	45							
- (J.)	1.5	29, I	7-1			-14-7	B. NE	TIT	RAF	SF	ECI	FICA	TIO	NS	Table of		
Site #			M	TD/NO.			H/P	IN	let Ty	pe I	Len	gth	De	pth	Mesh	Set	Habita
903		G	N		1		1		FL		92	_		.0	ST	BT	L
903		N	IT		1		1	1					0	.5		BT	L
903		N	IT		2		1		30				0	.6		BT	L
903		N	IT		3		1	13					0	.5		BT	L
11/8	- 7	1		FIE I B		11/2		SAF!	ISH	SU	MMA	RY	100	- X	N. Sections		THE WAY
Site#	1	MTD/N	0	H/P	,	ecies	Stage	Age	9	Total	# Lg	th (Min/M	ax)	FishAct		Comme	nt
903	GN		1	1	N	FC				0	FE						
903	MT		1_	1		FC				0	95			12-11			
903	MT		2	1_	_	FC				0		- 1					
903	MT		3	1	N	FC				0							
	- 47				1		10 mm m		CO	MM	ENT	\$					M= 44
	Sec	tion				-						Comm	ents				
- 1	VATER	POD		AIF	0 1	till and the	verts caugi	44.									

Morice North Planning Area

Reach #

ILP Map #

11 04

Watershed Code:

4.0

093L.025

1000		T.	100			1236			WA	TEF	BOI	Y	1	3/13		典法		
	100	Code	460-0		0000-000							Loc	al:					
v	Vaterbo			000000-0	0000-000	000-000	0-0000-0	00-00			00-000 093L.0	25		LP#:	3605	Reach #	4 -	
			5270						,	iiup ii.	OUOL.		ream: L	Ci ii.		From Date:		
F	ish Pe	rmit #:	14	5269	D	ate: 2	002/10/0	1	Т	: 200	2/10/02	Ag	ency: C172	2	Crew: SH/	DT	Resample:	
100	11.5		- Della	6 8	V			S	ITE	1 1	LETE	OD			THE POST	11 2	240	X E
Site#	NID	Мар	NID	#	UTM:Zone	/East/	North/Mt	hd	MTE	/NO	Temp	Cond	Turbid			Comment		
904	093	L.035	209	04 9	62271	8 6	018840	GPU	MT	5								
904	093	L.035	209	04 9	62271	8 6	018840	GPU	MT	4								
904	093	L.035	209	04 9	62271	8 6	018840	GPU	MT	3								
904		035	209	04 9	62271	8 6	018840	GPU	MT	2								
904	0931	L.035	209	04 9	62271	8 6	018840	GPU	МТ	1		STEE						
40	Was.	5	-	20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -				A. (GEA	R	SETI	INGS		1			1 33	
Site#	MT	O/NO	H/P	Date	In Ti	ne In	Date		Time	Out					Comment			
904	MT	1	1	2002/10	7.07.07.1	3:30	2002/1	0.24 2.0		:00								
904	MT	2	1	2002/10		3:30	2002/1		12:	0.00								
904	MT	3	1	2002/10		3:30	2002/1		12:									
904	MT	4	1	2002/10		3:30	2002/1		12:		_							
904	MT	5	1	2002/10	001 1	3:30	2002/1		12:			F104	TIONS		N. W. S. 1 - 611	100		
¥.	249			100			10/4-01		1000	(公司)(中岛)	ECI	FICA	TIONS	128	s die wa	74		7600
Site #	#			TD/NO.			H/P	1	let Ty	pe	Len	gth	Depth		Mesh	Set		bitat
904			IT .	-	1		1	-					0.6			BT	L	
904			IT.		2		1	+					0.5			BT	L	
904			IT IT	-	4	_	1	1		-			0.6	+		BT	L	
904		_	IT.	-	5	_	1	-		-		-	0.4	+		BT	L	_
304		IV		The same of the sa	807 - 7	10000	7 7 7	E	ICH	4811	MMA	PV	0.5			ы	L	
Site#	100	MTD/N	IO.	Lup	Casala	1 6	1			All Committee	Section 1	100000		5				1/-
904	MT	VI D/N	1	H/P	Species	1 8	tage	Age	9	Total 0		th (Min/M	lax) Fish	ACT		Comme	ent	
904	MT	-	2	1	NFC	+		_	-	0	_	-	-	-	inverts and sal	amandar a	uto conturad	l in t
201	MT	-	3	1	NFC	1		_	+	0	_	_			miverts and sal	amanuer n	ute captured	1111
904	775		_	-	2.20.00	-	_		-			_	1					-
904 904	MT		4	1	NFC					0			- 1					

Morice North Planning Area

Reach # ILP Map # ILP#

Watershed Code:

3.0

093L.046

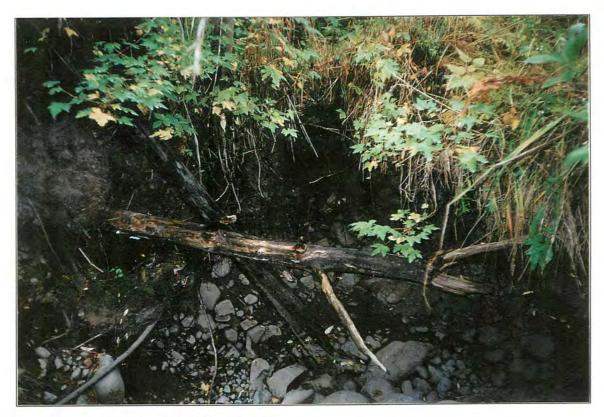
	- 3		-8-		1-140	FX			WA	TEF	RBO	DY	ge ja	and we com		を持てか	ly-ex-	
P	WS (aterbo	Code: Code: dy ID:	460-0 000-0	00000-00					0-000-	-000-0			cal: tream:	ILP#:		Reach # From Date		
F	ish Per	mit#:	145	5269		Date: 2	002/09/3	0	To	: 200	02/10/02	2 Ag	gency:	C172	Crew: SG	/JD SH/	Resamp	ole:
3 2 3	100	Y.	. 35		14.7	1000		S	TE	11	METI	HOD		- 1 H	- No - 5881			1
Site#	NID	Мар	NID	# 1	JTM:Zor	ne/East/	North/Mt	hd	MTD	/NO	Temp	Cond	Tur			Comment		
905	093L		2090	05	Ti-			GPU	GN	1								
906	093L	.046	2090	06 9	6381	29 6	030751	GPU	MT	5								
906	093L	.046	2090	100	6381		030751	GPU	MT	4	(1							
906	093L		2090		6381		030585	GPU	МТ	3			-					
906	093L	.046	2090	-	6381		030585	GPU	MT	2				_		_		
906	093L	.046	2090	06 9	6381	50 6		GPU		1			_	100		Javiere Is /		0001505
E		ott le						A. (5 E A	(K	SEI	TINGS		-11.			1/5/	
Site#	MTE	/NO	H/P	Date	ln 1	ime In	Date	_	Time						Comment			
905	GN	1	1	2002/10		16:30	2002/1	104-11-11		:00								
906	MT	1	1	2002/09		09:30	2002/1		09:	_						_		_
906	MT	2	1	2002/09		09:30	2002/1		09:							_	_	
906	MT	3	1	2002/09		09:30	2002/1		09:				_			_	_	_
906	MT	4	1	2002/09		09:30	2002/	22.2	09				_	_	_		_	
906	MT	5	-1	2002/09	9/30	09:30	2002/				DEC	IFICA	TIO	NS			3 (43)	
11.5	3/1	-			123	В	. NE	17.1	RAI	. 3			7.00	100000000000000000000000000000000000000	19 X	I Set		Habita
Site #	#		М	TD/NO.			H/P	1	let Ty	ре		ngth		epth 2.0	Mesh ST	BT		L
905			SN		1		1		FL		9	2.0		0.8	31	BT	\rightarrow	L
906	_	_	TN		1	1	1	+	_					0.8		BT	_	L
906			MT.		2	-	1	-	-					0.8		BT		L
906			MT.	4	3	-	1	+	_	_				1.2		BT		L
906	_		MT TN		5	-	1	+	_	-				1.2		ВТ		L
906	20/41/5	1	VII.	Els Vella	SERVE	A 25 1	EPSTA.	F	ISH	S	MMU	ARY	120	(20) (30)	8) I I I I	新洲水	THE REAL	34
Cite#		MTD/I	NO	H/P	Spec	ies I	Stage	Ag	Diff Man	Tota	200	Lgth (Min/	Max)	FishAct	11.711	Comn		
Site# 905	GN	_	1	1	NFC		Clago	. 19			0				Juvenille Gre was cut out o unharmed.	ebe was tan of the gill ne	gled in gi et and rele	Il net, it eased
000	Тмт	- T	1	1 1	T NFC						0							
906	M	_	2	1	NFC						0							
900	M	_	3	1	NFC						0							
906	900										0							
906 906	M		4	1	NFC	200			-		0						_	



Site #918, Upstream photo of cobble / gravel substrates. Roll #52, Frame #01, Date: 2002/09/05



Site #918, Downstream photo of small cascade over cobble. Roll #52, Frame #02, Date: 2002/09/05



Site #918, Falls over organic / cobbles 1.5 m. Roll #52, Frame #03, Date: 2002/09/05



Site #918, Culvert at road slight bank failure. Roll #52, Frame #04, Date: 2002/09/05

FDIS Reach Card

Morice North Planning Area

Reach # ILP Map #

ILP#

4.0

093L.046

2868

		PROJECT	E TYPE	
Stream Name (gaz.)	RFFHI within the Morice Forest BULKLEY RIVER 460-000000-00000-00000-00000		Project Code:	5270
		WATERSHED	(A) (A) (A) (A)	Y 10 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Reach Watershed Code: ILP Map #: 093L.046 Air Photos LINE: BCC98341_ #: 0	Gaz.: Local:	0-0000-000-000-000-000-000 Reach #: 4.0 Names	NID Map #: 093L.046	NID #: 10828 UTM(Zone/East/North/Method) 9.638953.6033191 GIS Sample Type: B Wetland:
	The second of the second	SURVEY INFO		
Date: 2002/08/27		Agency: C172		Crew: SG/SH
		ATTRIBUTES		
Length (km): 1.50 DS Elev.: 644 US Elev: 736	Gradient: 6.13 Order: 4 Magnitude: 129 BGC Zone: SBS	Setting: VW Open water: A Confinement: CO Coupling: CO	DISTURBANCE INDICATORS C1 C2	O1 B1 B2 B3 D1 D2 D3 C3 C4 C5 S1 S2 S3 S4 S5
Valley Flat: N Active Floodplain Visible Channel Pattern: IR	C/D: Est. Width:	Ma	Islands: N N SIDE DIAG ss Movement: M Riparian Veg.: N	G MID SPAN BR Exposed/Eroded: NS Landuse: NS
MA	PS			
Map Type Ma	p# Year			

TRIM

093L.046

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

4.0

093L.046

	R P	NY.				V Deler			WAI	ERB	O D	Y	V Vi	4 - 16	100	Transfer in	THE RE
Gaz	zetted	Name										Loca	al: Em	erson Creek			
F	Project	Code	460-0	000000-0	00000-	00000-00	000-0000-0	00-00	0-000-0	000-000	0						
	WS	Code	000-0	000000-0	00000-	00000-00	0-0000-000	00-00	0-000-0	000-000	000						
W	Vaterb	ody ID							ILP M	ap #: 09	3L.04	3		ILP#:	2868	Reach #: 4	-
	Pro	ect ID	5270									Lake/Str	ream:	S	Lake Fro	om Date:	
F	ish Pe	ermit #	14	5269		Date:	2002/09/0	7	To:	2002/0	9/07	Age	ency: C	172	Crew: JH/JD	Resar	nple:
	30		- N	913	777	N. 3	7.100	S	ITE.	/ ME	TH	O D	TE T		- 110		200
Site#	NIC	Мар	NID	#	UTM:	Zone/Eas	st/North/Mt	hd	MTD/	NO T	emp	Cond	Turbi	d	Co	omment	
945	093	L.046	509	45				GPU	EF	1	6	80	С				
(0,0	The Sail							Α.	GEA	RSE	TTI	NGS	100			MARKET STATE	
Site#	MT	D/NO	H/P	Date	In	Time Ir	Date	Out	Time (Out				C	omment		
945	EF	1	1	2002/0	9/07	16:40	2002/0	9/07	17:2	0		-					
==7	1715			Carrie		C. E	LECT	RO	FISH	IER :	SPE	CIFI	CAT	IONS			
Site#		MTD/N	10	H/P		Encl	Sec	1	ength	TW	idth	Volt	age	Frequency	Pulse	Make	Model
945	EF		1	1		0	562		150.0		0.0	60	00	J	7	SMITH ROOT	12B
100				21				F	ISH	SUM	MA	RY.	1 X	May 2000		17.37.3	
Site#		MTD/N	10	H/P	Spe	ecies	Stage	Ag	e T	Total #	Lgt	(Min/M	ax)	FishAct		Comment	
945	EF		1	1	NF	C			()	0							

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

7.0

093L.026

19		- 30 m		1 70		E LIS	25.74		WA	TEF	RBOD	Y					, a = , - 1, 2
Ga	zetted	Name	:									Loc	al:				
F	Project	Code	: 460-	000000-0	00000	-00000-0	000-0000-0	000-00	0-000	-000-0	00-0						
	WS	Code	000-	000000-0	00000	-00000-0	000-0000-0	000-00	0-000	-000-0	000-000						
V	Vaterbo	dy ID:							ILP	Map #:	093L.0	26		ILP#:	3715	Reach #:	7 -
	Proj	ect ID:	5270									Lake/St	ream: I		Lake	e From Date:	
F	ish Pe	rmit #:	14	5269		Date:	2002/09/3	0	Т	o: 200	2/09/30	Ag	ency: C1	72	Crew: SC	G/JD R	esample:
and to	- J- J	Sel.	2			7 7 11	100	S	ITE	1 1	METH	OD -	18.8	- 76		PARTIE S	
Site#	NID	Мар	NID	#	UTM:	:Zone/Ea	st/North/Mt	hd	MTC	NO	Temp	Cond	Turbid			Comment	
958		L.026	209	201	6	33123	6010250	GPU	MT	5							
958		L.026	209	58 9	6	33123	6010250	GPU	MT	4							
958		L.026	209	5.51	_	33123		GPU	MT	3							
958		L.026	209		6	33146		GPU	300	2							
958	0931	L.026	209	58 9	6	33146		GPU		1							
							44.84	A. (G E A	R	SETT	INGS					MIN 45
Site#	-	O/NO	H/P	Date	ln	Time I		Out	Time	Out					Comment		
958	MT	1	1	2002/0	100	12:15			10:	:00							
958	MT	2	1	2002/0	11 F F 1	12:15		100	10:								
958	MT	3	1	2002/0		12:15		1000	10:								
958	MT	4	1	2002/0	0.5	12:15	54.5	F 7521	10:								
958	МТ	5	1	2002/0	9/30	12;15			10:								
Sal	22	11/15-	- 46		100		B. NE	I/T	RAF	SI	ECI	FICA	TION	S			
Site #				TD/NO.			H/P	1	let Typ	pe	Leng	gth	Depth		Mesh	Set	Habita
958	7.1		T		1		1						1.5	-21		BT	L
958			IT		2		1	-					8.0		3	BT	L
958			IT.		3		1	-		-1			1.2	-		BT	L
958	-	N			4		1						0.6			BT	L
958		M		25 P 4 3 (54)	5		1	-	0.11	0.11		D 14///	1.0			BT	L
Site#		MTD/N	0	LUD	Lo	100	01	200	STATE	20030000	MMA	A THE LOW		757277	- Market		of the second
958	MT	WI DAN	1	H/P	NE	ecies	Stage	Age	+	Total	_	th (Min/M	ax) Fi	shAct		Comment	
958	MT	-	2	1	NE	_		-	+	0		-	_				
958	MT	+	3	1	NE				+	0	_						
3332	MT		4	1	NF		-		+	0	_						
958																	

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

ILP#

4.0

093L.056

STANK AND	the same	Sept.	V. M. 3		STR	EAM	RE	FERE	NC	ING	7 - 1 - 1		
Gazetted Na	ame:								Loc	al Name			
Watershed	Code: 0	00-000	0-00000-0	0000-0000-	-0000-00	0-000-0	00-00	0-000-000)	11	P Map #: 09:	3L.056	LP#: 2445
Jan.			-41 W. 12 1	Z saigi			RE.	ACH					
Reach #: 4 Length (km Gradient (% US Elev (m): 3.41): 4.3): 870		Confi	UTM(Zone oupling: Conement: From Islands: N	oupled requently ONE	y Confin	F	Magnitude Orde Riparian V	e: 31 r: 3 /egeta			Sample Type: BGC Zone: Open water: At	SBS
Bars: None	✓ Sid	de _	Diagonal	Mid-cha	innel _	Spar		Braid _	La	induse:	Not Specified	3890 1 167	
011- 4	000		- 405				31	ACC. (1) (1)		ENE C		<u>. 31</u>	
Site #		0		М 9.63435 ГМ 9.63422	3777257				ency: ency N		Crew: iton Environm	JH/DT Date ental Consultants (: 2002/09/30 Terrace)
No the	13 10				* 7	C	HA	NNEL	12	ide ide	मान्। जाता		
No Vis.Ch.: Dewatered: Stage: Low Med High			bs.:	Channel Wi Wetted Wi Bankfull De	dth (m):	8.24 3.20 0.53	6.90 2.3 0.5	0 9.5	# 7 7 3 ivity: 5		Gradier Pool Depth	2.771 / / / / / / / / / / / / / / / / / /	Low _
1 37		E - 10	4		-1	MOF	PH	OLOG	Y	S S 1	C. ST.	S20718	7 - 141
Channel Pa Cou Confine	Subdom attern: S apling: C ement: C ology: I	inuous oupled		D (cm): 100 cm): 30 nds: No	.00		Bars: N TURBANC DICATORS C2	E C	Side 01 B1 C4	B2 B		Braid D3 S5
W. W	25.	S	to the	10.2 40.		EN	COV	/ER	10	6.4			
Total Cover: LWD: LWD Dist:	Few			Ar Location: F		SWD T			B S	U N	DP T	OV IV N N	FSZ:
Right Bank: Left Bank: Right Bank: Left Bank:	Sha	pe: V - eg: Mi		ture: Fines ture: Fines	Gra Stage	avel 🗸 avel 🗸 e: Matur e: Matur	Cobble fores	e Bou	Ir		Manmad Manmad	e 🗍	rown Closure 1-20% Vascular
NID Mary	AUD	To	1			26	38.	FEAT		: S			WA X
093L.046	98000	Type	Hgt 5.0	Method GE	Lg	Meth	_		oto F: 0	9 L:		Photo #:	UTM (Z/E/N 9.634315.6039
and the second second	22 1 2 2 2 2 2 1 1		, Photo roll 89		19.	1				14.		1".	3.0343 13.0039
B 50	33	7000	2 2 5 10	\$ 8 2 VIII	18×16 S		FIS	H	30				
Site Number	Capt		Number of Events	Length fi		Tota	ıl	Voltage		Species	Total Fish	Minimum Length (mm)	Maximum Length (mm)
980	EF	11	1	250		840 s		800		NFC	0	giri (iiiii)	gar (min)

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

980 4.0 093L.056 2445

15.153	- Ella	(3/4)	137	allega	- 14			PR	OJE	C T				A.			1.50	5	
Pro	Pr Stream N ject Water		z.): BUL	KLEY R	VER			ct (tribs t	o Morice	⊋R.)		Name of the last	Project C	ode:			5270		
VI FILE TO			1-16 A 16		(特惠)		新 养养。	WAT	ERS	HED		27.17		er to			Ch	70-11	5.3
Gaz	etted Nar	ne:									Loc	cal Nam	e:						
Wate	ershed Co	de: 000-0	0-00000	0000-000	000-000	0-0000-0	00-000-	000-000	-000-000)									
	ILP Ma	p#: 093L.	056	- 1	LP#: 24	445	NID M	lap #: 09	3L.046	1	NID #: 50	980	Read	ch #:		1.0		Site #: 9	980
Field U	TM (Z.E.	N): 9.634	350.603	9934		Method:	GPU				Site Lo	g: 250		Met	hod: MAI		Acce	ss: H	
GIS U	TM (Z.E.	N): 9.634	224.603	9937						F	Ref. Name	9:							
	1	Date: 20	02/09/30		Time: 13	:00		Agency	C172		Crew:	IH/DT			ish Crd?	~	1	ncomple	to: []
15 10		3atc. 20	02/03/00		11116. 13	.00		21.0	1.00		Clew.	וטוחנ	1-		isii Ciur		"	comple	ite:
	- All Tales	- Table	1		7	3000			ANN	-						100	ANCE:		
Channe	el Width (n	Mtd	7.80	width 6.90	width 8.20	width 9.00	width 6.90	9.40	width 9.50	width	width	width	Avg	_	Mathad I.	Gadie		Mtd	Avg
	d Width (n	•	2.30	3.70	2.80	2.90	4.00	3.10	3.60	-			3.20		Method II:	4.0	3.0	C	3.50
	Depth (n	_	0.40	0.60	0.40	0.40	0.30	0.50	0.50				0.44	1.0	icaioa II.			-	1
								GEN-6	4.77		7 - 15				lo Vis.Ch	-		ittent:]
	Wb Dept	h: .5	.5	.6	Avg	g: 0.53	,	Method:	T	S	tage: L	М	A H		Dw	r: 🔲	T	ribs.:	
	COVE	R		Tota	al: A														
	Тур		_	WD	В	U	DF	9	OV	IV	CRO	OWN CL	OSURE						
	Amou			D	S	N	Т		N	N	1		-20%						
L	Loc: P/S/	0.		V			V				INS	TREAM	VEG:	NV	A	M	v 🗆		
	LW	D: F		D	IST: C														
	LB SH	IP: V									,	RB SHP	·V						
	Textu	re: F	GV	C	ВП	RIA							F	G	0 C	В	R	A	
		IP: M		1			had.					RIP		(
		G: MF										STG							
3	100 100	200	2	1		Tally -	3000	W	ATE	R	11.45	4 8 9	with the	455	7/4/1/-2	-3	M. Company	in the	111
	EM						78.2	. 5.				eq #:							
	Tem	p: 5 H: 7.0						od: T4			Co	ond.: 50					Meth	nod: S	3
F	lood Sign		debris					od: P2			T	urb.: T	M	TL	C	~	Meth	nod: G	E
		21110000				-													
		-/-10	E.E.	4	A POPULATION		- N	ORP	HOL	OGY		1500	10				100	200	(A.)
В	ed Materia	al:	Dominar	nt: B		Subdom	n: C				01	B1	B2 B	33	D1 D	2 D	3		
	D9	5: 100.0	D (cm): 30.00		Morph	: RP		ISTURE	BANCE			Ш						
	Patter	n: SI							INDICA	TORS	C1	C2	C3 C	4	C5 S	1 52	2 53	S S4	S5
	Island														ПІГ	THE	TIT		
1.2	Couplin																		
C	onfinemer								B	ars:	N	SIDE		DIAG	- A	ND[SPAN	u_	BR
	PS.	Z: [OID	V	اماران			OI AI	П.	DIV_
1.11,12	10	4	- 4.00	Res	-1	100	797	FEA	TUR	ES	Section 1	E 137	1 China	CARN.	025157°	- 3		an mu	377
NID Map	NID	Туре	Hgt	Method	I L	g N	fethod		Photo		M5	AirPl	noto			JTM (Z	/F/N)		Method
093L.046	98000	F	5.0	GE		-	HC	R: 65		09 [4		#:				039927		GIS
Comment	s: Falls (E	Barrier), P	hoto roll	89, # 18	and 19.													1	
Will Common Service			177.2	5.30	والق	2/49/	HAI	ATIE	TQL	IALI	TY	200 <u>7</u>	1	3-0%	74 -	30	900 h	15	
1-2-16	Name						-43-			C	Comment	S	Version in			- 28		- NH	
OverV	Vinter Hab	itat		ate - ass													_		
	ring Habita			rate - ass						VD and [D95.								
Spaw	ning Habi	tat	Moder	ate - ass	ociated	with grav	els, poo	ls, flows											

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

4.0 093L.056

2445

3817	Val					PHOTOS
	Ph	oto		Foc Lg	Dir	Comments
R:	65	F:	07	STD	U	Upstream photo within site.
R:	65	F:	08	STD	D	Downstream photo within site (DT).
R:	65	F:	09	STD	D	5 m Falls.
R:	65	F:	10	STD	D	DT downstream of Falls.
R:	89	F:	18	STD	Ü	View of 5 m Falls from helicopter.
R:	89	F:	19	STD	U	View of 5 m Falls from helicopter.
40	-22					COMMENTS
		Sec	tion			Comments
	-	CHAI	NNEL	NFC upstre	am of falls, 250 m	site 840 seconds I, 5, 800.

Morice North Planning Area

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

Reach #

ILP Map #

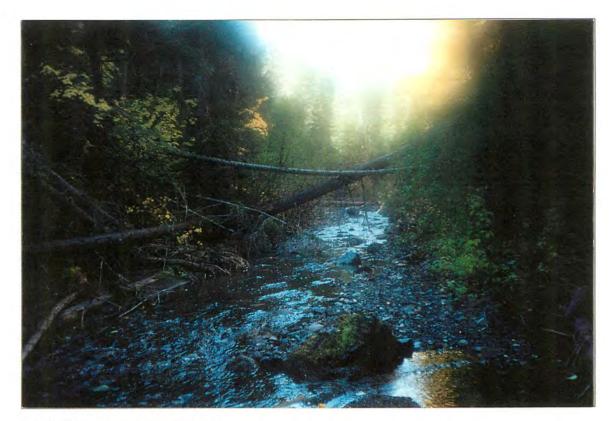
ILP#

Watershed Code:

4.0

093L.056

defle.	35.	30		100		11- 5/10		V	ATE	KB	O D		0.1		1111	14.58		
Gaz	zetted f	Vame:										Loca	al:					
F	roject	Code:	460-0	000000-0	00000-0	000-000	00-0000-000	000-	000-000	-000-)							
	WS	Code:	000-0	000000-0	00000-0	00000-000	00-0000-000	000-	000-000	-000-0	000							
W	/aterbo	dy ID:						11	LP Map	#: 09	3L.056	3		ILP#:	2445	Rea	ich#:	4 -
	Proje	ect ID:	5270								1	Lake/Str	eam:	S	Lal	e From	Date:	
F	ish Per	mit#:	14	5269		Date: 2	2002/09/30		To: 20	002/09	9/30	Age	ency:	C172	Crew: J	H/DT	Resa	mple:
Y 3				poderio	3 123			SII	TE /	ME	THO	D			12 M	X A GOVERN	Mills Comment	
Site#	NID	Мар	NID	#	UTM:Z	Zone/East	/North/Mthd	V	MTD/NO	Te	mp	Cond	Turb	id		Com	ment	
980	093L	.046	5098	30		-	GF	UE	F 1		5	50	C					
					1		Α.	G	EAR	SE	TTI	NGS			Total Control			W
Site#	MTE	O/NO	H/P	Date	In	Time In	Date Out	T	ime Out	T				C	omment	and the second	ill building	
980	EF	1	1	2002/0	9/30	13:00	2002/09/3	0	14:40									
- 1	4	Ŋ	. /	- 9.5 11.5%		C. E	LECTR) F I	ISHE	RS	SPE	CIFI	CAT	TIONS	W. 2007		4	
Site#	١	/ITD/N	0	H/P		Encl	Sec	Len	gth	Wi	dth	Volt	age	Frequency	Pul	se	Make	Mode
980	EF		1	1		0	840	250	0.0		9.0	80	0	LLL -	5		SMITH	12B
			1 20	Ti.			10.21	FIS	H SI	UMI	MAR	Y	Care .		-21	13		- 400
Site#	٨	ITD/N	0	H/P	Spe	cies S	Stage /	ge	Tota	al#	Lgth	(Min/Ma	ix)	FishAct		C	omment	
980	EF		4	1	NF	0				0								



Site #980, Upstream photo within site. Roll #65, Frame #07, Date: 2002/09/30



Site #980, Downstream photo within site (DT). Roll #65, Frame #08, Date: 2002/09/30



Site #980, 5 m Falls. Roll #65, Frame #09, Date: 2002/09/30



Site #980, DT downstream of Falls. Roll #65, Frame #10, Date: 2002/09/30



Site #980, View of 5 m Falls from helicopter. Roll #89, Frame #18, Date: 2002/09/30



Site #980, View of 5 m Falls from helicopter. Roll #89, Frame #19, Date: 2002/09/30

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

ILP#

1.0

093L.046

			1	_ 30 W	多题	ATT N	SI	TE MIL		अपूर्वा <u>त</u> ्य		100.0		\$ * (R)"(S	Jan Al
Site :	#: 981 h (m): 10	0		TM 9.6387 JTM 9.6387					ncy: C ncy Na		Crew: JH ton Environmenta	I/DT al Consu		2002/09 Terrace)	9/30
		Y-7			To all	C	HAN	INEL		100		172	2 NAV	A SHEW	1
No Vis.Ch.	: 🗌 In	termitt	ent:			Avg	Min	Max	#	1		Avg	Min	Max	#
Dewatered	: 🗆	Tri	bs.:	Channel V	/idth (m):	2.99	2	5.1	8] [Gradient %:	7.33	5	9	3
Stage: Lov	VV			Wetted W			0.5	2	6	1 L	Pool Depth (m):	0.30	0.200	0.400	6
Med	d 🗌			Bankfull D	epth (m):	0.50	0.5	0.5	3	1	Turb	idity.:	Turbid		Low
High		Te	emp (C): 6	F	H: 7.2			Conducti	vity: 80			М	oderate		Clear
	OF W		Angel Egi	the line of		MOR	PH	OLOG	Υ	ALC: N	William Co.	Time I	2		1年/16
Bed Materia			Cobble Boulders		(cm): 90 (cm): 40			Bars: N	on 🗌	Side	✓ Diagonal	Mid	-channe		pan 🔲
	upling: C	oupled	l.	Isl	ands: Nor	ne	INDI	URBANCI ICATORS			B2 B3			D3	
	ement: C nology:		Riffle Pool				C1	C2	C3 (C4 (C5 S1 S2	S3	S4	S5	
			1- 1-pg		778	E 7	COV	ER	510.0		Sints.	= = = 0			10 319
Total Cover LWD LWD Dist Right Bank Left Bank Right Bank Left Bank	: Few :: Clumpe : Sha : Sha : Rip.V	ed ape: Un ape: Un /eg: Mi		Location: exture: Fine exture: Fine	s Gra	SWD S avel v e: Mature	Cobble e fores	Boule Boult	der der	T Rock [Rock [DV T		FSZ rown Clos 1-20	sure
***	28 L 3	1, 5	201		1 3	W. F	John F	EAT	JRE	S	- FEED 1	200		1 35	
NID Map	NID	Туре	Hgt	Method	Lg	Meth	od	Pho	oto	122	AirPho	to		UTA	M (Z/E/N
093L.046	98002	F	5.0	GE		HC	R	: 65	F: 14	L:		#:			43.6037
Comment	s: Falls														
NID Map	NID	Туре		Method	Lg	Meth	od	Pho	oto		AirPhot	to		UTN	и (Z/E/N
093L.046 Comment	98001 s: Falls	F	2.0	GE		HC	R	: 65	F: 13	L:		#:		9.6387	10.6037
	11 15.5						Section 2								
		0	May Ja	34.36.9E.	(155 ft)	-	-	H		5,54	2 (6.4)	0.15	-111-111	- 25Un	#1
Site Number	Capt		Number of Events	f Length (n		Tota		Voltage	s	pecies	Total Fish	Minim Length		Maxir Length	mum ı (mm)
560	E	F	1	20	00	520 s		700		NFC	0				
1 NO. 1		77 1 7 7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19		- 0 - 12		H	A MARTINE		100	35° 4			
Site Number	Capt		Number of Events	f Length (n	202-20-20-20-20-20-20-20-20-20-20-20-20-	Tota Time		Voltage	S	pecies	Total Fish	Minim Length		Maxir Length	
981	E	F	1	10	00	328 s	ес	600	4	NFC	0				

Morice North Planning Area

PROJECT CONTRACTOR OF THE PROJECT CONTRACTOR																		
Project I Stream Name Project Watershed		Project Code:				5270												
					3 Ja 20	WAT	ERSH	ED							4-11			
Gazetted Name:									Loc	cal Name	:							
Watershed Code: 00 ILP Map#: 09			00-0000-0 .P #: 294					N	ID#: 50	001	Reac	L. #.	1.0	Cita	#- 001			
	ILP Map#: 093L.046 ILP #: 2942 NID Map #: 093L.046 N Field UTM (Z.E.N): 9.638706.6037718 Method: GPU											NID#: 50981 Reach#: 1.0 Site #: 981 Site Lg: 100 Method: MAP Access: V2						
GIS UTM (Z.E.N): 9.			IVIC	illou. V	Gr U			R	ef. Name			wethou.	MAF	Access.	V Z			
Date:	Date: 2002/09/30 Time: 16:00						Agency: C172 C				rew: JH/DT Fisl			Incor	nplete:			
En 1 Establish	CHANNEL			JICW, C				h Crd?: Incomplete:										
I N	Vitd wi	dth width	width	width	width	width	- Medical Andrews	width	width	width	Avg	The Carlo	Gadier	nt % M	td Avg			
	T 2.5			2.50	3.90	5.10	2.60	3.00	3.00	3.00	2.99	Meth			C 7.33			
		50 0.60		0.70	0.90	2.00					0.95	Metho	od II: 9.0		С			
	Pool Depth (m): T 0.30 0.30 0.40 0.20 0.40 0.20 0.30 0.30 No Vis.Ch.: Intermittent:																	
Wb Depth:	.5 .	5 .5	Avg:	0.50	٨	Method:	T.	S	tage: L	V M] H [Dw:	Tribs	a: 🗆			
COVER	Total: A																	
Type:	SWD	LWD	B T	U	DF	,	OV T	N	CRC 1	CROWN CLOSURE 1 1-20%								
Loc: P/S/O:		VIIV	-		V		int		4	INSTREAM VEG: N ✓ A ☐ M ☐ V ☐								
LWD: F			ST: C					нн										
		Di	31.0							20 0110	.7							
LB SHP: U Texture: F G ♥ C B R A Texture: F G ♥ C B R A																		
RIP: M								RIP: M										
STG: MI		STG: MF																
	1/100000		-			W	ATER	JY W		V 3		[acces		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				
EMS:			-				ATEN		Re	eq #:			- Wes	, le				
Temp: 6		Method: T4					Cond.: 80 Method						S3					
pH: 7.2		Method: P2					Turb.: T M L C Metho						GE					
Flood Signs: Rafted debris Method: GE																		
				(† E)	M	ORP	HOL	GY	Bu .			Call page	The state					
Bed Material:		inant: C	S	ubdom	:В				01	B1	B2 B	3 D1	D2 D3					
D95: 90	D95: 90.0 D (cm): 40.00				: RP		ISTURBA											
Pattern: SI					INDICATO					RS C1 C2 C3 C4 C5 S1 S2 S3 S4 S8								
Islands: N Coupling: CC)										LIL							
Confinement: CO																		
FSZ:							Bar	s:	N	SIDE	V	DIAG	MID	SPAN	BR			
			7.17	- 30	2 189	FEA	TURE	S	100		er well	- and tax is		S = 1/1	51			
NID Map NID Type	e Hgt	Method	Lg	М	ethod	33-037	Photo	S. Contract	diam's	AirPh	oto	1// 1/45	UTM (Z/I	E/N)	Method			
093L.046 98002 F	5.0	GE		1	HC	R: 65	F: 1	4 L	:		#:		9.638643.60	037789	GIS			
Comments: Falls	A 11-4	1 11-11-	1	1	-th		Dhete	-		41.5			1 1000 - 1000	- 40	10.00			
NID Map NID Type 093L.046 98001 F	e Hgt 2.0		Lg	_	ethod IC		Photo F: 1	3 1	1	AirPh	oto #:		UTM (Z/I 9.638710.60		Method GIS			
Comments: Falls	-					30	1.11	- 1,			120		3.0031 10.00		5,0			
was a Mine to	- 13 M	1 2 3	4 (84)	5,90	HAI	BITA	T QU	ALI	ГҮ			20,70		4 1 M	Sec. 50			
Name Comments											THE STATE OF THE S							

Morice North Planning Area

Reach# ILP

ILP Map #

093L.046

ILP# 2942 Site 981

福						HABITAT QUALITY
		Na	me			Comments
	Ove	rWint	er Habitat	None.		
	R	earing	Habitat	None.		
	Sp	awnin	g Habitat	None.		
3 -	RVVN					PHOTOS
	Ph	oto		Foc Lg	Dir	Comments
R:	65	F:	11	STD	Ü	Upstream photo within site.
R:	65	F:	12	STD	D	Downstream photo within site.
R:	65	F:	13	STD	U	2 m Falls.
R:	65	F:	14	STD	U	5 m Falls.
JAN.				# 017 g	(10 x 3 x 3 x 3 x 3 x 4 x 3 x 4 x 3 x 4 x 3 x 4 x 4	COMMENTS
		Sec	tion			Comments
		CHAN	NNEL	NFC		
		CHAN	NEL	Barrier 100 n	upstream of co	influence with Dockrill. 2 m Falls then 30 m upstream is another 5 m Falls.

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

1.0

093L.046

Gaz	zetted	Name:									Loca	al:				
F	roject	Code:	460-0	000000-0	0000-0000	0-000	0-0000-000-0	000-000	0-000-0	00-0						
	WS	Code:	000-0	000000-0	0000-0000	0-000	0-0000-000-0	00-000	0-000-0	00-000						
V	/aterbo	dy ID:						ILP	Map #:	093L.0	16		ILP#:	2942 F	Reach #: 1	-
	Proj	ect ID:	5270								Lake/Str	ream:	S	Lake Fro	m Date:	
F	ish Pe	mit#:	14	5269	Da	e: 20	002/09/30	To	o: 200	2/09/30	Age	ency:	C172	Crew: JH/DT	Resan	nple:
1	10					95		SITE	IN	ETH	OD	176	TP	700	30 F =	
Site#	NID	Мар	NID	#	UTM:Zone/	East/I	North/Mthd	MTI	D/NO	Temp	Cond	Turb	oid	Co	mment	
981	0931	046	5098	81			GPI	J EF	1	6	80	С				
		Wage .		an - C - I			Α.	GE	AR S	SETT	INGS					× 154
Site#	MT	O/NO	H/P	Date	In Tim	e In	Date Out	Time	e Out		and the Late		C	omment		
981	EF	1	1	2002/09	9/30 16	:00	2002/09/30	16	:50				20700			
1	10 12	3, -16	200	WE H	C.	EL	ECTRO	FIS	HER	SP	ECIFI	CA	TIONS	25763		5 N
Site#	1	MTD/N	0	H/P	Encl		Sec	Length	1	Width	Vol	tage	Frequency	Pulse	Make	Mode
981	EF	1	1	1	0		328	100.0		3.0	6	00		5	SMITH ROOT	12B
	No.		1	in the second	- 1. E.	17	AW . T	ISH	SU	MMA	RY	1		Man Jan Jan	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1-1
Site#	T	ATD/N	0	H/P	Species	S	tage A	ge	Total	# Lg	th (Min/M	ax)	FishAct		Comment	
981	EF		1	1	NFC	1			0	-						



Site #981, Upstream photo within site. Roll #65, Frame #11, Date: 2002/09/30



Site #981, Downstream photo within site. Roll #65, Frame #12, Date: 2002/09/30



Site #981, 2 m Falls. Roll #65, Frame #13, Date: 2002/09/30



Site #981, 5 m Falls. Roll #65, Frame #14, Date: 2002/09/30

FDIS Reach Card

Morice North Planning Area

Reach # ILP Map # ILP#

3.0

093L.046

2941

B. 12 - W.		PROJECT	
Stream Name (gaz.	e: RFFHI within the Morice Fore): BULKLEY RIVER e: 460-000000-00000-00000-000	est District (tribs to Morice R.)	Project Code: 5270
	创造品度 医多种	WATERSHED	
Reach Watershed Code ILP Map #: 093L.046 Air Photos LINE: BCC98341 #: 0	e: 000-000000-00000-00000-00 ILP#: 2941 Gaz.: Local:	000-0000-000-000-000-000-000 Reach #: 3.0 Names	NID Map #: 093L.046 NID #: 10632 UTM(Zone/East/North/Method) 9.631290.6037181 GIS Sample Type: B Wetland:
100		SURVEY INFO	
Date: 2002/08/27		Agency: C172	Crew: SG/SH
		ATTRIBUTES	
Length (km): 11.17 DS Elev.: 619 US Elev: 901 Valley Flat: N Active Floodplain Visible	Gradient: 2.52 Order: 4 Magnitude: 182 BGC Zone: SBS C/D:	Setting: VW Open water: A Confinement: FC Coupling: PC	DISTURBANCE O1 B1 B2 B3 D1 D2 D3 INDICATORS
Channel Pattern: IM	e: Est. Width:	-,,,	N SIDE DIAG MID SPAN BR Movement: M Exposed/Eroded: NS parian Veg.: NS Landuse: NS
M. W. W	APS		
Map Type Ma TRIM 093L.0	ap# Year 046		

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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3.0

093L.046

	1970					4.00		To the	WA	TER	BOD.	Y.		Chapter .	ave in	r Table		51 29
	Pro Wate		: 460- : 000-	000000-0	0000-000				0-000-	000-00	0-000 093L.046	Loc		ILP	#: :		Reach #: 3	3 -
		Permit #	-	5269	D	ate: 200	2/09/30)	To	: 2002	N72./-			C172	Cr	ew: JH/DT	00 0000	nnle.
77		Ya Live	12-11/2	0200	(A)	ate: 200	200/00		- 33	V-0/-	ETHO		Circy.	OHE	155	Table 1	nesar	mpie.
Site#	T	NID Map	I NIC)#	UTM:Zon	e/Fast/No	rth/Mth	7021	MTD	2	Temp	Cond	Tur	bid I		C	omment	15000
982		093L.046	980				7916		EF	1	6	50	(-	onincin	
	18/1	10000	=177 / 187	PAGE TO	12 14 13					RS	ETTI	NGS	428	THE PAS	4.77		10A)102 TSS	
Site#	T	MTD/NO	H/P	Date	In Ti	me In	Date 0	Out	Time	Out	SUMME	16-6059	1400	EDRH.	Com	ment	Saul Saul	
982	1	EF 1	1	2002/0	9/30 1	7:00	2002/09	9/30	17:									
1.00		W.F.	199	1 300	C	. ELE	CT	RO	FISI	HER	SPE	CIFI	CA	TION	S	Walling.		ar 3.00
Site#	T	MTD/I	OV	H/P	En	cl :	Sec	L	ength	A HELITANIA	Width	Vol	tage	Freq	uency	Pulse	Make	Mode
982		EF	1	1	0		420	_	100.0		20.0	_	00	_	1	5	SMITH	12B
	-				1 12				C 11	COM	MMAI	200					ROOT	
- ·	State .		9	allere.	100	1000	33.0	2013	SEALUR !	100	(4) (4)	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1						
Site#	+	MTD/N		H/P	Specie		ge	Age	9	Total #	_	(Min/M	-	FishAc	t		Comment	
982	_	EF	1	1	RB RB	F	-	0+	-	3	7	-	30 70	R	-			
982		EF	1	1	DV	F	-	1+		2	4		45	R				_
1,23	WES	1		A FRANCISCO	0.515 -0.07		INI		IDU		FISH	7	-	6 m-18			Maria Joseph	
Site#	М	TD/NO	H/P	Species	Length	Weight	Sex	Ma		Ag Str/Smp	е	Vch#	G	enetic /Smpl#	Roll #	Frame#	Comm	nent
982	EF	1-1	1	DV	45		U	U	1	T	- I	-	Oll	- Tilding	65	15	_	
982	EF		1	DV	45		U	U	-		1	-			00	10		
982	EF	1	1	RB	70		U	U										
982	EF	1	1	RB	30		U	U			1							
982	EF		1	RB	30		U	U	12		101	C.						
982	EF	1	1	RB	30		U	U										



Site #982, Dolly Varden fry, 45 mm Roll #65, Frame #15, Date: 2002/09/30

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

HP#

4.0

093L.046

	ame:						L	ocal Na	me:					
Watershed (Code: 00	00-000	000-00000-	-0000-0000-	-0000-00	0-000-000-0	000-000-000		ILP	Map #: 093L.0	46	ILP#	# : 2	981
THE NEXT	#12 S	4 1				RI	ACH			A 100	10/103			7
Reach #: 4	4.0		4-1-1-1	UTM(Zone	e/East/N	orth): 9.626	902.6040314				Sample Ty	/pe:	Biased	-
Length (km): 1.78			Coupling: P			Magnitude:	57				ne: ES	a case a c	
Gradient (%				nfinement: O	region and		Order: 3				pen water			
US Elev (m): 1097			Islands: N	ONE		Riparian Veg	etation:	Conife					
Bars: None	✓ Sid	le 🗌	Diagonal	Mid-cha	annel T	Span				Specified				
. 90			0,000				ITE			25 0 15	Sel 191		1900 C	
Site #	: 986		Field L	JTM 9.62743	3.60400	47	Agency	r: C172		Crew: SC	S/SH D	Date: 20	002/09/0	07
Site Length	(m):300)	GIS	UTM 9.62741	9.60400	77				Environmenta		Carried Co.		5"
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Morice North Planning Area

ILP Map # Reach# 4.0

ILP#

Site

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Morice North Planning Area

Reach #

ILP Map #

ILP# 2981 Site

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093L.046

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Over	Winter Ha	bitat	Good	- due to abur	ndant co	ver, deep po	ools in	n ma	insten	and o	off channel	areas and perennial flo	ows.	
Rea	aring Habi	tat	Good	I - due to abur	ndant co	ver and off o	chann	el ar	eas.					
1/20		1		300				PH	OTO) S				(5/37)
Pho	to	F	oc Lg		Dir							Comments		
R: 95	F: 11		STD		U	Ups	strear	n ph	oto of	falls at	outlet of M	felissen Lake.		
R: 95	F: 12	1	STD		U	Ups	strear	n ph	oto of	Lower	Falls.			
R: 95	F: 13	1 32	STD		U	Ups	stream	n ph	oto of	snow s	slide tailou	t.		
R: 95	F: 14		STD		U	Ups	stream	n ph	oto of	log jan	n from mul	tiple slides.		
R: 95	F: 15		STD		D	Dov	vnstre	eam	photo	of typi	cal habitat	through riffle area.		
R: 95	F: 16		STD		U	Ups	trean	n ph	oto of	typical	habitat wi	h abundant LWD.		
		#= 0	. 27),			点。 消暑	CC	MC	ME	NTS		国际区域		
	Section			Was Institute	THE PERSON NAMED IN			and participated in	and and and	7-11-11	Comme	nts	* SERVINGE	
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Morice North Planning Area

Reach #

ILP Map #

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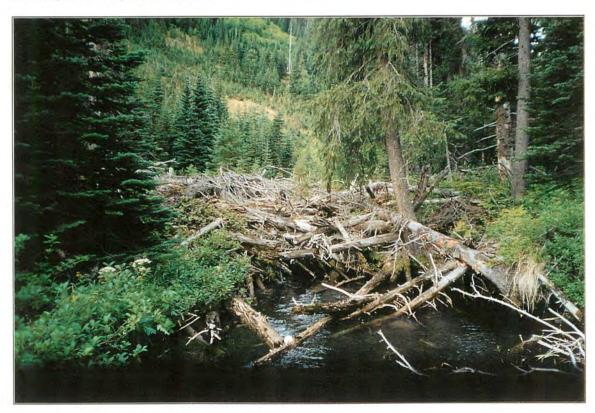
Site #986, Upstream photo of falls at outlet of Melissen Lake. Roll #95, Frame #11, Date: 2002/09/07



Site #986, Upstream photo of Lower Falls. Roll #95, Frame #12, Date: 2002/09/07



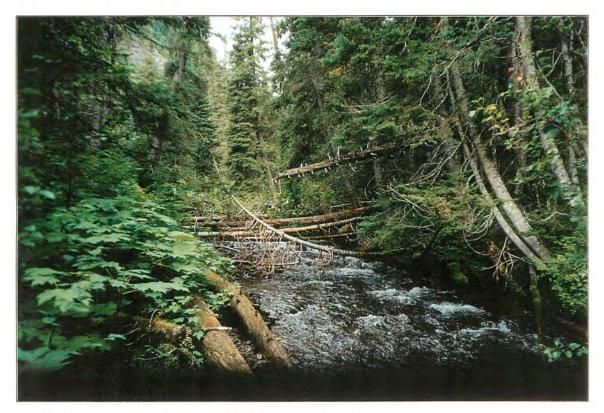
Site #986, Upstream photo of snow slide tailout. Roll #95, Frame #13, Date: 2002/09/07



Site #986, Upstream photo of log jam from multiple slides. Roll #95, Frame #14, Date: 2002/09/07



Site #986, Downstream photo of typical habitat through riffle area. Roll #95, Frame #15, Date: 2002/09/07



Site #986, Upstream photo of typical habitat with abundant LWD. Roll #95, Frame #16, Date: 2002/09/07

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

Instream Veg: None Algae Moss Vascular

ILP#

1.0 093L.036

3543 STREAM REFERENCING **Gazetted Name:** Local Name: ILP Map #: 093L.036 ILP#: 3543 REACH Reach #: 1.0 UTM(Zone/East/North): 9.636306.6023417 Sample Type: Length (km): 1.43 Coupling: Decoupled Magnitude: 5 BGC Zone: SBS Gradient (%): 4.9 Confinement: Occasionally Conf Order: 3 Open water: Absent US Elev (m): 892 Islands: NONE Riparian Vegetation: Deciduous Bars: None ✓ Side ☐ Diagonal ☐ Mid-channel ☐ Span ☐ Braid ☐ Landuse: Not Specified SITE Site #: 987 Field UTM .. Agency: C172 Crew: SG/SH Date: 2002/09/09 Site Length (m): 100 GIS UTM 9.636367.6022112 Agency Name: Triton Environmental Consultants (Terrace) CHANNEL No Vis.Ch.: Intermittent: 🗸 Min Max Avg # Avg Min # Dewatered: Tribs.: Channel Width (m): 0.65 0.600 0.800 6 Gradient %: 0.67 0.5 3 Wetted Width (m): 0.00 Pool Depth (m): 0 0 0 0.00 0 0 0 Low V Stage: Bankfull Depth (m): 0.30 0.3 0.3 3 Med Turbidity.: Turbid Low High Temp (C): pH: Conductivity: Moderate Clear MORPHOLOGY Bed Material: Dominant: Fines D95 (cm): 0.05 Bars: Non 🗸 Side Diagonal Mid-channel Span Subdominant: Not Applicable D (cm): 0.05 Braid Channel Pattern: Sinuous Islands: None DISTURBANCE **INDICATORS** Coupling: Decoupled Confinement: Unconfined Morphology: RP Riffle Pool COVER Total Cover: Abundant Type: SWD LWD В OV IV Amount N D S LWD: None Location: P/S/O: LWD Dist: Not Specified FSZ: Shape: Sloping (g Texture: Fines ✔ Gravel Cobble Boulder Rock Manmade Right Bank: Crown Closure Shape: Sloping (g Texture: Fines ✔ Gravel Cobble Boulder Rock Manmade Left Bank: 1-20% Right Bank: Rip.Veg: Deciduous Stage: Pole-sapling stage

Stage: Pole-sapling stage

Left Bank:

Rip.Veg:

Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

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	2			A Venix	W	1/1/4	WAT	ERS	HED		111	ll no	10.5		or st		
Gazetted Name										Lo	cal Nam	e:				1/1/20	
Watershed Code: ILP Map#: Field UTM (Z.E.N): GIS UTM (Z.E.N):	: 093L.0 :	36 67.6022	112	LP#: 35 N	543 Method:	NID M	ap #: 09	3L.036	R	IID#: 2 Site L ef. Nam	0987 g: 100 e:		ch #: Method	d: HC	.0	Access: F	
Dai	e. 200.	2/09/09		Time: 13:	:44	-	Agency:			Crew:	SG/SH		Fish	Crd?:	ш	Incom	nplete:
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200,110.0										INS	IKEAM	VEG:	N \ A		N 📗	V	
RIP: STG:											STG						
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EMS:										R	eq #:						
Temp:						Metho	od: T4			C	ond.:					Method:	S3
pH:							od: P2			1	urb.: T	m M	7 4	СС	1	Method:	GE
Flood Signs: I	None					Metho	d: GE							1 - 1	1		77
AL ALL AL		200		Trees.	- 2	M	ORP	HOL	OGY	W. C.		Andrew -	W. 17 . 18	Santi.			
Bed Material:	Г	ominan	r-E		Subdom	· NA				01	B1	B2 E	33 D1	D2	D3	3	
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Islands:									0110	C1	C2	C3 (C4 C5	S1	S2	2 \$3	S4 S5
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Confinement: I																	
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Name								2000	C	ommen			100 (0000	The last	1		
Spawning Habitat		-	no grav														
OverWinter Habita	t		no pool														
Rearing Habitat		Poor -	no pool l	habitat a	ind seas	onal stre											
Service Annual Control		- A/G	13 7		1.5	100	PH	ото	S	19			3150				4
Photo	Fo	c Lg		Di	ir	T			146			Commen	ts		- Alba		
93 F: 14		TD		C)	Dow	nstream	photo o	f site.								
93 F: 15	S	TD		L	J	Upst	ream ph	oto of si	te.								

Morice North Planning Area

ILP Map # Reach #

ILP#

Site 987

1.0

093L.036

	COMMENTS
Section	Comments
CHANNEL	S4 - no barriers observed.



Site #987, Downstream photo of site. Roll #93, Frame #14, Date: 2002/09/09



Site #987, Upstream photo of site. Roll #93, Frame #15, Date: 2002/09/09

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0

093L.047

	3. 3.1.		STR	EAM	REF	EREN	CING	il - in the	111.1	Pany.		
Gazetted Name	:					L	ocal Name:					
Watershed Code	e: 000-000	0000-00000-00	000-0000-0000-00	0-000-0	000-000	-000-000	ILF	Map #: 093L.0	47	IL	P#:	3028
F				7 4 1	REA	CH		The state of	-7/0			
Reach #: 3.0 Length (km): .47 Gradient (%): 0.0 US Elev (m): 60 Bars: None	0 8	Co Confin	JTM(Zone/East/N upling: Decoupled ement: Occasiona slands: NONE Mid-channel	i	Ma Ri	gnitude: Order:		iduous	Sample BGC Open wa	Zone:		m
	1,000	1 - 6 -	1,196	0.018	SIT	E	5 (1:0)	Topopie opinion	1.5	學學	-W3	-12
Site #: 988 Site Length (m)		Field UTM GIS UT	И М 9.642255.60326	47		0.00	y: C172 cy Name: Trit	Crew: Son Environment	G/SH al Consu		2002/09 errace)	9/09
	-100-20		1, 1, 100 15	С	HAN	NEL	10 -111	50 (1)	1600			
No Vis.Ch.:	Intermit	tent:		Avg	Min	Max	#		Avg	Min	Max	#
Dewatered: 🗸	Tr	ibs.:	hannel Width (m):	2.02	1.9	2.200	6	Gradient %	2.50	2	4	4
Stage: Low			Wetted Width (m):	0.20	0	0.400	6	Pool Depth (m)	0.10	0.100	0.100	4
Med		В	ankfull Depth (m):	0.23	0.2	0.3	3	Turt	oidity.:	Turbid	1	Low
High [Т	emp (C): 7	pH: 7.4			Conductivit	y: 100	,		oderate	<u> </u>	Clear
A	17/2/3			MOR	PHO	LOGY	APTIVATE OF	10000000000000000000000000000000000000	1,30	772		. 3
Bed Material: I	Dominant: dominant:		D95 (cm): 17 D (cm): 5.			Bars: Non	Side	Diagonal	Mid-	-channel		pan 🔲
Channel Patter Coupling	n: Sinuous g: Decoup		Islands: No	ne		IRBANCE CATORS	01 B1	B2 B3	D1	D2 C	03	
Confinemen	nt: Unconfi	ined			C1	C2 C	3 C4 C	5 S1 S2	S3	S4	S5	
Morpholog	y: RP	Riffle Pool		1		CITE						
					COV	ER	FK = 0.60	TOTAL STREET	100		- 5 111	7
Total Cover: Mod	derate		Type:	SWD	LW	D B	U	DP	OV	IV		
LWD: Few			Amount:	T	S	T	T	N	D	T		
LWD Dist: Eve		outed	Location: P/S/O:		~		V				FS	z: 🗌
Left Bank: Right Bank: R	Shape: Sl Shape: Sl Rip.Veg: D Rip.Veg:	loping (g Text	ure: Fines Gra Stag	avel 🗸 avel 🗸 e: Young e: Pole-s	Cobble forest	Boulde		Manmade Manmade	Algae	Cr.	own Clos 1-2	
				5.3	FIS	H	10 3 10	3.35	138	2000	3 11	
	Capture Method	Number of Events	Length fished (m)	Tota		Voltage	Species	Total Fish	Minin Length			imum h (mm)
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Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

3.0 093L.047 3028 988

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	azetted Na										Lo	cal Nam	ie:				M (2000)	2 - 8	
Wa	tershed Co	de: 000-0	00000-00	000-000	000-000	0-0000-0	00-000-0	000-000	-000-000	0									
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GIS	UTM (Z.E	N): 9.642	255.6032	647						R	ef. Name	e:							
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	EM	15: 1p: 7					Math	od: T4				eq #:	0						
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	Flood Sign							od: GE			Ţ	urb.: T	□ M		C		Metho	od: GI	E
17/3	70 VK		III KES	7 W	TO SAID	100	N	ORP	HOL	OGY	gir in	1,32	Ministra	alla S			78		
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93	F: 16		STD)	Dow	nstream	photo o	f typical	habitat -					_			
93	F: 17		STD	- 1		J	Upst	ream ph	oto of ty	pical hat	oitat.		700						
93	F: 18		STD	- 1 -	- (J	Priva	ate culve	rt (dama	aged) 450	0 mm at	12% slc	ppe.						

Morice North Planning Area

57.77.17.17.47.Av. 31

Reach # ILP Map #

ILP#

Site

3.0 093L.047

3028

	COMMENTS
Section	Comments
CHANNEL	Culvert is plugged and stream flow is ponded above culvert. This ponding has potentially resulted in the dewaterd channel here are downstream at the Walcot road crossing.
CHANNEL	S3* (accessible).

Morice North Planning Area

Reach #

ILP Map #

ILP#

Watershed Code:

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

3.0

093L.047

No.18				فالرووف	***				WA	TER	BO	PΥ	THE STATE OF			W.DE		
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				000000-	00000-	00000-00	00-0000-00	0-00	0-000	-000-00	000-00							
W		dy ID:							ILP	Map #:	093L.0	047		ILP#:	3028	F	Reach #:	3 -
	Proj	ect ID:	5270	1								Lake/S	tream:	S	L	ake Fro	m Date:	
F	ish Pe	rmit#;	14	5269		Date:	2002/09/09		То	2002	2/09/09	Ag	ency:	C172	Crew:	SG/SH	Res	sample:
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Site#	NID	Мар	NID	#	UTM:	Zone/Eas	t/North/Mtho	1	MTD)/NO	Temp	Cond	Tur	bid		Co	mment	
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V	VATER	RBOD	r -	Ele	ctrofis	hed in iso	lated pond t	elov	v culv	ert and	large p	onded an	ea ups	tream.				



Site #988, Downstream photo of typical habitat - dry. Roll #93, Frame #16, Date: 2002/09/09



Site #988, Upstream photo of typical habitat. Roll #93, Frame #17, Date: 2002/09/09



Site #988, Private culvert (damaged) 450 mm at 12% slope. Roll #93, Frame #18, Date: 2002/09/09

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

II P#

1.0

093L.046

Reach #: 1.0 Length (km): .36 Gradient (%): 7.8 US Elev (m): 90 Bars: None Site #: 996 Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	6 8 12 Side 5 1350 Intermitt	Confir	UTM(Zone/East/Noupling: Coupled nement: Occasion: Islands: NONE Mid-channel M 9.635502.60356 M 9.635534.60356 Channel Width (m): Wetted Width (m): Bankfull Depth (m):	Span Span	REA 63550 M	2.6035530 agnitude: Order: 3 iparian Veg Braid Agenc Agenc N N E L Max 3.3	6 3 getation: Co Landuse: N	niferous Not Specified Crew: S ton Environment	Sample BGC 2 Open wat	Type: Zone: der: Abse	ent 2002/09	
Reach #: 1.0 Length (km): .36 Gradient (%): 7.8 US Elev (m): 90 Bars: None Site #: 996 Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	6 B 1/2 Side 5 Side 5 Side Tri	Confir	UTM(Zone/East/Noupling: Coupled nement: Occasion: Islands: NONE Mid-channel M 9.635502.60357 M 9.635534.60356 Channel Width (m): Wetted Width (m):	Span Span	R E A 63550 M R S I H A I Min 2.6	2.6035530 agnitude: Order: 3 iparian Veg Braid Agenc Agenc Agenc NNEL Max 3.3	6 3 getation: Co Landuse: N y: C172 cy Name: Tri	niferous Not Specified Crew: S ton Environment	Sample BGC 2 Open wat	Type: Zone: der: Abso	Biase SBS ent 2002/09 errace)	ed 9/07
Length (km): .36 Gradient (%): 7.8 US Elev (m): 90 Bars: None Site #: 996 Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	Side 56 Side Intermitt	Confir I Diagonal Field UTA GIS UT ent: bs.: C	bupling: Coupled nement: Occasional Islands: NONE Mid-channel M 9.635502.60357 M 9.635534.60356 Channel Width (m): Wetted Width (m):	Span 770 661 Avg 2.92 1.78	63550 M R S I	2.6035530 agnitude: Order: 3 iparian Veg Braid Agenc Agenc Agenc N N E L Max 3.3	getation: Co Landuse: N y: C172 cy Name: Tri	Not Specified Crew: S ton Environment	G/SH tal Consult	Zone: der: Abso Date: tants (Te	SBS ent 2002/09 errace)	9/07
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Gradient (%): 7.8 US Elev (m): 90 Bars: None Site #: 996 Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	Side 56 Side Intermitt	Confir	mement: Occasion Islands: NONE Mid-channel M 9.635502.60356 M 9.635534.60356 Channel Width (m): Wetted Width (m):	770 661 C Avg 2.92 1.78	HAI Min 2.6	Order: 3 iparian Veg Braid FE Agenc Agenc Agenc NNEL Max 3.3	getation: Co Landuse: N y: C172 cy Name: Tri	Not Specified Crew: S ton Environment	G/SH tal Consult	Zone: der: Abso Date: tants (Te	ent 2002/09 еггасе)	#
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Site #: 996 Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	6): 350 Intermitti Tri	Field UTM GIS UT	M 9.635502.60357 M 9.635534.60356 Channel Width (m): Wetted Width (m):	770 661 C Avg 2.92 1.78	HAI Min 2.6	Agence Agence Agence Max 3.3	y: C172 cy Name: Tri	Crew: S	Avg	tants (Te	Max	#
Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	Intermitt	ent: C	Channel Width (m):	Avg 2.92 1.78	HAI Min 2.6	Agence Agence N N E L Max 3.3	cy Name: Tri	ton Environment	Avg	tants (Te	Max	#
Site Length (m) No Vis.Ch.: Dewatered: Stage: Low Med High	Intermitt	ent: C	Channel Width (m):	Avg 2.92 1.78	Min 2.6	Agend N E L Max 3.3	cy Name: Tri	ton Environment	Avg	tants (Te	Max	#
No Vis.Ch.: Dewatered: Stage: Low Med High	Intermitt Tri	ent: C	Channel Width (m): Wetted Width (m):	Avg 2.92 1.78	Min 2.6	Max 3.3	#		Avg	Min	Max	
Dewatered: Stage: Low Med High	Tri	bs.:	Wetted Width (m):	Avg 2.92 1.78	Min 2.6	Max 3.3	#				UF GOTTES	
Dewatered: Stage: Low Med High	Tri	bs.:	Wetted Width (m):	2.92	2.6	3.3		Gradient %			UF GOTTES	
Stage: Low / Med High			Wetted Width (m):	1.78			6	Gradient %	3.25	3	4	1
Med High	т.				14	_						1 4
Med [] High []	¥.	В	Bankfull Depth (m):		1.54	2.200	6	Pool Depth (m): 0.28	0.200	0,400	6
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bed Material. L	Dominant:	Gravels	D95 (cm): 10	.00		Bars: Non	✓ Side	Diagonal	Mid-c	channel		pan 🗍
Subo	dominant: I	Fines	D (cm): 6.								-	raid 🗌
Channel Pattern	n: Sinuous		Islands: No	ne	DIST	JRBANCE	O1 B1	B2 B3	D1 E)2 D	3	
Coupling	g: Coupled	1			IND	CATORS						
Confinemen	t: Confine	d			C1	C2 C3	3 C4 (C5 S1 S2	S3	S4	S5	
Morphology	y: RP	Riffle Pool										
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Total Cover: Abus	ndant		Type:	SWD	LW	D B	U	DP	ov	IV		
LWD: Abu	ndant	1	Amount:	T	S	N	T	T _{est}	D	N		
LWD Dist: Ever		uted	Location: P/S/O:	/	V						FSZ	Z: 🗌
Right Bank:	Shape: V -	shape Text	ture: Fines Gra	avel	Cobble	✓ Boulde	Rock	Manmade	1	Cro	wn Clos	SUITA
	Shape: V -	7.0			Cobble			Manmade	ī	Cit	1-20	
	ip.Veg: Co	The state of the s		e: Mature		-			-1			0.70
	ip.Veg:		90.00	e: Mature			Instream V	/eg: None ✓	Algae 🗌	Moss	Vas	cular
	3	- With			FIS	A			area Monte	THE VELVA	(100	1808
Site Number C	apture	Number of	Length fished	Tota	DE VANDA	Voltage	Species	Total	Minimu	ım	Mavi	mum
active injection and	Method	Events	(m)	Time		, c.iugo	- pecies	Fish	Length (The second second		h (mm)
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Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

1.0 093L.046 2927 996

	15.17						PR	OJE	CT				F-100-100	4.9		
Proje Stream Nan Project Watersh	ne (gaz.	: BUL	KLEY RI	VER	rice Fore					00		Project C	ode:		5270	
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Gazetted Name: Watershed Code: ILP Map#: Field UTM (Z.E.N): GIS UTM (Z.E.N):	000-00 093L.0 9.63556 9.63555	46 02.6035 34.6035	770 661	LP#: 29	927 Method:	NID M	000-000 ap #: 09		N	Lor ID #: 20 Site Lor ef. Name	g: 350		ch #: Method: HC	1.0	Site #: Access: H	
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COVER			Tota	al: A												
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Morice North Planning Area

Reach #

ILP Map #

ILP#

Site

1.0

093L.046

O	a	6
v	J	v

The Village	COMMENTS
Section	Comments
CHANNEL	S6, Barrier downstream.

Morice North Planning Area

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

ILP Map # Reach #

ILP#

Watershed Code:

1.0

093L.046

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W	aterbody ID						ILP M	lap #: 0	93L.04	6		ILP#:	2927	Reach #:	-
	Project ID	5270								Lake/Str	eam:	S	Lake Fr	om Date:	
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Site#	NID Map	NIC)#	UTM:Zor	e/East/	North/Mthd	MTD/	NO 1	emp	Cond	Tur	bid	C	omment	
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Site#	MTD/NO	H/P	Date	In T	ime In	Date Out	Time	Out	The state of some	- in the second		Co	omment		
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Site#	MTD/N	10	H/P	Er	ncl	Sec	Length	V	Vidth	Volt	age	Frequency	Pulse	Make	Mode
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700 B L S	表 3 李 ·	77	37-11-46	· 15		id at F	ISH	SUN	MA	RY	- 1	19 -2 .48		ROOT	
Site#	MTD/N	10	H/P	Specie	s S	Stage Ag	e l	Total #	Lat	h (Min/M	ax)	FishAct		Comment	
996	EF I	4	1	NFC				0	-		-	7.7-10-74-			



Site #996, Downstream photo of typical habitat within site. Roll #94, Frame #14, Date: 2002/09/07



Site #996, Upstream photo of typical habitat within site with \log . Roll #94, Frame #15, Date: 2002/09/07

FDIS Reach/Site Summary

Morice North Planning Area

Reach # ILP Map #

ILP#

3.0

093L.056

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Left Bank	k: Rip.	Veg:		-1	Stag	e: Young		-			Veg:	None 🗸	Algae [_	Moss	Vas	cular
AUD	400		Maril	4 00	28		0.53	FEAT	1625	S	0	- 3-1	-	2 956	115	318
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Morice North Planning Area

Watershed Code:

2732

EF

NFC

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Reach #

ILP Map #

ILP# 2450

3.0 093L.056

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273	093L	056	202	73	- 1			GPU	EF	1	4	11	0	С	1.55				
	N. He		No.					A. (3 E /	AR :	SET	TING	38	Z 2	- 架樹		12 1		
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273	EF	1	1	2002/0	9/05	07:49	2002/0	9/05	08	:45									
2732	EF	1	1	2002/0	9/05	12:00	2002/0	9/05	12	:30									
Self (20.0	= 20		C. E	LECT	ROI	FIS	HE	RSP	ECI	FIC	AT	IONS	N. Carlo		5	
Site#	I	/ITD/N	Ю	H/P	1	Encl	Sec	L	ength		Width		Voltag	je	Frequency	Puls	e	Make	Mode
273	EF		1	1		0	340		120.0		2.0		700		60	6		SMITH ROOT	12B
2732	EF		1	1		0	270		80.0		2.0		700		60	6		SMITH	12B
		= 0		July 1	0.000		100	FI	SH	SU	MM	ARY	15.00	1= 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1053	400 j	- J 10
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APPENDIX II

Phase Completion Reports

PROJECT PHASE COMPLETION REPORT

PHASE 4

• MWLAP Project Number: CNF_C172_010_2003

• Contract Name: Fish and Fish Habitat Inventory in selected tributaries within

the Tochcha and Morice Planning Areas

• FIA Project Number: FIA 2002-8

• FIA Region Skeena-Bulkley Region

MWLAP Region Skeena 06/07
 FDIS Project Code: 5270 and 5271
 Forest District Morice Forest District
 Project Type: 1:20 000 Reconnaissance

• Report Date: October 15, 2002

• Proponent: Canadian Forest Products Ltd. (Houston Operations)

• Company/Agency: Triton Environmental Consultants Ltd.

Contact Person: Jason Harris
 Contact Phone: (250) 635-1494
 Contact E-Mail: jharris@triton-env.com

FIA Coordinator: Todd Mahon
 Proponent QA Monitor: Chris Schell

List of Deliverables Submitted

Deliverable Product	Received	Approved
Site Cards	Delivered as attachment to Final Report	
Fish Collection Forms/Individual Fish Data Forms	Delivered as attachment to Final Report	
Additional Sampling Table	Delivered as attachment to Final Report	
Phase Completion Report		
Phase 2 Quality Assurance	Delivered as attachment to Final Report	

Activity Log

<u>Date</u>	Activity
September 2, 2002 –	Gear up, travel, fieldwork and gear down for stream inventory in the Morice
October 10, 2001	Forest District.

Summary of Work Completed

Total number of stream reaches sampled:

384*

*Includes 3 lakes sampled - overnight gillnet sets
*Includes 15 lakes / wetlands sampled - overnight minnow trap sets

Summary of Phase Costs

Professional Fees \$45,014.29 Disbursements \$45,641.00

Progress and Problems Summary

Phase 4 was completed as scheduled. Sampling during late summer periods allowed crews to assess habitat during low flow conditions and gave a good representation of stream habitats throughout the year.

Identification of obstructions/barriers was critical to describing and assessing fisheries distribution within the sampled watersheds. Field crews tried to identify obstructions/barriers while on site, by either using a helicopter recce of the stream or by strategically moving sample sites while still in the field.

Field crews were in constant contact with Todd Mahon (FIA contract monitor) and John Brockley (Canfor) when the originally proposed plan needed modifications. Modifications of the original plan were used to provide additional fisheries information for the working area.

Next Phase Project Plans and Constraints

The project will now proceed with data compilation and reporting.

Contract Monitor Acceptance

Report Submitted By: Jason Harris	Date: October 15, 2002
Phase Completion Approved:	Date:
Comments:	

PROJECT PHASE COMPLETION REPORT

PHASE 5/6

MWLAP Project Number: CNF C172 010 2003

Contract Name: Fish and Fish Habitat Inventory in selected tributaries within

the Tochcha and Morice Planning Areas

• FIA Project Number: FIA 2002-8

• FIA Region Skeena-Bulkley Region

MWLAP Region Skeena 06
 FDIS Project Code: 5270 and 5271

Forest District
 Project Type:
 Morice Forest District
 1:20 000 Reconnaissance

• Report Date: January 15, 2003

• Proponent: Canadian Forest Products Ltd. (Houston Operations)

• Company/Agency: Triton Environmental Consultants Ltd.

Contact Person: Jason Harris
Contact Phone: (250) 635-1494

• Contact E-Mail: jharris@triton-env.com

FIA Coordinator: Todd Mahon
 Proponent QA Monitor: Chris Schell

List of Deliverables Submitted

Deliverable Product	Received	Approved (QA)
FDIS Site Cards (in watershed reports)		
FDIS Fish Collection Forms (in watershed reports)		
FDIS Database (as attachment)		
Planning Document (as attachment)		
Field Notes (as attachment)		
Fish Ageing Structures (as attachment)		
Photodocumentation (as attachment)		
Digital Data (as attachment)		
FISS update data (as attachment)		
Final Reports (hardcopy and digital)		
Project Overview Map		
Interpretive Maps		
Project Maps		

Activity Log

<u>Date</u>	Activity	Time Spent
October - November 2002	site card entry	200 hrs
November - December 2002	fish collection form entry	200 hrs
November - December 2002	photo development/scanning/printing	115 hrs
November - December 2002	watershed reporting	500 hrs
January – February 2003	mapping project/interpretive/overview	787.6 hrs

Summary of Work Completed

Total number of stream reaches processed:

384*

Summary of Phase I-III Costs

Professional Fees	\$20,911.79
Disbursements	\$680.00

Summary of Phase IV Costs

Professional Fees	\$45,014.29
Disbursements	\$45,641.00

Summary of Phase V Costs

Professional Fees	\$23,282.00
Disbursements	\$1,850.00

Summary of Phase VI Costs

Professional Fees	\$55,266.21
Disbursements	\$1,853.00

Progress and Problems Summary

The reporting and mapping procedures followed those outlined in the *Reconnaissance* (1:20,000) *Inventory Standards* and includes additional data not otherwise required. The digitally produced maps include all information as per RIC standards and the contract. These maps include: watershed codes; ILP's; stream names; waterbody identifiers; stream networks; reach breaks; fish sampling/site card locations; fisheries sensitive zones; fish species; and features.

All data entered into FDIS was audited using MWAP's QA/QC tool prior to inclusion into the watershed reports.

^{*}Includes 3 lakes sampled - overnight gillnet sets

^{*}Includes 15 lakes / wetlands sampled - overnight minnow trap sets

Next Phase Project Plans and Constraints

Nid to UTM conversions will be completed post QA/QC.

Triton will complete digital mapping QA internally after QA/QC has been completed.

Contract Monitor Acceptance

Report Submitted By: Jason Harris	Date: January 15, 2003
Phase Completion Approved:	Date:
Comments:	

APPENDIX III

Quality Assurance Forms and Correspondence

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
Bed_Moveable_Particle	093L.015	3801	4	529	093L.025	50529	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.024	3580	1	311	093L.024	20311	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.025	3617	4	312	093L.024	20312	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.025	3618	1	589	093L.025	50589	Bed Moveable Particle (D) should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.025	3618	1	589	093L.025	50589	D95 should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.025	3618	1	589	093L.025	50589	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.025	3618	4	316	093L.025	20316	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.025	3620	1	317	093L.025	20317	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.025	3623	1	313	093L.025	20313	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.026	3681	1	518	093L.026	50518	Bed Moveable Particle (D) should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.026	3681	1	518	093L.026	50518	D95 should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.026	3681	1	518	093L.026	50518	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.026	3693	1	597	093L.026	50597	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.026	3723	1	323	093L.026	20323	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.026	3725	1	596	093L.026	50596	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.035	3146	2	599	093L.035	50599	Bed Moveable Particle (D) should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.035	3146	2	599	093L.035	50599	D95 should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.036	3406	4	546	093L.036	50546	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.036	3439	1	547	093L.036	50547	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.036	3529	3	516	093L.036	50516	Bed Moveable Particle (D) should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.036	3529	3	516	093L.036	50516	D95 should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.036	3529	3	516	093L.036	50516	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.036	3543	1	987	093L.036	20987	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.046	2868	6	545	093L.046	50545	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.046	2937	2	260	093L.046	20260	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.046	2939	2	561	093L.046	50561	Bed Moveable Particle (D) should be less than 0.2.	Field estimate

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
Bed_Moveable_Particle	093L.046	2939	2	561	093L.046	50561	D95 should be less than 0.2.	Field estimate
Bed_Moveable_Particle	093L.046	2939	2	561	093L.046	50561	D95 is less than D.	Field estimate
Bed_Moveable_Particle	093L.046	2981	7	539	093L.045	50539	D95 is less than D.	Field estimate
CONFINEMENT	093L.014	3783	2	306	093L.014	20306	if Confinement EN then Reach Confinement must = EN or CO.	Field measurement differs from map estimate.
CONFINEMENT	093L.014	3783	3	49	093L.014	20049	if Confinement EN then Reach Confinement must = EN or CO.	Field measurement differs from map estimate.
CONFINEMENT	093L.014	3784	1	305	093L.014	20305	if Confinement EN then Reach Confinement must = EN or CO.	Field measurement differs from map estimate.
CONFINEMENT	093L.026	3681	1_	518	093L.026	50518	if Confinement UN then Reach Confinement should = OC or UN. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.
CONFINEMENT	093L.034	3042	2	319	093L.034	20319	if Confinement EN then Reach Confinement must = EN or CO.	Field measurement differs from map estimate.
CONFINEMENT	093L.035	3162	1	332	093L.035	20332	if Confinement UN then Reach Confinement should = OC or UN. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.
CONFINEMENT	093L.035	3184	1_	614	093L.035	50614	if Confinement OC then Reach Confinement should = FC or OC or UN. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
CONFINEMENT	093L.035	3275	3	610	093L.035	50610	if Confinement OC then Reach Confinement should = FC or OC or UN. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.
CONFINEMENT	093L.046	2868	5	281	093L.046	20281	if Confinement OC then Reach Confinement should = FC or OC or UN. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.
CONFINEMENT	093L.046	2885	2	268	093L.046	20268	if Confinement CO then Reach Confinement should = EN or CO or FC. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.
CONFINEMENT	093L.046	2910	3	261	093L.046	20261	if Confinement CO then Reach Confinement should = EN or CO or FC. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.
CONFINEMENT	093L.046	2927	1	996	093L.046	20996	if Confinement CO then Reach Confinement should = EN or CO or FC. Warning Only, do not change if Reach confinement matches map.	Field measurement differs from map estimate.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID -	Comment	Triton Comment
FEATURE	093L.036	3477	5	329	093L.035	20329	Roll and Frame missing.	No photos taken.
FEATURE	093L.046	2912	5	266	093L.046	20266	Roll and Frame missing.	No photos taken.
FISH EF SPECS	093L.014	3781	3				EF Length 2 must be >= 100 for Site # 304; Method & #: EF/1; H/P: 1	Electroshocked in a small pool at culvert inlet.
FISH EF SPECS	093L.046	2873	1				EF Length 50 must be >= 100 for Site # 279; Method & #: EF/1; H/P: 1	rest of the stream was DRY
FISH EF SPECS	093L.046	2873	2				EF Length 20 must be >= 100 for Site # 272; Method & #: EF/1; H/P: 1	Electroshocking was conducted in two isolated pools below culvert outlet. Dewatered.
FISH EF SPECS	093L.046	2877	4				EF Length 10 must be >= 100 for Site # 283; Method & #: EF/1; H/P: 1	Electroshocked a small isolated pool above CV. DRY/INTERMITTENT stream.
FISH EF SPECS	093L.046	2913	1				EF Length 10 must be >= 100 for Site # 262; Method & #: EF/1; H/P: 1	Electroshocked in a small isolated pond at CV inlet, stream is NCD upstream and downstream of pond.
FISH EF SPECS	093L.046	2925	1				EF Length 50 must be >= 100 for Site # 293; Method & #: EF/1; H/P: 1	Electroshocked in a small isolated pool from the confluence for 50 m upstream. DRY/INTERMITTENT stream.
FISH EF SPECS	093L.046	2941	1				EF Length 100 must be >= 172 for Site # 253; Method & #: EF/1; H/P: 1	Site length was 150 m, electroshocking length was 100 m.
FISH EF SPECS	093L.047	3028	2				EF Length 30 must be >= 100 for Site # 259; Method & #: EF/1; H/P: 1	All fish were captured in the culvert outlet pool. This stream was Dewatered.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.013	3731	-1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3742	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3742	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3742	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3743	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3746	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3749	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3749	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3749	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3753	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.013	3753	2				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.014	3776	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.014	3777	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.014	3781	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.014	3783	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.014	3783	5				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.014	3784	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.014	3787	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.024	3580	1				WARNING: A stream should have a minimum of two methods.	No comment,
FISH FORM	093L.025	3599	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3599	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3601	3				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.025	3601	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3602	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3605	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3607	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3617	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3617	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3617	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3618	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3618	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3618	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3618	5				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.025	3620	1_				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3623	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3626	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3628	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3628	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3628	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3633	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3633	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3637	5				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.025	3638	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3633	2				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID.	Comment	Triton Comment
FISH FORM	093L.026	3675	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3678	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3682	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3684	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3688	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3695	7				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3697	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3698	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3701	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3711	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3715	4				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.026	3716	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.026	3723	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.034	3042	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3073	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3112	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3122	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3138	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3146	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3146	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3155	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3164	1				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.035	3164	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3164	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3174	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3178	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3182	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3184	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3247	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3247	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3252	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3259	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3259	4				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.035	3275	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3275	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3315	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3315	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3315	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3332	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3332	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3332	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3349	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3349	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3350	1				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.035	3357	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3361	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.035	3375	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3406	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3406	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3406	5				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3406	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3406	10				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3412	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3412	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3439	1				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.036	3439	2			į T	WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3439	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3471	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3477	1_				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3477	5				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3477	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3520	-1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3526	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3528	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3529	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3532	1				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.036	3532	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3549	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.036	3559	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.045	2593	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.045	2593	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.045	2593	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.045	2610	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.045	2690	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.045	2774	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	1					No comment,
FISH FORM	093L.046	2868	4				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.046	2868	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	7				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	8				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	8				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2868	9				WARNING: A stream should have a minimum of two methods,	No comment.
FISH FORM	093L.046	2868	10				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2873	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2873	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2877	1				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.046	2877	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2877	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2885	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2908	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2912	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2912	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2912	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2912	5				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2913	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2915	3					No comment.
FISH FORM	093L.046	2925	1				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.046	2927	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2934	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2937	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2941	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2941	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2941	6				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2942	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2942	1				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2981	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2981	7					No comment.
FISH FORM	093L.046	2981	8				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.046	2981	10				WARNING: A stream should have a minimum of two methods.	
FISH FORM	093L.046	2981	12				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.046	2999	3				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.047	3028	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.047	3028	3				WARNING: A stream should have a minimum of two methods.	No comment,
FISH FORM	093L.056	2445	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2445	4				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2445	7				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2445	8				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2445	9					No comment.
FISH FORM	093L.056	2445	11				WARNING: A stream should have a minimum of two methods.	No comment.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
FISH FORM	093L.056	2445	13				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2445	14				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2450	2				WARNING: A stream should have a minimum of two methods.	No comment.
FISH FORM	093L.056	2450	6				WARNING: A stream should have a minimum of two methods.	No comment.
Gradient	093L.013	3736	3	309	093L.013	20309	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estima
Gradient	093L.013	3737	2	46	093L.013	20046	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estima
Gradient	093L.013	3740	2	45	093L.013	20045	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.013	3742	2	44	093L.013	20044	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.013	3743	1	455	093L.013	95455	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimat
Gradient	093L.013	3749	1	42	093L.013	20042	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimat
Gradient	093L.013	3749	1	452	093L.013	95452	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimat

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
Gradient	093L.013	3749	2	41	093L.013	20041	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.014	3784	1	305	093L.014	20305	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.014	3787	3	48	093L.013	20048	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.024	3580	1	311	093L.024	20311	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.025	3618	4	316	093L.025	20316	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.025	3633	6	533	093L.026	50533	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.026	3678	8	338	093L.045	20338	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.026	3681	1	518	093L.026	50518	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.026	3688	1	517	093L.026	50517	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.026	3710	3	521	093L.026	50521	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.026	3711	1	520	093L.026	50520	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
Gradient	093L.026	3723	1	323	093L.026	20323	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.026	3725	1	596	093L.026	50596	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3112	1	330	093L.035	20330	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3122	1	328	093L.035	20238	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3146	1	601	093L.035	50601	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3155	2	334	093L.035	20334	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3162	1	332	093L.035	20332	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3164	6	354	093L.035	20354	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3182	1	351	093L.035	20351	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3182	2	613	093L.035	50613	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3184	1	614	093L.035	50614	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
Gradient	093L.035	3247	1_	349	093L.035	20349	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3252	1	611	093L.035	50611	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3259	4	320	093L.034	20320	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3275	1	592	093L.035	50592	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3275	3	610	093L.035	50610	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3315	3	595	093L.035	50595	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3332	1	348	093L.035	20348	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3332	2	347	093L.035	20347	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3361	2	341	093L.035	20341	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.035	3375	1	586	093L.035	50586	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.036	3471	3	456	093L.036	95456	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
Gradient	093L.036	3471	5	461	093L.046	95461	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.036	3525	3	507	093L.036	50507	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.036	3543	1	987	093L.036	20987	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.036	3549	2	512	093L.036	50512	Average Gradient is higher than the reach gradient plus the tolerance.	
Gradient	093L.037	3571	1	500	093L.037	50500	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.045	2593	4	541	093L.045	50541	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.045	2593	6	289	093L.045	20289	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.045	2774	1	340	093L.045	20340	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.046	2868	4	282	093L.046	20282	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.046	2868	5	280	093L.046	20280	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.046	2874	1	269	093L.046	20269	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID .	Comment	Triton Comment
Gradient	093L.046	2885	2	268	093L.046	20268	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.046	2908	2	459	093L.046	95459	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.046	2910	3	261	093L.046	20261	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.046	2927	1	996	093L.046	20996	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.047	3028	3	988	093L.046	20988	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.047	3028	6	286	093L.046	20286	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
Gradient	093L.056	2445	9	336	093L.055	20336	Average Gradient is higher than the reach gradient plus the tolerance.	Field measurement is different than map estimate
Gradient	093L.056	2450	6	276	093L.056	20276	Average Gradient is lower than the reach gradient minus the tolerance.	Field measurement is different than map estimate
PATTERN	093L.035	3275	2		093L.035	11066	Gradient cannot exceed 8% when the Reach Pattern is IM/ME	Field measurement is different than map estimate
PATTERN	093L.035	3357	1		093L.035	Gradient cannot exceed 8 when the Reach Pattern 093L.035 11187 IM/ME		Field measurement is different than map estimate
PATTERN	093L.035	3361	2		093L.035	11190	Gradient cannot exceed 8% when the Reach Pattern is IM/ME	Field measurement is different than map estimate

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
PATTERN	093L.045	2542	2		093L.045	10212	Gradient cannot exceed 8% when the Reach Pattern is IM/ME	Field measurement is different than map estimate
PATTERN	093L.045	2593	4		093L.045	10273	Gradient cannot exceed 8% when the Reach Pattern is IM/ME	Field measurement is different than map estimate
PATTERN	093L.045	2641	2		093L.045	10424	Gradient cannot exceed 8% when the Reach Pattern is IM/ME	Field measurement is different than map estimate
PATTERN	093L.055	2435	1		093L.055	10038	Gradient cannot exceed 8% when the Reach Pattern is IM/ME	Field measurement is different than map estimate
REACHCARD	093L.013	3753	2		093L.013	12352	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.025	3602	3		093L.025	11996	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.025	3605	2		093L.035	11236	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.025	3618	2		093L.025	11947	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.025	3628	1		093L.025	11205	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.025	3637	5		093L.025	12106	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.026	3678	3		093L.035	11000	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.

Field_Name	ILP Map	ILP	Reach	Site	NID Map	NID	Comment	Triton Comment
REACHCARD	093L.026	3678	6		093L.035	11003	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.026	3684	1		093L.026	12187	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.026	3698	3		093L.026	12151	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.035	3164	2		093L.035	11291	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.035	3247	4		093L.035	11032	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.036	3406	5		093L.036	11622	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.036	3528	2		093L.036	11557	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.036	3529	1		093L.036	11565	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.036	3532	3		093L.036	11576	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.046	2868	7		093L.046	10831	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.
REACHCARD	093L.046	2868	9		093L.045	10337	Site card must be filled out.	Fish only sampling site. No site card filled out in the field.

March 21, 2003

Todd Mahon, Wildfor Consultants FIAA Co-ordinator, Canadian Forest Products Ltd. PO Box 158, Houston, BC, VOJ 1Z0

Re: Stage 3 QA on phases 5-6 fish and fish habitat inventory in the Tochcha and Morice North Planning Areas.

Todd:

The stage 3 quality assurance (QA) review of the final deliverables for the 1:20k stream inventory sampling program performed by Triton Environmental Consulting Ltd. for Canadian Forest Products Ltd. has been completed. Resources Inventory Committee standard QA forms were completed during the audit and are included with this letter.

The list of deliverables check found everything present. The card/FDIS/map check found an acceptably small number of errors and no systematic problems. The report was fine. On the maps I noted a few discrepancies in the stream classification coding which need to be addressed, but these were minor and the maps were otherwise excellent. Mapping comments are contained on the last page of this report. The FISS update deliverables was complete and to standards. I found some errors in the photodocumentation package.

While there are some minor issues to address, the deliverables for this project are complete and to RIC standards. This project has passed QA review. If you have any questions regarding the information presented in this memo or in the QA forms please contact me by e-mail (schell@bulkley.net) or by telephone (250-847-9059).

Sincerely,

Chris Schell

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

A I OICCL HAIRC.	P	roi	ect	name:
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1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432

MELP project number: SCI-C172-010-2001

Submitted by:

Triton Environmental Consultants Ltd

QA review by:

Chris Schell Review date: March, 2003

FORM 3A

DATA COMPILATION AND REPORTING DELIVERABLES FOR QA – PAGE 1 OF 1

	Deliverable	Hardcopy	Digital	Comments
Watershed	Watershed report	Y	Y	***************************************
reporting	Appendices	 	<u></u>	
	I. FDIS summary and photographs	Y	Y	
	II. Hardcopy maps	Y	N	No digital mapping files see attached email and digital deliverables CD
	Attachments			
	I. Pre-field planning document	-	Y	
	II. Field notes and forms	Y	•	
	III. Fish aging structures	Y	-	
	IV. Fish samples and vouchers	-	•	None
	V. Photodocumentation	Y	Y	
	VI. Digital data	Y	, .	Mapping files and digital mapping QA files missing see attached email and digital deliverables CD
	VII. FISS update data	Y		
	VIII. Aerial photography		-	
Individual lake	Lake report			No lake reporting.
reporting	Appendices	†		- Promise
(for each lake)	I. Lake survey form			
	II. Water chemistry data			
	III. Fish collection forms			
	IV. Tributary summary			
	V. Photographs			
	VI. Bathymetric map			
	Attachments			
	I. Photodocumentation			
	II. Digital data			
	III. FISS update data			
	IV. Phase completion reports			
	V. Field notes and forms			
	VI. Aerial photography			
	VII. Fish ageing structures			
	VIII. Fish samples and vouchers			-

FISH INVENTORY QUALITY ASSURANCE CHECK FORM Project name: 1:20 k Reconnaissance F&FHI - Canfor 2002 program FRBC project number: 716432 MELP project number: SCI-C172-010-2001 Submitted by: Triton Environmental Consultants Ltd QA review by: Chris Schell Review date: March, 2003 FORM 3B DIGITAL DATA CHECKING - PAGE 1 OF 1 For each FDIS file provided: FDIS filename: Acceptable Comments Y N Conversions done: ILP to WSC Ÿ Not completed, but not expected. NID-UTM Y Update bathymetry NA NA FDIS QA report attached Acceptable error report Ÿ See comments below For each FDIS file and digital map file set: ARCView fish QA tool Acceptable Filename Comments Y N Digital map files Metadata table M620301.dbf Y M620302.dbf Map attributes table A620301.dbf Υ A620302.dbf FDIS data check Sequential reach Y numbering: Point locations on Y TRIM streams: Copy of ARCView fish QA tool error report attached Acceptable error Y

Morice FDIS QA: site 530 and 259, cond and temp should have been measured in the field if EF was the primary sampling method. Site 172, EF length should have been equal to x10 channel length.

report

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name:

1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432

6432 MELP project number: <u>SCI-C172-010-2001</u>

Submitted by:

Triton Environmental Consultants Ltd

QA review by:

Chris Schell Review date:

March, 2003

FORM 3C

CONSISTENCY CHECK: STREAM CARDS, FDIS, PROJECT, INTERPRETIVE MAPS – PAGE 1 OF 6

	1	2	3	4	5	6	7	8	9	10
Site #	5	16	20	31	39	54	62	73	355	361
NID map #	93k.071	93k.091	93k.081	93k.091	93m.020	93m.029	93m.039	93n.001	93m.019	93m.029
NID#	40005	40016	40020	40031	40039	40054	40062	40073	20355	20361

Record errors below with an 'x.' An error occurs if there is any inconsistency among: 1) field site cards, 2) FDIS, 3)

project maps and 4) interpretive maps, as specified for each attribute.

Card section	Attribute	Where to	1	2	3	4	5	6	7	8	9	10	Error locations
Header	Stream name	1, 2, 3, 4	Ť	Ī	-	Ė	٦	Ů	Ė	٦	Í	10	locations
	Watershed code or ILP map # and ILP #	1, 2, 3, 4	\vdash								-		
	NID map # and NID #	1, 2	_	_									
	Reach #	1, 2, 3, 4	1							-			
	Site #	1, 2, 3, 4											
	Site length	1, 2											
	Access	1, 2											
	Survey date	1, 2, 3, 4	П						_				
	Agency conducting survey	1, 2, 3, 4						\dashv	_				·
	Time of survey	1, 2	H					\dashv					
	Crew conducting survey	1, 2			_	\exists							
	Fish form completed	1, 2	H			\dashv	\neg	\dashv					
Channel	Channel width	1, 2, 3, 4		\dashv				\exists				-	
	Wetted width	1, 2						寸					
	Residual pool depth	1, 2			\dashv				\dashv	7		$\neg \dashv$	<u></u>
	Gradient	1, 2, 3, 4			\dashv		\dashv	1	\dashv		\dashv		
	Bankfull depth	1, 2			\dashv		1		\dashv	_			
	Stage	1, 2			7	\exists		\dashv	7	\dashv			
	No Vis. Ch., DW, and Dry/Int.	1, 2, 3, 4		寸	\dashv	ᅦ			7	7	\neg		
	Tribs	1, 2, 3, 4		7	7		\neg		7		_		
Cover	Total cover	1, 2		\dashv	7		1	\dashv	_	7			
	Cover elements	1, 2	$\neg \uparrow$			\dashv	\dashv	\dashv	1	+		\neg	
	Functional LWD (amount, distribution)	1, 2	1	\dashv	一	1	\dashv	十		寸	\dashv		
	Crown closure	1, 2	\dashv	7	1	\dashv	\dashv	+	+	_	\dashv		
	Instream vegetation	1, 2	\dashv	7	寸	+	1	\dashv	\dashv	\dashv	\dashv		
	Bank shape, texture, riparian vegetation	1, 2	7	\dashv	_	\dashv	+	\dashv	十	\dashv	_	\dashv	

FORM 3C

CONTINUED - PAGE 2 OF 6

Card section	Attribute	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Water	EMS #	1, 2, 3, 4	\dagger						一	_			
	Temperature, pH	1, 2							\vdash	 		$\neg \neg$	
	Water chemistry requisition #	1, 2	T										
	Conductivity, turbidity	1, 2					_		-				
Channel -	Flood signs	1, 2					\neg						
morpho	Bed material	1, 2, 3	T				\exists		_		\vdash		
logy	D95, D	1, 2	Н		_		ㅓ					_	
	Morphology	1, 2, 3	П		7	\dashv	\dashv		_		\vdash		
	Disturbance indicators	1, 2, 3	$\dagger \dagger$			\neg	7	\dashv	\dashv		\dashv	_	
	Pattern	1, 2, 3	Н	\dashv	+				\dashv		\dashv		
	Islands, bars, coupling	1, 2	Н		7	\dashv	1	\dashv		\dashv	\dashv	-	
	Confinement	1, 2, 3	H	+	\dashv		-		\dashv	\dashv	-+	-	
Features	NID map # and NID #	1, 2	Н		7	\dashv	\dashv	\dashv	\dashv	-	\dashv		
	Type, height/length	1, 2, 3, 4		\dashv	\dashv	+	\dashv	+	\dashv	\dashv	+	\neg	
	Photo, comments	1, 2, 3, 4		\dashv	\dashv	\dashv	\dashv	\dashv	\dashv	\dashv	\dashv	\dashv	
	UTM	1, 2	H	+	\dashv	X	X	\dashv	\dashv	7	\dashv	_	
Habitat	General comments	1, 2	H	7	\dashv	+	+	\forall	+	7	+	\dashv	
quality	Fisheries sensitive zones	1, 2	H	7	十	\dagger	+	\dashv	\dashv	-+	十	\dashv	 -
Photo-	Roll #	1, 2	H	+	十	\dashv	\dashv	\dashv	\dashv	+	\dashv	\dashv	
documen-	Frame #	1, 2		\dashv	7	十	+	\dashv	\dashv	\dashv	\dashv	\dashv	
tation	Focal length	1, 2	\dashv	-	\dashv	+	+	+	\dagger	+	\dashv	_	
	Direction	1, 2	\top	\forall	+	+	\dagger	\top	+	+	+	-	
	Comments	1, 2	\dashv	\forall	+	╁	+	+	+	+	+		
Wildlife	Group	1, 2	\dashv	+	+	\dashv	+	+	\dashv	+	\dashv	_	
	Observations	1, 2	\dashv	\dagger	+	\dashv	+	+	\dashv	+	+	\dashv	
Comments	General comments	1, 2	+	+	+	+	+	+	\dashv	\dashv	$\frac{1}{x}$	+	· · · · · · · · · · · · · · · · · · ·
Total errors	:		十	\dashv	+	1	1	+	+		11	\dashv	3

Comments:

^{4 &}amp; 5) UTM for features are missing in FDIS <u>Added to FDIS</u>.9) Card says S6, FDIS says S3, the map is solid blue. <u>Fixed FDIS</u>.

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name: 1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432 MELP project number: SCI-C172-010-2001

Submitted by: Triton Environmental Consultants Ltd

QA review by: Chris Schell Review date: March, 2003

FORM 3C

CONSISTENCY CHECK: STREAM CARDS, FDIS, PROJECT, INTERPRETIVE MAPS – PAGE 3 OF 6

	1	2	3	4	5	6	7	8	9	10
Site #	376	580	627	642	42	52	259	267	276	285
NID map #	93m.010	93n.001	93m.029	93n.002	931.046	931.013	931.046	931.046	931.036	931.046
NID#	20376	50580	50627	50642	20042	20052	20259	20267	20297	20285

Record errors below with an 'x.' An error occurs if there is any inconsistency among: 1) field site cards, 2) FDIS, 3)

project maps and 4) interpretive maps, as specified for each attribute.

Card section	Attribute	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Header	Stream name	1, 2, 3, 4	<u> </u>	-	-	-	3	U		-		10	locations
7.700.00	Watershed code or ILP map # and ILP #	1, 2, 3, 4	\vdash			X							
	NID map # and NID #	1, 2	 	-	-					\vdash			
	Reach #	1, 2, 3, 4	-		-			_		_			
	Site #	1, 2, 3, 4	 	-									
	Site length	1, 2											:
	Access	1, 2				<u> </u>							
	Survey date	1, 2, 3, 4											
	Agency conducting survey	1, 2, 3, 4											
	Time of survey	1, 2											
	Crew conducting survey	1, 2											
	Fish form completed	1, 2											
Channel	Channel width	1, 2, 3, 4								X			-
	Wetted width	1, 2								Х			
	Residual pool depth	1, 2					X						
	Gradient	1, 2, 3, 4											
	Bankfull depth	1, 2											
	Stage	1, 2											
	No Vis. Ch., DW, and Dry/Int.	1, 2, 3, 4											
	Tribs	1, 2, 3, 4											
Cover	Total cover	1, 2											
	Cover elements	1, 2											
	Functional LWD (amount, distribution)	1, 2											
	Crown closure	1, 2											
	Instream vegetation	1, 2											
	Bank shape, texture, riparian vegetation	1, 2											

FORM 3C

CONTINUED - PAGE 4 OF 6

Card section	Attribute	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Water	EMS#	1, 2, 3, 4	1										
	Temperature, pH	1, 2							_				
	Water chemistry requisition #	1, 2						-	r				
	Conductivity, turbidity	1, 2			_				_				·
Channel -	Flood signs	1, 2							_		H		
morpho	Bed material	1, 2, 3											
logy	D95, D	1, 2	П										
	Morphology	1, 2, 3	П				7						
	Disturbance indicators	1, 2, 3	П			\exists							
	Pattern	1, 2, 3				1	_						
	Islands, bars, coupling	1, 2	П		\exists	\exists					\dashv		
	Confinement	1, 2, 3	Ħ										
Features	NID map # and NID #	1, 2				\dashv							
	Type, height/length	1, 2, 3, 4					_		\exists		7		
	Photo, comments	1, 2, 3, 4		\exists	_	1					7		
	UTM	1, 2		1		\dashv			T				
Habitat	General comments	1, 2			\exists	1	1				\dashv		
quality	Fisheries sensitive zones	1, 2			7	\dashv	7		7	1	\dashv	\dashv	
Photo-	Roll #	1, 2		\dashv	7	7	T				\dashv		
documen-	Frame #	1, 2				+	寸	7					
tation	Focal length	1, 2	1		\dashv	1	7	\dashv	7	1	7	#	
	Direction	1, 2	\top			寸	7	7	\dashv	7	\dashv		
	Comments	1, 2	_	\forall	7	十	\dashv	\dashv	1	\forall	\dashv	_	
Wildlife	Group	1, 2	+	\dashv	7	\dashv	\dashv	7	+	\dashv	\top	+	
	Observations	1, 2	\top	+	\dashv	\top	\dashv	\dagger	\dashv	\dashv	+	\dashv	
Comments	General comments	1, 2	\top	\dashv	\dashv	\top	†	\top	+	十	\dagger	-+	
Total errors	•		\dashv	\dashv	7	1	1	\forall	\top	2	十		4

Comments:

- 4) ILP 1750 in FDIS, some of the labels on the maps say this is 1750, and some say 1752 (headwater label). <u>Stream should be ILP 1750 at headwaters, fixed map.</u>
- 5) Wb method, GE on card, MS in FDIS Fixed FDIS.
- 8) channel method on card is HC, channel method in FDIS is MS Fixed FDIS.

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name:

1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432

MELP project number: SCI-C172-010-2001

Submitted by:

Triton Environmental Consultants Ltd

QA review by:

Chris Schell

Review date:

March, 2003

FORM 3C

CONSISTENCY CHECK: STREAM CARDS, FDIS, PROJECT, INTERPRETIVE MAPS -PAGE 5 OF 6

	1	2	3	4	5	6	7	8	9	10
Site #	297	304	312	324	337	342	349	461	517	531
NID map #	931.036	931.014	931.024	931.035	931.055	931.045	931.035	931.046	931.029	931.025
NID#	20297	21304	20312	20324	20337	20342	20349	95461	50517	50531

Record errors below with an 'x.' An error occurs if there is any inconsistency among: 1) field site cards, 2) FDIS, 3)

project maps and 4) interpretive maps, as specified for each attribute.

Card		Where to				_							Error
section	Attribute	check	1	2	3	4	5	6	7	8	9	10	locations
Header	Stream name	1, 2, 3, 4	L										
	Watershed code or ILP map # and ILP #	1, 2, 3, 4											
	NID map # and NID #	1, 2											
	Reach #	1, 2, 3, 4											
	Site #	1, 2, 3, 4											
	Site length	1, 2											
	Access	1, 2											
	Survey date	1, 2, 3, 4											
	Agency conducting survey	1, 2, 3, 4											
	Time of survey	1, 2											
	Crew conducting survey	1, 2											
	Fish form completed	1, 2											
Channel	Channel width	1, 2, 3, 4											
	Wetted width	1, 2											
	Residual pool depth	1, 2											
	Gradient	1, 2, 3, 4											
	Bankfull depth	1, 2											
	Stage	1, 2											
	No Vis. Ch., DW, and Dry/Int.	1, 2, 3, 4											
	Tribs	1, 2, 3, 4											
Cover	Total cover	1, 2											
	Cover elements	1, 2											
	Functional LWD (amount, distribution)	1, 2											
	Crown closure	1, 2	-		ļ								
	Instream vegetation	1, 2											
	Bank shape, texture, riparian vegetation	1, 2											

FORM 3C

CONTINUED - PAGE 6 OF 6

Card section	Attribute	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Water	EMS#	1, 2, 3, 4											
	Temperature, pH	1, 2											
	Water chemistry requisition #	1, 2											
	Conductivity, turbidity	1, 2											
Channel -	Flood signs	1, 2											
morpho	Bed material	1, 2, 3	П										
logy	D95, D	1, 2	П										
	Morphology	1, 2, 3	П										
	Disturbance indicators	1, 2, 3											
	Pattern	1, 2, 3				_							
	Islands, bars, coupling	1, 2	П										
	Confinement	1, 2, 3	П										
Features	NID map # and NID #	1, 2	П			\exists							
	Type, height/length	1, 2, 3, 4											
	Photo, comments	1, 2, 3, 4	П										
	UTM	1, 2	П										
Habitat	General comments	1, 2				\exists					7		
quality	Fisheries sensitive zones	1, 2	\Box			\dashv		\exists					
Photo-	Roll #	1, 2				\exists							· · · · · · · · · · · · · · · · · · ·
documen-	Frame #	1, 2	П					7	T		T		
tation	Focal length	1, 2											
	Direction	1, 2						\exists			\neg		
	Comments	1, 2		\exists				1	_	\dashv	\dashv	\dashv	
Wildlife	Group	1, 2	\Box				1		7		_	\dashv	
	Observations	1, 2		\exists	\neg	_							
Comments	General comments	1, 2	H			+	\dashv	\dashv	1	7	\dashv		
Total errors	;			_	\dashv	1		\dashv	寸	-	寸	-	

Summary of stream site information check:

Number of marks (# cards * 52):1560	Maximum number of errors acceptable (5%):52
Number of errors found: 7	Is the number of errors acceptable: Yes

Comments:

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name:

1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432

MELP project number: SCI-C172-010-2001

Submitted by:

Triton Environmental Consultants Ltd

QA review by:

Chris Schell

Review date:

March, 2003

FORM 3E

CONSISTENCY CHECK: FISH COLLECTION FORM, FDIS, PROJECT MAP, INTERPRETIVE MAP - PAGE 1 OF 6

	1	2	3	4	5	6	7	8	9	10
Site #	5	16	20	31	39	54	62	73	355	361
NID map #	93k.071	93k.091	93k.081	93k.091	93m.020	93m.029	93m.039	93n.001	93m.019	93m.029
NID#	40005	40016	40020	40031	40039	40054	40062	40073	20355	20361

Record errors below with an 'x'. An error occurs if there is inconsistency among 1) fish collection forms, 2) FDIS,

3) project maps, and 4) interpretive maps, and/or 5) lake outline maps, as specified for each attribute.

Group	Item	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Header	Name	1, 2, 3, 4, 5											
	Stream/Lake/Wetland	1, 2, 3											
	Watershed code or ILP	1, 2, 3, 4, 5											
	Waterbody ID	1, 2, 5											
	ILP map #	1, 2											
	Reach #	1, 2, 3, 4, 5											*
	MELP fish permit #	1, 2											
	Date start, end	1, 2											
	Agency, crew	1, 2											
	Resample	1, 2											
Site/Method	Site #	1, 2, 3, 4, 5											
	NID map #, NID #	1, 2											
	Site UTM	1, 2											
	Method, method no.	1, 2											
	Temp, turbidity	1, 2											
	Conductivity	1, 2, 3, 4											
Fish summary	Method, method no.	1, 2											
	Haul/Pass (H/P)	1, 2											
	Species	1, 2, 3, 4											
	Stage, total #	1, 2											
	Min. length	1, 2											
	Fish activity	1, 2									į		

FORM 3E CONTINUED - PAGE 2 OF 6

Group	Item	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Gear	Method, method no.	1, 2	1	-							<u> </u>		
specifications	Haul	1, 2									_		
	Date, time in/out	1, 2											
	Net type, lgth, dpth	1, 2											
	Mesh size	1, 2											
	Set, habitat	1, 2											
Electrofisher	Method, method no.	1, 2	1										
specifications	Pass	1, 2	\Box										
	Time in, time out	1, 2											
	EF sec.	1, 2											-
	Length, width	1, 2											
	Enclosure	1, 2		\dashv	7								
	Voltage, freq., pulse	1, 2											·
	Make, model	1, 2					1						 -
· · · · · · · · · · · · · · · · · · ·		Total:		7	\neg			\neg	\dashv		\exists	X	1

Comments:

10) FDIS fish card printout missing from binder. Added to binder.

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name:

1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432

MELP project number: SCI-C172-010-2001

Submitted by:

Triton Environmental Consultants Ltd

QA review by:

Chris Schell Review date: March, 2003

FORM 3E

CONSISTENCY CHECK: FISH COLLECTION FORM, FDIS, PROJECT MAP, INTERPRETIVE MAP, - PAGE 3 OF 6

	1	2	3	4	5	6	7	8	9	10
Site #	376	580	627	642	42	52	259	267	276	285
NID map #	93m.010	93n.001	93m.029	93n.002	931.046	931.013	931.046	931.046	931.036	931.046
NID#	20376	50580	50627	50642	20042	20052	20259	20267	20297	20285

Record errors below with an 'x'. An error occurs if there is inconsistency among 1) fish collection forms, 2) FDIS, 3) project maps, and 4) interpretive maps, and/or 5) lake outline maps, as specified for each attribute.

Where to **Error** Group Item check 2 3 4 5 6 7 8 9 10 1 locations Header Name 1, 2, 3, 4, 5 Stream/Lake/Wetland 1, 2, 3 Watershed code or ILP 1, 2, 3, 4, 5 Waterbody ID 1, 2, 5 ILP map # 1, 2 Reach # 1, 2, 3, 4, 5 MELP fish permit # 1, 2 Date start, end 1, 2 Agency, crew 1, 2 Resample 1, 2 Site/Method Site # 1, 2, 3, 4, 5 NID map #, NID # 1, 2 Site UTM 1, 2 Method, method no. 1, 2 Temp, turbidity 1, 2 Conductivity 1, 2, 3, 4 Fish summary Method, method no. 1, 2 Haul/Pass (H/P) 1.2 **Species** 1, 2, 3, 4 Stage, total # 1, 2 Min. length 1, 2 Fish activity 1, 2

FORM 3E

CONTINUED - PAGE 4 OF 6

Group	Item	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Gear	Method, method no.	1, 2								-			
specifications	Haul	1, 2					-				-		
	Date, time in/out	1, 2	1										-
	Net type, lgth, dpth	1, 2				-							
	Mesh size	1, 2	\vdash										<u> </u>
	Set, habitat	1, 2	\Box									\neg	
Electrofisher	Method, method no.	1, 2								_			
specifications	Pass	1, 2			_								
	Time in, time out	1, 2		7			7	_	\dashv	-			
	EF sec.	1, 2		-	7		\dashv		\dashv	\dashv		-	
	Length, width	1,2		\dashv			\dashv	\dashv	-	\dashv			
	Enclosure	1, 2		\exists	\dashv	7	1	\dashv	_	\dashv		-	***
	Voltage, freq., pulse	1, 2	\Box	\dashv	\dashv	\dashv	\dashv	\dashv	+	_	\dashv		
	Make, model	1, 2		1	7		-	\dashv	\dashv	_	-	-+	
		Total:		+	\dashv	_	\dashv	-+	\dashv	\dashv	7		

Comments:

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name:

1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432

MELP project number: SCI-C172-010-2001

Submitted by:

Triton Environmental Consultants Ltd

QA review by:

Chris Schell

Review date:

March, 2003

FORM 3E

CONSISTENCY CHECK: FISH COLLECTION FORM, FDIS, PROJECT MAP, INTERPRETIVE MAP, - PAGE 5 OF 6

	1	2	3	4	5	6	7	8	9	10
Site#	297	304	312	324	337	342	349	461	517	531
NID map #	931.036	931.014	931.024	931.035	931.055	931.045	931.035	931.046	931.029	931.025
NID#	20297	21304	20312	20324	20337	20342	20349	95461	50517	50531

Record errors below with an 'x'. An error occurs if there is inconsistency among 1) fish collection forms, 2) FDIS, 3) project maps, and 4) interpretive maps, and/or 5) lake outline maps, as specified for each attribute.

Group	Item	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Header	Name	1, 2, 3, 4, 5											, . <u></u>
	Stream/Lake/Wetland	1, 2, 3											
	Watershed code or ILP	1, 2, 3, 4, 5											
	Waterbody ID	1, 2, 5								_			
	ILP map #	1, 2											
	Reach #	1, 2, 3, 4, 5	\vdash						_				
	MELP fish permit #	1, 2											
	Date start, end	1, 2											
	Agency, crew	1, 2											
	Resample	1, 2											
Site/Method	Site #	1, 2, 3, 4, 5											
	NID map #, NID #	1, 2											
	Site UTM	1, 2											
	Method, method no.	1, 2											
	Temp, turbidity	1, 2				_							
	Conductivity	1, 2, 3, 4											
Fish summary	Method, method no.	1, 2							_				
	Haul/Pass (H/P)	1, 2		\dashv									****
	Species	1, 2, 3, 4			\dashv	7	\dashv	\dashv		\dashv	\dashv		
	Stage, total #	1, 2			\dashv			\dashv			\dashv		
	Min. length	1, 2	 		_	\dashv	\dashv	\dashv	\neg				
	Fish activity	1, 2		_	-	_	\dashv	\dashv	_	\dashv	\dashv		

FORM 3E

CONTINUED - PAGE 6 OF 6

Group	Item	Where to check	1	2	3	4	5	6	7	8	9	10	Error locations
Gear	Method, method no.	1, 2									 - 		
specifications	Haul	1, 2								_			
	Date, time in/out	1, 2											
	Net type, lgth, dpth	1, 2								_			
	Mesh size	1, 2					\dashv						
	Set, habitat	1, 2					\dashv	-					
Electrofisher	Method, method no.	1, 2					7	-	-		\dashv		
specifications	Pass	1, 2			\exists	7		-	\dashv		7		
	Time in, time out	1, 2		_	_		7	\dashv	_	\dashv	_		.
	EF sec.	1, 2		7	_		\dashv	+	+	\dashv		-1	
	Length, width	1, 2		7		\dashv	\dashv	\dashv	7	\dashv	\dashv		
	Enclosure	1, 2		_	_†	\dashv	\dashv	_		\dashv	\dashv	-	
	Voltage, freq., pulse	1, 2		+	7	\dashv	\dashv	+	\dashv	7	\dashv	\dashv	·
	Make, model	1, 2		_		\dashv	\dagger	+	+	\dashv	\dashv	_	<u> </u>
		Total:		_+	7	\dashv	\dashv	\dashv	+	-	十	-	

Number of marks (# cards * 36): _720_ Number of errors found:1	Maximum number of errors acceptable (5%): <u>36</u> Is the number of errors acceptable: Yes

Comments:

Submitted by	t number			ssance F&										r: <u>S</u>	CI-C	172-010	-2001
-				ntal Consu				1	- 24	002							
QA review by	y: 	Chris Sc	nell	_Review d	late:		M	arcl	1, 20	003							
FORM 3F	Consi	STENCY	Снеск	: Indivi	DUA	ц	(IS	n D	АТ	'A (Cab	w,	FD	IS	– P	AGE 1	OF 1
	1	2	3	4		5	Ī	(6		7			8		9	10
Site #	31	580	627	259	2	97	\dagger	3()4	+	53	 I		556	\dashv	593	615
NID map #	93k.091	93n.001	93m.029	931.046	93	.03	5	931.	014	. 9	31.0	25	9:	31.03	36	931.035	931.03
NID#	40031	50580	50627	20259	20	297	1	21:	304		505.	31	5	055	6	50593	50615
FDIS, as speci Group	fied for ea	Item	te.	Where check		1	2	3	4	5	6	7	8	9	10	Err	
Individual	Site #			1, 2													
fish data	Method	Method, method no.		1, 2													
	Haul/Pass Species		1, 2														
			1, 2														
	Length			1, 2													
	Weight			1, 2													
	Sex			1, 2													
	Maturit	у		1, 2													
	Age str			1, 2												<u> </u>	
	Age sar	nple #		1, 2													
A	Age			1, 2											X		
	Vouche			1, 2						نـــا							
	Genetic	structure		1, 2						<u> </u>						ļ	
	ļ		Genetic sample #													<u> </u>	
	ļ	sample #		1, 2						1						1	

FISH INVENTORY QUALITY ASSURANCE CHECK FORM

Project name: 1:20 k Reconnaissance F&FHI - Canfor 2002 program

FRBC project number: 716432 MELP project number: SCI-C172-010-2001

Submitted by: Triton Environmental Consultants Ltd

QA review by: Chris Schell Review date: March, 2003

FORM 3K

WATERSHED REPORT - PAGE 1 OF 4

	RSHED REPORT - PAGE 1 OF 4		T	Report section	Attribute	Accept. (Y/N)	Note
Report section	August 1	Accept.		Introduction			
Title page	Attribute	(Y/N)	Notes	Project scope, objectives	1:20 000, 1:5000, lakes, etc.	Y	
Title page	Proper title	Y		Location	Description	Y	
	Watershed code below title	Y		Overview map	8.5 × 11" or 11 × 17"	Y	
	Prepared for	Y			Outline of study area	Y	
	Prepared by	Y			Inset map showing relation to BC	Y	
Sign	Signature of R.P.Bio	N	Not yet		Sample site locations	Y	
			TAWt		1:20 000 map grid	Y	
D.C			sign		Major communities	Y	
Reference information	Project reference information	Y			TRIM/FC aquatic features	na	
	Watershed information	Y		Access	Description	Y	
	Sampling design summary	Y		Resource Information	First Nations	Y	
	Contractor information	Y			Land use, logging, recreation, etc.	Y	
Disclaimer	Standard wording disclaimer	Y			Impacts and uses by wildlife	Y	
Acknowledgements	- Community	Y	-		Existing water quality data	Y	
Table of contents	Page numbering correct				Previous fish presence	Y	
		Y		Methods	Reference to RECCE standards	Y	
Lists	Report outline follows standard	Y			Reference to project plan	Y	
LISIS	List of Tables	Y			Deviations from RIC standards	Y	
	List of Figures	N	1		Deviations from project plan	Y	
	List of Attachments	Y			List of sampling equipment used	Y	
	List of Appendices	Y	-				

Notes:

¹⁾ Tochcha report has 2 page vi and two list of figures Addressed.

FORM 3K

CONTINUED - PAGE 2 OF 4

Report section	Attribute	Accept. (Y/N)	Notes
Results and Discussion			
Logistics	Problems encountered	Y	
	Weather	Y	
	Access	Y	
	Water levels	Y	
	How was it addressed	Y	
	How did it impact the results	Y	

Stream Report Format

Report section	Attribute	Accept. (Y/N)	Notes
Summary of sub-basin	Table defining each sub-drainage	Y	
biophysical information	Sub-drainages not sampled but included in the planning document	Y	
	Previous sampling reference	Y	
Habitat and fish	Characteristics of fish habitats	Y	
distribution	Pattern of fish distribution	Y	
	Location of significant fish pop.s	Y	
	Lakes treated as a reach of the stream	Y	· ·
	Upstream limits of fish presence	Y	
	Obstructions influencing fish	Y	
	Table of all barriers present	Y	

Stream Report Format - cont.

Report section	Attribute	Accept. (Y/N)	Notes
Fish age, size and life history	Summary of life stages, life history, etc.	Y	1
	Length-frequency histograms	Y	
	Histograms have the same x-axis	Y	
	Table: Summary of length-at-age.	Y	
	Data presented by species	Y	
	Data presented by sub-drainage	NA	
	Age classes appear correct	Y	
Significant features and	Fish and fish habitat		
fisheries observations	Critical habitats	Y	
	Special populations	Y	
	Wild stocks	Y	
	Rare stocks or species	Y	
	High value sport fishing	Y	
	NO management recommend.	Y	
	Habitat protection concerns	· · · · · · · · · · · · · · · · · · ·	
	Fisheries sensitive zones	Y	
	Fish above 20% gradients	Y	
	Restoration opportunities	Y	
	Problem culverts	Y	
	Unstable slopes	Y	
Fish bearing status	Brief narrative section	Y	
İ	Table: Summary of fish bearing reaches	Y	

Notes:

¹⁾ Morice report. Why do you not think the fish you have captured are RB and not ST?

FORM 3K

CONTINUED - PAGE 3 OF 4

Stream Report Format - cont.

Stream Report Appendices	- cont.
--------------------------	---------

Report section	Attribute	Accept. (Y/N)	Notes
Fish bearing status (cont.)	Table: Summary of non-fish bearing reaches	Y	
	Table: Follow-up sampling required	Y	
References	All sources in report listed	Y	
	According to CBE style manual	Y	

Stream	Report	Appendice	S
--------	--------	-----------	---

Report section	Attribute	Accept. (Y/N)	Notes
Appendix I.	In ascending order by WSC		
FDIS summary and	Grouped by site	Y	
Photographs	FDIS reach card printouts	Y	
	FDIS site card printouts	Y	
	Fish data collection form	Y	
	Photos (min. 1, max. 4)	Y	
	All photos entered in FDIS	Y	
	Explanatory photo captions	Y	
	Photos in colour (final only)	Y	
Appendix II.	"E" size plots	Y	
Hardcopy maps -	Folded in pocket in report	N	
General	UTM projection	Y	
	1:20 000 map grid	Y	
	1:20 000 scale	Y	
	Complete title box	Y	
	Complete legend box	Y	
	Source information box	Y	

Report section	Attribute	Accept. (Y/N)	Notes
Appendix II.	Inset map box	Y	
Hardcopy maps -	Fish species box	Y	
General (cont.)	100 m contour lines	Y	
	WSCs or ILPs for all sampled streams	Y	
	WSCs or ILPs for all 3 rd order or higher streams	Y	
	WSCs or ILPs for every other 1 st and 2 nd order stream	Y	
	WBIDs for all lakes	Y	
	Sample site locations	Y	
Project map	All site data symbols attached to sites	Y	
	Lake summary symbols	Y	
	Reach data symbols on all reaches <30% gradient and all reaches containing sites	Y	
	Features, obstructions, etc.	Y	
	Reach breaks and numbers	Y	
Interpretive map	Reach summary symbols for all reaches in the project area	NA	
	Features, obstructions	Y	
	Fish distribution limits	Y	2
	Stream class	Y	

Notes:		

FORM 3K

CONTINUED - PAGE 4 OF 4

Stream Report Attachments

Report section	Attribute	Accept. (Y/N)	Notes
Attachment I.	Budget breakdown by phase	Y	
Planning document	Project sampling design	Y	
	Process of site selection	Y	
	Reach table	Y	
	Lake table	Y	
	Random sample table	Y	
	References, contacts list	Y	
Attachment II.	Field book or facsimile	Y	
Field notes	Site cards	Y	
	Fish collection forms	Y	
	Individual fish data forms	Y	
	Field working maps	na	
Attachment III.	Actual ageing structures	Y	
Fish ageing structures	Labelled photocopies	Y	
	Annuli identified with red	Y	
	Age data are correct	Y	
Attachment IV.	Table: Vouchers collected	NA	
Voucher, DNA samples	Table: DNA collected	NA	
Attachment V.	Table: Photo summary report	Y	
Photodocumentation	Colour thumbnail reference	Y	
	Photo CD	Y	
	CD Image #s match digital	X	1
	Negatives in plastic sleeves	Y	
	Negatives labelled	Y	

Report section	Attribute	Accept. (Y/N)	Notes
Attachment V.	Negative #s match digital	Y	
Photodocumentation	Prints in plastic sleeves	Y	
(cont.)	Prints labelled	Y	
Attachment VI.	Budget breakdown by phase	na	-
Digital data	Project sampling design	Y	
	References, contacts list	Y	
	Table of vouchers collected	Y	in FDIS
	Table of DNA collected	Y	in FDIS
	Photo summary report	Y	in FDIS
	Report tables, figures	Y	
	Report text	Y	
	FDISDAT.MDB	Y	
	Mapping files (plot files)	N	see attached email and digital deliverable s CD
	Mapping files (metadata and map features files)	N	see attached email and digital deliverable s CD
Attachment VII.	FISS data forms and maps	Y	
FISS update data	Copies of reference material	Y	
	Data on forms match FDIS	Y	
Attachment VIII.	Purchased aerial photos	na	
Aerial photography	Aerial video tape	na	

Notes:

1) Roll 6, the images on the CD do not match the FDIS photodoc printout. Double checked photos to CD and photodoc printout, everything correct.

Tochcha Maps:

93m.030 R9&10 of Hautete Creek - dashed red should be solid red Fixed.

93k.092 R3 of 2075 - changes from solid red to dashed red halfway through the reach. Why? Stream was visibly accessible to fish from observations conducted during

931.090 R4 of 2174 - move solid blue down to falls Fixed map.

93m.020 typo on Hautete Lake Edited Map.

Morice Maps:

931.035 R2 of 3259 - changes from solid red to dashed red in middle of reach. Why? No barriers were observed to the solid red/dashed red break, upstream of this point is potential fish access.

931.035 R2 of 3275 - same question No barriers were observed to the solid red/dashed red break, upstream of this point is potential fish access.

931.013 R2 of 3742 - same question Exact fish distribution to the meter is unknown due to helicopter overflight and general UTM location.

931.013 R2 of 3749 - same question Stream has increasing gradient and goes to inferred non fish bearing status (dashed blue).

Site 342. The site symbol of this map is on a different map sheet than the site itself. Fixed

Lakes (site 902, 903 and 907) should have lake summary symbols, not stream summary symbols. Complete lake surveys were not conducted, the lakes that were sampled were used for determining fish presence/absence.

CC:

From: Shawna Hartman To: Schell, Chris Date: 3/21/03 9:57AM Subject: Re: Tochcha Final Chris, Attached is the Morice Final. Shawna >>> "Chris Schell" <schell@bulkley.net> 03/21/03 08:58AM >>> Great Shawna, thanks. Still awaiting the Morice files though. Chris. Chris Schell PO Box 4695 Smithers, BC, V0J 2N0 tel & fax: (250) 846-9059 -- Original Message -----From: "Shawna Hartman" < shartman@triton-env.com> To: <schell@bulkley.net> Cc: "Jason Harris" < JHarris@triton-env.com>; "Kim Strong" < KStrong@triton-env.com> Sent: Wednesday, March 19, 2003 9:43 AM Subject: Tochcha Final > Hi Chris, > Attached is the final Tochcha file. Please contact me if there is any > problem or questions. > Thanks, > Shawna Hartman, Biologist > shartman@triton-env.com > Triton Environmental Consultants Ltd. > Mail: PO Box 88, Terrace, BC V8G 4A2 > Courier: #300 - 4546 Park Avenue, Terrace, BC V8G 1V4 > Tel: (250) 635-1494; Fax: (250) 635-1495

Harris, Jason; Strong, Kim

APPENDIX IV Phase I-III Project Plan (with attachments) Triton Environmental Consultants Ltd. 3363/WP T-1390 Appendix IV

Phases I - III Pre-Field Project Planning Report Reconnaissance (1:20,000 Scale) Fish and Fish Habitat Inventory in selected tributaries within the Tochcha and Morice Planning Areas



Sakeniche River WSC 182-819600-63300-40900 Babine River WSC 480-000000 Morice River WSC 460-600600 Bulkley River WSC 460-000000

Prepared for:



September 2002

Prepared by:



PHASES I - III PRE-FIELD PROJECT PLANNING REPORT Reconnaissance (1:20,000) Fish and Fish Habitat Inventory in selected tributaries within the Tochcha and Morice Planning Areas

Sackeniche River WSC 182-819600-63300-40900
Babine River WSC 480-000000
Morice River WSC 460-600600
Bulkley River WSC 460-000000

Prepared for:



Canadian Forest Products Ltd. P.O. Box 158 Houston, BC VOJ 1Z0

September 2002

Prepared by:



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PHASES I - III PRE-FIELD PROJECT PLANNING REPORT

Reconnaissance (1:20,000) Fish and Fish Habitat Inventory in selected tributaries within the Tochcha and Morice Planning Areas

Project Name: Reconnaissance (1:20,000) Fish and Fish

Habitat Inventory in selected tributaries within

the Tochcha and Morice Planning Areas

Project Type: 1:20,000 Reconnaissance

Report Date: September 2, 2002

Proponent: Canadian Forest Products Ltd.

Company/Agency: Triton Environmental Consultants Ltd.

Contact Person: Jason Harris
Contact Phone: (250) 635-1494

Contact E-Mail: jharris@triton-env.com

Coordinator: Todd Mahon, Wildfor Consultants Ltd.

TABLE OF CONTENTS

				Page
1.0	INTI	RODUCTI	ON	1
	1.1	Summa	ry of Work Completed	1
2.0	STU	DY AREA	AND ACCESS	1
	2.1	List of 7	Гrim Maps	2
	2.2	Working	g Areas and Major Sub-Basins within the Project Area	2
	2.3	Access	-	2
3.0	BAC	KGROUN	ID REVIEW	3
4.0	DEV	IATION F	ROM RIC STANDARDS	4
	4.1	Planning	g Phases	4
5.0	PRO.	JECT PLA	N	5
	5.1	Phase 4:	Field Data Collection (Streams)	5
		5.1.1	Pre-Field Preparation	5
		5.1.2	Equipment	5
		5.1.3	Field Assessment	5
		5.1.4	Fish Species Sampling	6
		5.1.5	Habitat (Site) Description	6
		5.1.6	Water Quality	7
		5.1.7	Wildlife Observations	7
		5.1.8	Photographic Documentation	7
		5.1.9	Inventory Area Specific Sampling	7
		5.1.10	Non Fish Bearing Reaches	8
		5.1.11	Lakes Sampling	9
	5.2	Lakes Pl	lan	9
		5.2.1	Phase 4: Field Data Collection	9
		5.2.2	Field Assessment	9
		5.2.3	Fish Species Sampling: Primary Lakes	9
		5.2.4	Fish Species Sampling: Secondary Lakes	10
		5.2.5	Fish Species Sampling: General	10
		5.2.6	Lake Habitat Descriptions	11
		5.2.7	Water Quality	12
		5.2.8	Wildlife Observations	12
		5.2.9	Photographic Documentation	12

6.0	PHASE 5 - DATA COMPILATION			
7.0	PHASE 6 - REPORTING AND MAPPING 7.1 Existing Data			
8.0	PROJECT TIMELINES			
9.0	PROPOSED STAFF			
10.0	EQUIPMEN	ΓLIST	15	
11.0	CONTINGE	NCY PLAN	16	
		LIST OF TABLES		
Table 1 Sample Site Summary by Planning Area				
		LIST OF FIGURES		
Figure Figure		ha Lake Planning Area Overview Map e North Planning Area Overview Map	v vi	
		APPENDICES		
Appe	ndix I	Project Phase Completion Report: Phases I - III		
Appe	ndix II	Bibliography		
Appe	ndix III	List of Key Contacts and Information Sources		
Appe	ndix IV	Tochcha Planning Area Sample Selection		
Appe	ndix V	Morice Planning Area Sampling Summary Report (with sample selection and FDIS QA)		

DIGITAL PRODUCTS

Bibliography
List of Contacts
Project Planning Report
Phase Completion Report

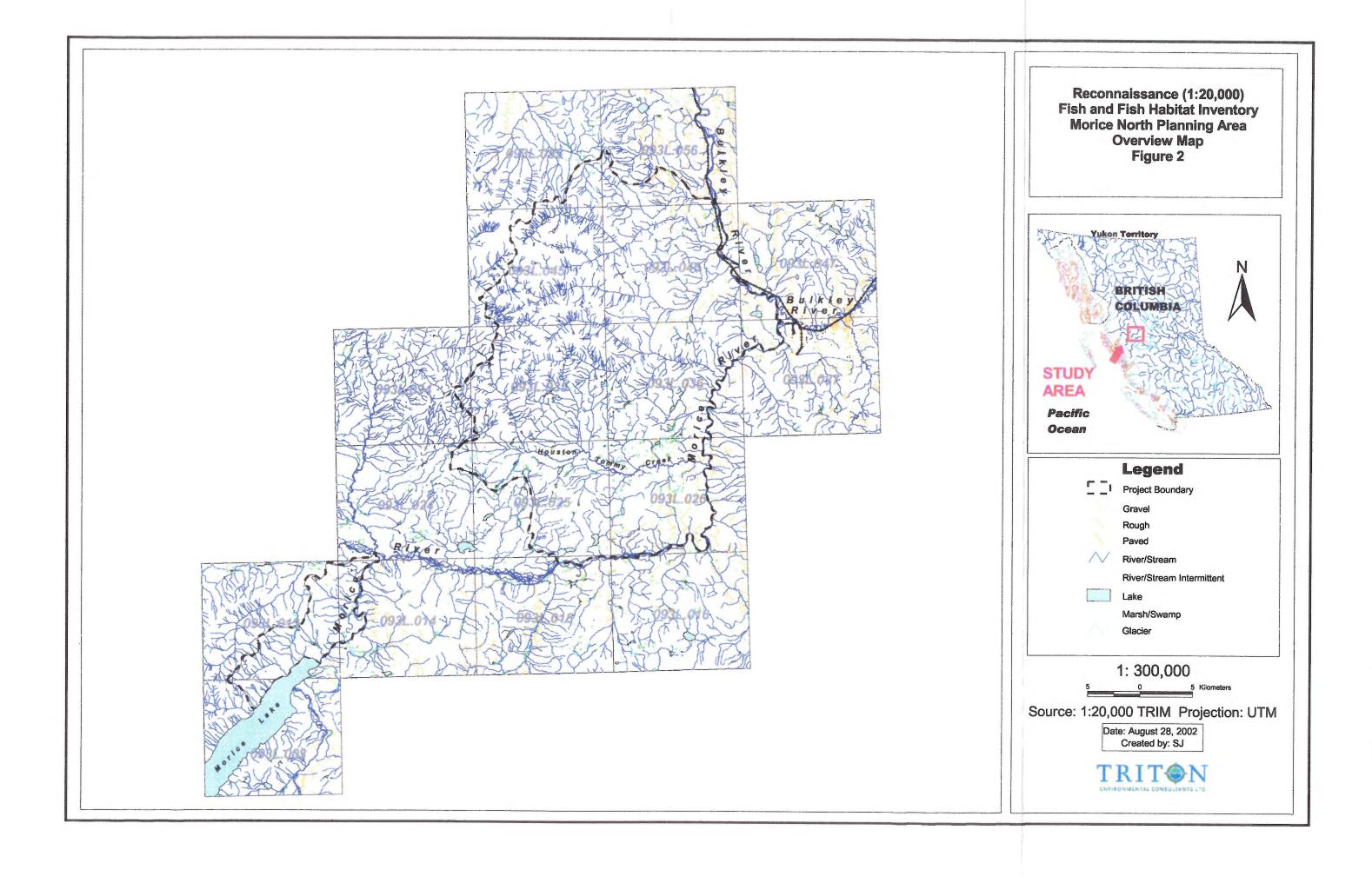
Bibliography 2002.doc Contacts 2002.doc Project Plan 2002.doc Phase Completion 123 2002.doc

Tochcha Digital Data

Tochcha Stream ILP Data Sheet Tochcha Lake ILP Data Sheet Tochcha Wetland ILP Data Sheet Tochcha FDIS tochcha stream ilp.dbf tochcha lake ilp.dbf tochcha wetland ilp.dbf FDISDAT.mdb

Morice Digital Data

Morice Stream ILP Data Sheet Morice Lake ILP Data Sheet Morice Wetland ILP Data Sheet Morice FDIS morice stream ilp.dbf morice lake ilp.dbf morice wetland ilp.dbf FDISDAT.mdb



1.0 INTRODUCTION

Triton Environmental Consultants Ltd. was retained by Canadian Forest Products Ltd. (Canfor), Houston, BC in partnership with the Forest Investment Account (FIA) and Ministry of Sustainable Resource Management (MSRM) to conduct a reconnaissance level fish and fish inventory in selected tributaries within the Tochcha Lake and Morice River watersheds. This report summarizes work completed in Phases I-III and outlines the project plan for Phases IV-VI.

1.1 Summary of Work Completed

A summary of work completed for each phase is outlined in the attached Phase Completion Report (Appendix I). This summary includes:

- contractor information;
- list of deliverables submitted;
- activity log;
- summary of work completed;
- progress and problems summary; and
- next phase project plans and constraints.

2.0 STUDY AREA AND ACCESS

The Tochcha planning area is located approximately 30 km west of the community of Topley Landing. The Tochcha planning area includes all tributaries located along the east shore of Babine Lake between WSC 480-598800 and WSC 480-807300 as well as all tributaries flowing into the Sakeniche River WSC 182-819600-63300-40900 and Hautete Creek WSC 180-819600-63300-40900-8500.

The Morice planning area is located approximately 5 km northeast of Houston, BC. The Morice planning area includes all tributaries located along the left bank of the Morice River between WSC 460-600600-35600 and WSC 460-600600-02700 and all tributaries located to the east along the Bulkley River left bank between WSC 460-622700 and WSC 460-545700, as well as tributaries located along the west shore of Morice Lake from WSC 480-460-600600-66900 to Gosnell Creek (WSC 460-600600-50800-00500).

2.1 List of Trim Maps

The 1:20,000 TRIM sheets covering this project area include:

Tochcha Planning Area

93M.038	93M.039	93M.040	93M.028	93M.029	93M.030
93M.019	93M.020	93M.010	93N.001	93M.009	93N.011
93N.002	93L.100	093L.090	93K.091	93K.092	93K.081
93K.082	93K.071	93K.072			
Morice Plan	ning Area				
93L.055	93L.056	93L.045	93L.046	93L.047	93L.034

93L.024

93L.013

93L.025

93L.014

93L.026

2.2 Working Areas and Major Sub-Basins within the Project Area

93L.037

93L.003

The sub-basins to be sampled in the project area include:

93L.036

93L.016

Tochcha Planning Area

93L.035

93L.015

Gloyazeikut Creek	(WSC 182-819600-63300-40900-8040)
Hautete Creek	(WSC 182-819600-63300-40900-9760)
Nizik Creek	(WSC 182-819600-63300-40900-8500)
Sakeniche River	(WSC 182-819600-63300-40900)

Morice Planning Area

Houston Tommy Creek	(WSC 460-600600-17000)
Emerson Creek	(WSC 460-568500)
Dockrill Creek	(WSC 460-562100)
Knapper Creek	(WSC 460-600600-11800)

2.3 Access

Road access is fairly extensive throughout the Tochcha planning area and the lower reaches of the Morice planning area. The upper reaches of many of the sub-basins will be accessed by helicopter where road networks are not present.

3.0 BACKGROUND REVIEW

An extensive background review was completed for the project area. Data sources reviewed include:

- consultants reports;
- Canfor planning and stream class information;
- previous inventory data;
- FISS data base and maps; and
- DFO/MSRM Fish Habitat Inventory and Information Program (FHIIP or SISS) catalogue for Sub-district 4D Smithers (Volume 2) Bulkley.

A complete list of references and contacts used during the background review is provided in Appendix II and Appendix III. The background review indicated that the following species are present within the project area:

- coho salmon (Oncorhynchus kisutch);
- pink salmon (O. gorbuscha);
- chinook salmon (O. tshawytscha);
- kokanee/sockeye salmon (O. nerka);
- steelhead/rainbow trout (O. mykiss);
- cutthroat trout (O. clarki);
- Dolly Varden char/Bull Trout (Salvelinus malma);
- lake trout (S. namaycush);
- brook trout (*S. fontinalis*);
- bridgelip sucker (Catostomus columbianus)
- largescale sucker (C. macrocheilus);
- longnose sucker (*C. catostomus*);
- white sucker (C. commersoni);
- northern pikeminnow (Ptychocheilus oregonensis);
- peamouth chub (Mylocheilus caurinus);
- redside shiner (Richardsonius balteatus);
- longnose dace (*Rhinichthys cataractae*);
- northern redbelly dace (Chrosomus eos)
- mountain whitefish (*Prosopium williamsoni*);
- pygmy whitefish (P. coulteri);
- lake whitefish (Coregonus clupeaformis);
- burbot (*Lota lota*);
- prickly sculpin (Cottus asper);
- lamprey (Lampetra sp.); and
- Arctic lamprey (*L. japonica*).

4.0 DEVIATION FROM RIC STANDARDS

4.1 Planning Phases

Sample site selection was based on satisfying the types of stream reaches identified in the Sample Size Summary Table (as generated by the FDIS random generated planning tool).

Prior sampling, fish presence and historical features have been added to the planning maps and the FDIS database. These sites were used to modify the sampling plan and avoid redundancy in sampling efforts. Random sites downstream of confirmed fish and upstream of End of Fish Use (EFU) will be removed or relocated (as discretionary sites) to support further fish distribution information.

Discretionary site selection focused on obtaining comprehensive fish distribution data from the major sub-basins within the study area. Discretionary sites were selected to achieve connectivity within sub-basins and identify upstream limits for fish distribution. Major inlets of primary and secondary lakes, as well as reaches that may contain barriers were potential candidates for discretionary sites. Forest development planning and the operational needs of the licensee were also considered when selecting sites.

Randomly selected reaches are shown on the interim maps with a green highlighter and green label dots. Randomly selected reaches that have been moved are shown with a green highlighter that has been crossed out (no label dot). Discretionary sites are shown with a green dashed line and red label dot. Label dots were used to allow for easier identification of sites.

FISS data will be compiled, edited and submitted at the completion of phase 6. FISS updates will include existing information found during the data search and new site information captured during the field inventory.

Detailed reach planning was not conducted during the planning phases, as it is anticipated (based on previous experience) that several reaches will be moved during pre-field meetings with the licensee, ministry representatives and during the sampling program. Detailed reach planning forms will be completed during phase 5 and will be submitted as a deliverable for phase 6.

5.0 PROJECT PLAN

5.1 Phase 4: Field Data Collection (Streams)

Following is an outline of our approach to the fieldwork, clarification of specific sampling methodologies, and an estimate of the effort required. The following sections describe the methodologies and approaches to complete field sampling, data collection and reporting.

5.1.1 Pre-Field Preparation

Pre-field preparations will entail both office activities and logistics planning in coordination with members of the project team, the Implementation Contractor and Canfor. Fish collection permits will be obtained from MSRM and the Department of Fisheries and Oceans (DFO) prior to commencement of field activities.

Pre-field preparations will include a crew talk and pre-field training. During the crew talk, safety issues and procedures will be reviewed. All staff will be required to complete pre-field training to review standards and procedures. Crew members who are not involved in the planning phases will be informed about project specific logistics and requirements. The crew talk and pre-field training will provide a means to ensure that all inventory cards are completed in a standardized manner by all crews and that crews are aware of QA/QC requirements.

5.1.2 Equipment

Triton possesses all necessary field equipment to complete the project.

Each crew will be equipped with a Smith-Root Model 12A backpack electrofisher and other standard field gear (Abney level, hip chain, tape measure, VHF radio, first aid kit, etc.).

5.1.3 Field Assessment

Two person field crews will conduct fieldwork. Crew mobilization will take place using a variety of methods depending on the access available in each watershed. In watersheds where road access is available, crews will drive to the sample sites. In watersheds where road access is unavailable crews will be transported by helicopter to the sample sites.

Field crews will be supplied with forest cover maps, TRIM planning maps and aerial photographs to assist in locating and accessing reaches of interest. Reaches will be largely accessed using compass bearings, hip chains and GPS units.

5.1.4 Fish Species Sampling

Fish sampling efforts will focus on reaches of <20% gradient (>20% at the Project Manager's discretion (i.e. suspected bull trout, regionally significant species presence)) and will follow the procedures outlined in the *Reconnaissance Fish and Fish Habitat Inventory: Standards and Procedures* (April, 2001) and the *Forest Practice Code's* Fish Stream Identification Guidebook. A minimum 100 m of stream length or a length equal to 10 bankfull widths (whichever is greater) will be sampled in each reach identified for sampling. In addition, intermittent fish sampling may be conducted during travel between sample sites (in an upstream direction), upstream and downstream of barriers and within habitat features (pools, debris jams etc.) that may be utilized by fish.

The presence, relative abundance and diversity of fish species will generally be evaluated through electroshocking at least 100 linear meters of stream length. In areas where return visits are practical, minnow traps baited with salmon roe will be set and allowed to remain for a 24-hour period. This sampling method will be used to supplement electroshocking data, or in areas that are not suited to electroshocking (deep pools, wetlands, and active spawning areas). Other sampling methods, such as snorkeling, beach seining, and angling may be used where necessary.

All fish sampling data will be recorded on Fish Collection Forms. The following data and samples will be recorded and collected for fish caught at each sampling site:

- species (keyed out using RIC's Field Key to Freshwater Fishes of BC). Special attention will be given to documenting species at risk in Region 6;
- length to the nearest mm (fork length or total length depending on species) determined for 30 random samples of each fish species captured including the longest and shortest fish;
- life stage;
- a representative sample of any abnormal or unidentified fish will be preserved and submitted to the Implementation Contractor; and
- aging structures will be collected from a representative sub sample of fish species captured throughout the inventory area.

5.1.5 Habitat (Site) Description

The following data will be collected at each site:

- site length;
- stream gradient;
- 6 individual channel and wetted width measurements;
- estimates of bed material size, by size class;

- measurements of stream cover / riparian vegetation and large organic debris;
- channel confinement:
- water temperature;
- conductivity;
- major features (fish passage barriers, log jams, LWD, beaver dams, clay slides, etc.)
- obvious fish habitat limitations or restoration opportunities; and
- preliminary identification of obvious Fisheries Sensitive Zones as per Fish-stream Identification Guidebook specifications.

5.1.6 Water Quality

Triton will sample water quality parameters in the field at each sample site. Parameters will be measured in the field in order to reduce laboratory costs and shipping. Specifically, Triton proposes to measure air and water temperature using standard field thermometers, pH and conductivity using hand held meters, and turbidity using visual estimates.

5.1.7 Wildlife Observations

Wildlife observations will be noted and specific details recorded. Amphibians, aquatic invertebrates and macrophytes will be described and identified to Order or Family (where practical). Photographs will be taken for further documentation and confirmation. Wildlife observations will be recorded on the Site Card with emphasis placed on species considered rare, endangered or threatened as defined by the Conservation Data Centre.

5.1.8 Photographic Documentation

Photographs will be taken of each sample site (including upstream and downstream perspectives), of each feature identified and of representative or unidentifiable fish species. Photographs will be documented on Site Cards and Fish Collection Forms.

5.1.9 Inventory Area Specific Sampling

Through completion of Phases I-III we have identified specific reaches to sample in each working area. Sample sizes are outlined in Table 1.

Table 1 Sample Site Summary by Planning Area

Inventory Area	Tochcha Planning Area	Morice Planning Area
Number of reach sample sites proposed	100	260

In order to achieve Reconnaissance (1:20,000) Fish and Fish Habitat Inventory objectives discretionary sites were selected using the following criteria:

- where it is necessary to determine fish presence within a sub-basin;
- to address Local Area Agreements and fisheries distribution within the project area;
- inlets and outlets of lakes where it is necessary to determine fish presence within a sub-basin;
- lower order reaches that are likely to delineate the upper limits of fish distribution;
- within or adjacent to proposed cutblocks;
- above and below potential barriers; and
- around the 20% gradient break.

5.1.10 Non Fish Bearing Reaches

The fish bearing status of streams may be directly supported by sampling data or indirectly inferred based on fish captures in associated reaches, or habitat quality and the occurrence or lack of barriers to fish passage. Should a barrier be located, sampling will focus on covering perennial and non-perennial habitat types above that barrier. Sampling in perennial habitats will follow the Guidelines for Local Area Agreement Preparation-Skeena Region (version 2). This will include sampling perennial habitats above barriers with adequate intensities, stream order u/s of barrier x 2 = number of required sites. This intensity should allow field crews to cover all spawning, rearing and overwintering habitat types within that particular stream. Minnow traps and small gill nets will be set overnight in possible overwintering wetlands and where practical, primary or secondary lakes sampling methods will be conducted. If no perennial habitats are present within a stream and a barrier is located (no connectivity, cascades, falls etc.) sampling intensity of stream order u/s of barrier = number of required sites.

Identification of barriers in the field is critical to describing and assessing fisheries distribution within a particular watershed or stream. Field crews will try to identify these barriers while on site, by either using a helicopter recce of the stream or by strategically moving sample sites while still in the field. At the end of each field day crews will meet to discuss data and color code interpretive maps. This color coding of maps will allow field crews to identify unanswered questions regarding distribution and make proper changes while still in the field.

For all reaches with a non-fish bearing classification a written explanation supporting the classification will be submitted (Non-Fish Bearing Classification Report) in the final report. The explanation will focus on sampling methods utilized during the field program, and water quality parameters, including conductivity and turbidity.

5.1.11 Lakes Sampling

Lakes have not been specifically selected for sampling. Potential lake sampling will be discussed with Todd Mahon and John Brockley at the conclusion of the stream-sampling program. Lake sampling will then focus on attaining information that will be of value to both MSRM (watershed wide fish distribution) and the licensee (headwater lakes which support fish).

Should lake sampling be required the following plan will be used.

5.2 Lakes Plan

5.2.1 Phase 4: Field Data Collection

Following is an outline of our approach to the fieldwork, clarification of specific sampling methodologies, and an estimate of the effort required. The following sections describe the methodologies and approaches to complete field sampling, data collection and reporting for primary and secondary lake inventories.

5.2.2 Field Assessment

A 2-person field crew will conduct the lakes fieldwork. Crew mobilization will take place using a variety of methods, which will maximize the efficiency of the field program depending on specific access available at each lake. For lakes with road access, the field crew will utilize a 4X4-crew cab pickup truck. For sites in which road access is unavailable the field crew will be mobilized by helicopter.

The field crew will be equipped with a Smith-Root Model 12A backpack electrofisher, gill nets, minnow traps and other standard field gear (zodiac and motor, clinometer, hip chain, tape measure, Van Dorn bottle, VHF radio, first aid kit, etc.). Utilizing a combination of these methodologies will ensure that field efficiency is maximized and the project target is attained.

5.2.3 Fish Species Sampling: Primary Lakes

Multi-panel floating and sinking gill nets will be the principal fish sampling method utilized in primary lakes, along with minnow traps and angling. Gill nets (floating and sinking) to be used will follow specifications for standard nets used in reconnaissance level lake inventories in B.C. Gill nets will be set with the smallest mesh size at the shallow end of the net set and secured to a point on shore. Gill nets and minnow traps will be allowed to fish overnight for a minimum period of 8 hours. Gill nets will be set in the evening and monitored for approximately 30 - 45 minutes for an indication of catch

success. Professional judgment will be applied to reduce the netting effort if early indications of net catch suggest excessive fish mortality will result from a standard two net or overnight set. The depth sounder will be operated while setting gill nets to provide a record of bottom substrates and the presence of submerged logs or snags.

Baited (boraxed salmon roe) minnow traps will be set around the perimeter of the lake within shallow shoal areas. Water depths at trap sites will be between 0.3 m and 1.5 m and the trap entrances will be placed parallel to shore or submerged cover. Styrofoam floats will be attached to the traps with a 1.5 m length of string. Minnow traps will be allowed to fish overnight for a minimum of 8 hours.

Inlet and outlet streams will be sampled using an electroshocker to determine fish species presence and relative abundance.

5.2.4 Fish Species Sampling: Secondary Lakes

Secondary lakes are intended to be quick (1 day) surveys of fish species presence or absence. Gill nets will be set initially upon arrival to a lake and allowed to fish while the field crew completes their limnological sampling and other tasks. Minnow traps will also be set for the day during secondary lake surveys. Fish sampling in streams will not be conducted for secondary lakes unless downstream or upstream reaches are sampled during the concurrent stream inventory.

5.2.5 Fish Species Sampling: General

All fish sampling data will be recorded on waterproof Fish Collection Forms. The following data and samples will be recorded and collected for fish caught at each sampling site:

- species (keyed out using RIC's Field Key to Freshwater Fishes of BC). Special attention will be given to documenting species at risk;
- life stage;
- wet weight (in grams);
- a representative sample of any abnormal or unidentified fish or a species of fish out of its normal range will be preserved and submitted to the Implementation Contractor.

Non-lethal aging structures will be removed from a subsample of fish captured in lakes (generally 30 of each species) to determine the age of cohorts present in the lake. Aquatic insects, invertebrates and amphibians will be identified, enumerated and released. Unidentified invertebrates will be retained and preserved in buffered 10% formalin.

A reach description will be completed for one reach of the major inlet and outlet streams to each primary lake consistent with the Site Description form and entered into MSRM's FDIS database as part of Phase 5. Each sampling site length will be 100 m, or >10 bankfull widths whichever is greater. The following data will be collected at each site:

- site length
- stream gradient
- 6 individual channel and wetted width measurements
- estimates of bed material size, by size class
- measurements of stream cover / riparian vegetation and large organic debris
- channel confinement
- water temperature
- conductivity (ambient)
- major features (fish passage barriers, log jams, LWD, beaver dams, clay slides, etc.)
- obvious fish habitat limitations or restoration opportunities
- preliminary identification of obvious Fisheries Sensitive Zones as per Fish-stream Identification Guidebook specifications.

For secondary lakes a visual survey of each inlet and outlet will be conducted to determine the presence of potential habitats that are important to fish.

For all inlet and outlet reaches with non-fish bearing classification a written explanation supporting the classification will be submitted. The written explanation will be included in the final report. The discussion will focus on sampling methods utilized during the field program, water quality parameters including conductivity and turbidity and recommendations for follow-up sampling.

5.2.6 Lake Habitat Descriptions

Bathymetric soundings will be conducted using a Lowrance X-16 electronic depth sounder. The transducer will be mounted on the transom of a 3 m Achilles inflatable boat powered by a short-leg 9.9 hp Johnson outboard. This combination of boat and motor will allow transects to be conducted in water as shallow as .30 m in depth, resulting in accurate estimates of distance at transect start and end points. Depths within shoal areas and weed beds will be measured with a measuring pole.

An E-line transect will be performed along the main (long) axis of the lake to determine the maximum depth in the main basin of the lake. Upon completion of the E-line transect, a shoreline perimeter cruise will be conducted to record lakeshore features, surrounding terrain, vegetation and aquatic plant descriptions.

Full bathymetric surveys will only be required on primary lakes. Transects will be conducted in a straight line, perpendicular to the shoreline and towards an easily

identifiable feature on the opposite shoreline (i.e. point, snag etc.). A constant speed will be maintained for the duration of each transect (~1 m/sec). Speed will be estimated using a floating object tossed in the water ahead and to one side of the boat and timed as it passes beside the boat from bow to stern. Echograms will be marked with a single solid line to represent the start of each transect and double solid lines to indicate end points. Measurement of lake surface area and drainage area will be determined using a Placom KP-90N digital planimeter.

5.2.7 Water Quality

Triton field crews will sample water quality parameters in the field at each limnology station. EMS numbers will be acquired from MSRM prior to the commencement of fieldwork in primary lakes. Parameters will be measured in the field in order to reduce laboratory costs and shipping. On primary lakes, water samples will be sent to a certified laboratory for analysis. Parameters analyzed will follow the Lake and Stream Inventory manual.

Specifically, Triton proposes to measure field air and water temperature using standard field thermometers, pH and conductivity using hand held meters, and turbidity using visual estimates.

Lake limnological sampling will also include a dissolved oxygen/temperature profile, to be completed with a YSI DO probe. A secchi depth measurement will be taken at the deepest point within the lake. Conductivity and pH will be measured from just below the surface and above the lake bottom. Water samples within the lake will be collected with a Van Dorn bottle.

5.2.8 Wildlife Observations

Wildlife observations will be noted and specific details recorded. Amphibians will be identified in the field. Abundant invertebrates will be described and field identified to Order or Family (where practical), as will aquatic macrophytes. Photographs will be taken for further documentation and confirmation. Wildlife observations will be recorded on the lake survey form with emphasis placed on species considered rare, endangered or threatened as defined by the Conservation Data Center.

5.2.9 Photographic Documentation

Triton will make extensive use of photography throughout the project. For lakes, a series of panoramic pictures will be taken from the geographic center of the lake. Pictures will also be taken which highlight geographic features, surrounding country and aquatic vegetation. Other photographs taken on lakes will include evidence of recreational use, wildlife features and fish species (if captured). Photographs will be documented on lake

survey form and Triton's photodocumentation form. The photos will be presented in the report in a manner that meets RIC standards.

6.0 PHASE 5 - DATA COMPILATION

The office portion of Phase 5 will entail entering hardcopy field notes and field forms into requisite electronic database forms including lake forms, site cards, fish collection forms and photodocumentation Form 1. Photographs taken during the field will be developed, captioned and coupled with lake forms and site cards where applicable. Additional photographs will be indexed in referenced binders with the photodocumentation cards and negatives. Bathymetric and lake outline mapping will be completed during Phase 5.

7.0 PHASE 6 - REPORTING AND MAPPING

The final report will follow the outline provided in the Reconnaissance (1:20,000) Inventory Standards and will include data analyses, fisheries values, stream and riparian classifications and management recommendations. This report will contain fish bearing and non fish bearing classification reports and a table supporting each will include sampling methods (and effort), habitat conditions, barriers to fish passage and water quality parameters.

For all reaches with a non fish bearing classification a written explanation supporting the classification will be submitted (Non Fish Bearing Classification Report). The written explanation will be included in the site descriptions provided in the final report. The discussion will focus on sampling methods utilized during the field program, water quality parameters including conductivity, turbidity and recommendations.

All final map work will be produced using GIS software program. Maps produced digitally will include all information as per the requirements outlined in the Reconnaissance (1:20,000) Inventory Standards. The hybridized project/interpretative maps will include: watershed codes (ILP's); stream names; waterbody identifiers; reach breaks; fish sampling sites; fish species; features; stream classification; annotated fish distribution and historical data. Overview maps will accompany the final reports and will show sampling site locations.

7.1 Existing Data

Existing data (i.e. Houston Tommy Inventory 1998/99) will be incorporated into the report where applicable and for ease of reference. The results from previous sampling will be used to establish fish presence and distribution throughout the watershed and to facilitate and/or confirm stream Riparian Management Area classifications.

Historical inventory data will be annotated on the inventory maps and will be linked via a unique site number to the original report.

8.0 PROJECT TIMELINES

Phase III deliverables including ILP map and data sheet by: September 2, 2002

Phase IV activities completed by: October 18, 2002

Phase IV deliverables by: October 25, 2002

Draft Phase V and VI deliverables completed and delivered by: January 15, 2003

Final deliverables for all phases by: March 31, 2003

9.0 PROPOSED STAFF

Project Director Tom Watson

Project Manager Jason Harris

GIS Coordinator David Warburton

GIS Technician Suhkbir Johal

Crew Supervisor Jason Dorey

Crew Member Shawna Hartman

Crew Member Shawn Geisbrecht

Crew Member David Taft

10.0 EQUIPMENT LIST

Fish Collection/Crew

1 electrofisher
l large battery
1 small battery
1 charger
2 anode poles
2 cathodes
3 pairs of linesman gloves
Fish Collection Permit
1 small net
measuring board
recovery bucket
10 minnow traps
bait
4 bottle of alcohol
voucher jars
Fish Collection Methods and Procedures
1 bottle of clove oil
scale envelopes
DNA vials
razorblade knife
ziplock bags
fishing license

Misc

141130
RIC inventory standards
contract
fish identification key
project contact list
winch
jack-all
tire iron
spare tire
shovel
axe
Swede saw
горе
tarps
planning maps
timesheets
expense claim forms
daytimers
l flashlight

Field Gear/Crew

2 compass	first aid kit	hip chain	bug dope		
2 clino	2 wool blankets	string	2 scale rules		
2 field books	waders	flagging tape	metric thermometer		
site cards	wading boots	l axe	pH meter		
fish forms	aquaseal	file	conductivity meter		
individual fish data	color film	caulks	two way radio		
duksbak	waterproof camera	caulk wrench	radio frequencies		

11.0 CONTINGENCY PLAN

It is critical that sampling be approached strategically, rather than (or in addition to) strictly site based. Crews will work from the approved plan, but if modifications to the plan lead to an increased knowledge of fish distribution (within the watershed) changes to the plan will be made. In cases where sampling could not be conducted, or where conditions for sampling were unfavorable, the field crews will make a number of assumptions in selecting new sites.

The following criteria will be considered when adding or moving sites:

- the establishment of fish presence within a catchment or basin (the intent here is not to chase End of Fish Use in every tributary);
- the identification of upstream limits of fish distribution;
- the investigation of barriers to fish passage; and
- the investigation of potential overwintering habitat. The identification and confirmation of barriers to fish passage have significant implications, where entire portions of sub-basins could be confirmed as non-fish bearing, pending the sampling of any potential overwintering habitats upstream of the barrier.

Strategic selection and professional judgement to relocate sites within the watershed will allow maximum sampling efficiency and it will also allow crews to assess barriers and fisheries values throughout the watershed.

APPENDIX I

Project Phase Completion Report: Phases I – III

PROJECT PHASE COMPLETION REPORT: PHASES I - III

Project Name: Reconnaissance (1:20,000) Fish and Fish Habitat

Inventory in selected tributaries within the Tochcha

and Morice Planning Areas

Project Type:

1:20,000 Reconnaissance

Report Date:

September 2, 2002

Proponent:

Canadian Forest Products Ltd. (Canfor)

Company/Agency:

Triton Environmental Consultants Ltd.

Contact Person: Contact Phone: Jason Harris

Contact E-Mail:

(250) 635-1494 jharris@triton-env.com

Coordinator:

Todd Mahon, Wildfor Consultants Ltd.

Table 1. List of Deliverables Submitted (Phase I)

Deliverable Product	Received	Approved (QA)
Bibliography (hardcopy and digital)		
List of Contacts (hardcopy and digital)		
Interim Maps with;		
watershed boundaries		
waterbodies with ILP's or watershed codes		
reach breaks with NIDS		
lakes with NIDS		
proposed sample sites		
Reach tables (digital FDIS)		
Project Plan (hardcopy and digital)		
Lake tables (digital FDIS)		
Phase completion report (hardcopy and digital)		

Table 2. Activity Log (Phases I - III)

Date	Activity
Aug 10 - Aug 15	Assign ILP's, delineate watershed boundaries
Aug 10 - Aug 25	Completing Reach Tables and Quality Control
Aug 10 - Aug 25	Completing Interim Maps and Quality Control
Aug 15 - Aug 25	Lakes planning and lakes information tables
Aug 15 - Aug 25	Completing Basin Classification, Reach Breaks, Lakes
	Classification and Quality Control
Aug 25 - Sept 1	Create contact list, bibliography, etc.
Aug 25 - Sept 1	Project Plan development
Aug 28 - Sept 2	Interim Maps/Sample Site Locations

Summary of Work Completed

A background data review was conducted to establish existing information within the Tochcha and Morice watersheds. These reports were obtained from the Ministry of Sustainable Resources Management (MSRM) office in Smithers, Canadian Forest Products (Canfor) in Houston, various consultants and the BC Conservation Data Centre. A bibliography listing these reports was completed.

In the process of data collection and compilation consultants, government agencies and Canfor personnel were contacted. A list of contacts made during this process was completed.

FISS maps were reviewed and compared with the data collected during the background review. Information that was not included on the FISS maps, as well as new information gathered in Phase 4, will be transcribed to a corresponding 1:50,000 scale National Topographic Scale (NTS) map during Phase 5.

The project area boundaries were delineated on TRIM maps and all streams, wetlands and lakes were assigned, waterbody identifiers or ILP's. ILP's were assigned using Arcview and FDIS.

Thirty-eight working TRIM map sheets are being used for the project.

Detailed map and photo analysis was conducted in order to identify and classify sub-basins within the study area; to determine reach breaks; and to determine individual reach characteristics for all watercourses, lakes and wetlands. The delineation of sub-basins was based on stream order and hierarchy within the watershed.

All connected wetlands were identified and added to the interim maps. Wetlands with defined or partly defined channels, which convey flow, were included in the stream portion of the sampling plan. While wetlands without defined channels, or those with extensive ponding were included in the lake portion of the sampling plan.

All watercourses within the study area were divided into reaches and physical features affecting fish habitat suitability (including gradient, confinement, channel pattern and riparian vegetation) were identified.

All lakes within the study area were assigned to lake groups.

The focus of Phase 3 was to develop the detailed sampling plan and produce the planning report. The number of sample sites proposed and a brief rational for sample site selection is provided in the project plan.

Planning for the field-sampling portion of this project followed a balanced approach between RIC requirements and Canfor's operational needs. Initial sample site selection was undertaken using the FDIS random generator. Further discretionary sites were added to the initial randomly generated sampling sites. Discretionary sites were selected using the following criteria:

- FDIS Reach Sampling Summary table for each watershed;
- existing fish species distribution data;
- strategies to determine fish distribution within each watershed; and
- Canfor operational needs.

Revisions to the stream sampling plan (increased number of site, alternate site locations) will be revised at the beginning of Phase 4, which is scheduled to commence in the summer of 2002.

Table 3. Project Area Statistics

Inventory Area	Tochcha Planning Area	Morice Planning Area
Project Area (Ha)	141,732 Ha	85,029 Ha
Number of TRIM maps	21	17
Largest watershed (stream) order	5	5
Number of 3rd order basins	66	67
Km of streams	2033.4 km	1544.5 km
Number of stream reaches in project area	2762	2208
Number of lakes in project area	134	33

Table 4. Sample Site Summary

Inventory Area	Tochcha Planning Area	Morice Planning Area
Number of reach sample sites proposed	100	260

Progress and Problems Summary

Detailed reach planning was not conducted during the planning phases, as it is anticipated (based on previous experience) that several reaches will be moved during pre-field meetings with Canfor personnel, ministry representatives and during the sampling program. We anticipate several changes to the sampling plan, and these changes will significantly alter the original sample site selection. Detailed reach planning forms will be completed during phase 5 and will be submitted as a deliverable for this phase.

No lakes were specifically selected for sampling; therefore no detailed lakes forms were completed. Lakes to be sampled will be selected after the conclusion of the stream sampling program. Lakes sampling will then focus on attaining information that will be of value to both MSRM (watershed wide fish distribution) and Canfor (headwater lakes which support fish in ephemeral systems).

Next Phase Project Plans and Constraints

FISS updates will be provided with the Phase VI deliverables as opposed to Phase III. At that time new information gathered from the field can be incorporated into FISS.

Phase IV (field) is scheduled to commence in September of 2002.

Summary of Phases I - III Costs

Costs as per contract

Contract Monitor Acceptance

Report Submitted By: Jason Harris	Date: September 2, 2002				
Phase Completion Approved:	Date:				
Comments:					

APPENDIX II

Bibliography

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APPENDIX III List of Key Contacts and Information Sources Triton Environmental Consultants Ltd. 3363.01/WP#T-1345

Appendix III

List of Key Contacts and Information Sources for Canadian Forest Products Stream Inventory Project

Name	Company/Agency	Title	Contact Number	Date	Comments
John Brockley	Canadian Forest Products Ltd.	Project Administrator	(250) 847-5277	Ongoing	Guidance throughout project
Todd Mahon	Wildfor Consultants Ltd.	Project Co-ordinator	(250) 846-5449	Ongoing	Guidance throughout project
Paul Giroux	MWLAP (Smithers)	Regional Biologist	(250) 847-7303	Ongoing	Guidance throughout project
John Thibeau	MOF (Houston)	Forestry Technician	(250)-845-6243	Ongoing	Identification of barrier to fish migration in the Tochcha Lake planning area.
Dana Atagi	MWLAP (Smithers)	Fisheries Biologist	(250) 847-7303	Ongoing	Requested info. regarding project area
Matthew Jessop	MWLAP (Smithers)	Fisheries Technician	(250) 847-7303	Ongoing	Requested info. regarding project area
Scott Northrup	DFO (Nanaimo)	Habitat Biologist	(250) 756-7275	Ongoing	Contacted for info. regarding completed inventories within the study area
Jim Trask	Triton Environmental Consultants Ltd. (Prince	Consultant	(250) 562-9155	Ongoing	Requested info. pertaining to work completed in the study area
	George)				Guidance throughout project
Chris Schell	Consultant	Fisheries Biologist	(250) 846-9059	Ongoing	RIC Inventory expert
					Guidance throughout project
David Bustard	Consultant	Fisheries Biologist	(250) 847-2963	Ongoing	Familiar with fisheries resources throughout the study area
David Warburton	Triton Environmental Consultants Ltd. (Prince George)	GIS Co-ordinator	(250) 562-9155	Ongoing	Requested existing inventory maps and databases
David Taft	Triton Environmental Consultants Ltd. (Terrace)	Local Legend	(250) 635-1494	Ongoing	Familiar with fisheries and wildlife resources throughout the study area
Tony Cheong	MWLAP (Victoria)	Fisheries Biologist	(250) 387-9585	Ongoing	Familiar with RIC standards and requirements
Lynn Meirs	MWLAP (Victoria)	Data Administrator	(250) 387-9564	Ongoing	FDIS database request and ongoing support

List of Key Contacts and Information Sources for Canadian Forest Products Stream Inventory Project

Name	Company/Agency	Title	Contact Number	Date	Comments
Sean Cheesman	MWLPA (Victoria)	GIS Technician	(250) 387-2579	Ongoing	WSC submission and RIC requirements
Tom Pendray	DFO (Smithers)	District Habitat Officer	(250) 847-4723	Ongoing	Familiar with study area
Carl Vandermark	Canfor (Houston)	Planning Superintendent	(250) 847-5200	Ongoing	Guidance throughout project
Colin Johnston	Canfor (Houston)	Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Cam Bentley	Canfor (Houston)	Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Keith Jaarsma	Canfor (Houston)	Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Aurnir Nelson	Canfor (Houston)	Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Barry Watson	Canfor (Houston)	GIS Administrator	(250) 847-5200	Ongoing	Familiar with study area
Trevor Bellevance	Canfor (Houston)	Assistant Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Rebecca Werner	Canfor (Houston)	Assistant Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Miro Kosalko	Canfor (Houston)	Assistant Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Jim McCormack	Canfor (Houston)	Planning Forester	(250) 847-5200	Ongoing	Familiar with study area
Harry Anaka	Canfor (Houston)	Forestry Supervisor	(250) 847-5200	Ongoing	Familiar with study area
Jesse Anaka	Anaka Environmental Consulting	Local Legend	(780)-919-4878	Ongoing	Familiar with study area
Brenda Donas	DFO (Smithers)	Community Advisor	(250) 847-5298	Ongoing	Familiar with study area

APPENDIX IV

Tochcha Planning Area Sample Selection

Tochcha Sample Selection

MAPSHEET	NID	ILP	REACH
93M.010	11436	1803	9
93N.001	11797	1809	3
93N.001	11723	1763	5
93N.001	11712	1769	1
93N.001	11767	1792	1
93M.020	11030	1470	11
93M.020	10947	1432	2
93M.020	11075	1429	2
93M.020	11026	1470	7
93M.020	10861	1398	4
93M.020	10892	1404	5
93M.020	10884	1408	2
93M.030	10638	1394	6
93M.030	10642	1394	4
93M.030	10577	1290	1
93M.029	10509	1296	3
93M.029	10471	1181	3
93M.029	10531	1155	5
93M.029	10487	1182	3
93M.029	10531	1155	5
93M.029	10437	1141	3
93M.029	10455	1150	5
93M.029	10526	1158	2
93M.029	10414	1119	4
93M.029	10413	1119	3
93M.029	10399	1123	2
93M.029	10424	1135	2
93M.039	10023	1155	7
93M.039	10037	1173	4
93M.039	10138	1056	5
93M.039	10137	1056	4
93M.039	10046	1015	1
93M.039	10077	1022	6
93M.039	10110	1079	2
93M.039	10081	1022	10
93M.039	10042	1018	2
93M.039	10188	1030	2
93M.039	10197	1037	11
93M.039	10211	1044	3
93M.019	10690	1332	4
93M.029	10330	1232	1
93M.029	10315	1231	2
93M.029	10319	1231	6
93M.029	10306	1224	1
93M.029	10283	1206	1
93M.029	10270	1204	3
93M.029	10326	1235	1
93M.019	10764	1361	4

Tochcha Sample Selection

- sumpre ser	Detion		
MAPSHEET	NID	ILP	REACH
93N.001	11789	1808	3
93N.001	11685	1784	1
93K.091	12139	1990	1
93K.091	12135	1989	3
93K.091	12163	1979	2
93K.091	12165	1979	4
93K.091	12133	1989	1
93K.091	12180	1975	1
93K.091	12193	1966	1
93K.092	12264	1742	14
93K.092	12288	2055	2
93K.092	12421	2127	4
93K.092	12378	2075	4
93K.082	12953	2308	3
93K.092	12410	2076	4
93N.002	11872	2114	3
93N.002	11890	1844	1
93K.092	12326	2308	4
93K.081	12844	2009	2
93K.091	12108	2009	6
93K.081	12794	2253	3
93K.091	12081	1948	1
93K.091	12083	1948	3
93K.091	12061	1942	2
93K.091	12071	1944	2
93K.071	13050	2358	2
93K.071	13081	2370	5
93K.071	13089	2373	3
93K.071	13054	2359	3
93K.071	13067	2366	2
93K.081	12818	2251	3
93K.081	12820	2251	5
93M.029	10473	1181	5
93M.030	10618	1305	3
93M.020	10852	1390	2
93M.010	11262	1594	5
93N.001	11855	1752	8
93N.001	11717	1768	3
93N.001	11820	1757	2
93L.100	11919	1877	3
93M.010	11573	1863	2
93K.071	13028	2380	6
93M.019	10687	1332	1
93M.019	10794	1521	1
93M.009	11150	1520	1

APPENDIX V

Morice Planning Area Sampling Summary Report (with sample selection and FDIS QA)

- Anna Anna Anna Anna Anna Anna Anna Ann			SMALL			MEDIU			LARG	-
GRADIEN	FORM	Total	Sample	Actual	Total	Sampl	Actual	Total	Sample	Actual
1.5	ST/SI	171	. 13	26	120	13	34	47	2	6
<=4	IM/ME	0	0	0	6	2	4	11	22	4
	AN/BR	0	0	. 0	0	0	10	2	2	2
2.7	ST/SI	238	14	.29	108	- 12	40	14	2	
>4 and <=8	IM/ME		有一种		6	* 2	a 1 6 -	2	2	2
T Company	AN/BR	0	0	0		少有时	1,000	0	· > 0	0
3	ST/SI	438	16		, 164	13	40	Ö	0	0
>8 and <=20	IM/ME		1	1.1	2	2	2	1.	1_	1
- Gana 20	AN/BR	0 :	. 0	. 0	0	0	0	. 0	0	. 0
4	ST/SI	196	14	10,	61.	6	111	i	4	1
1 7 7	IM/ME	0	0.4	0	2	2	2	B 70	0.	0
>20 and <=30	AN/BR	0	9.0	0	0.0	0	0	0	0	0
5	ST/SI	571	o e	2	73	0	727.9	0	0	.0.
>30	IM/ME	- 0	0	. 0 ∮	27-16	. 0	0	0	- 0	0
	AN/BR	≨:≛∢ 0 ∷	0	0	0		AND DESCRIPTION OF THE PARTY.	0.0		0
Reach Total:	2208 Sar	nple Tota	al: 124	Sampl	e % 5.	ô <i>p</i>	ctual Tot	al: 26	0 Actua	1%: 11.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	THE PERSON	r r r et de		S. printing	A STATE OF THE	analist est	WHI HE WASH	建筑智慧	The same of the sa	Steens in
Group 1 Gr	oup 2	Group 3	Grou	p 4						
The second second										_

MAPSHEET		ILP	REACH		
093L.046	10930	3571			
093L.035			6.0		
093L.033	11065 10908	3275	1.0		
		3028	2.0		
093L.046	10909	3028	3.0		
093L.046	10911	3028	5.0		
093L.046	10912	3028	6.0		
093L.046	10898	2877	2.0		
093L.046	10927	2857	1.0		
093L.046 093L.034	10894 10971	2874	1.0		
093L.034		3042	1.0		
	10975	3268	2.0		
093L.047	10998	3025	1.0		
093L.035	11031	3247	3.0		
093L.035	11035	3248	2.0		
093L.046	10820	2910	1.0		
093L.046	10923	2861	1.0		
093L.046	10863	3471	5.0		
093L.055	10003	2445	7.0		
093L.046	10828	2868	4.0		
093L.046	10829	2868	5.0		
093L.046	10830	2868	6.0		
093L.046	10831	2868	7.0		
093L.046	10899	2879	1.0		
093L.046	10862	3471	4.0		
093L.035	11066	3275	2.0		
093L.046	10864	3471	6.0		
093L.046	10866	2908	1.0		
093L.046	10876	2885	2.0		
093L.046	10886	2873	1.0		
093L.046	10887	2873	2.0		
093L.046	10888	2873	3.0		
093L.046 093L.035	10848	2890	2.0		
093L.035	11360	3599	2.0		
093L.035	11048	3259	1.0		
	11285	3601	5.0		
093L.035	11290	3164	1.0		
093L.035	11294	3164	5.0		
093L.035	11301	3169	1.0		
093L.035	11257	3604	6.0		
093L.035	11325	3182	3.0		
093L.035	11254	3604	3.0		
093L.035	11362	3599	4.0		
093L.035	11377	3138	3.0		
093L.035	11401	3158	2.0		
093L.035	11416	3477	2.0		
093L.035	11418	3477	4.0		
093L.035	11438	3162	1.0		
093L.035	11319	3179	2.0		

MA POUR		I TY N	DEACH		
MAPSHEET		ILP	REACH		
093L.035	11190	3361	2.0		
093L.035	11116	3314	1.0		
093L.035	11121	3315	1.0		
093L.035	11122	3315	2.0		
093L.035	11147	3332	2.0		
093L.035	11167	3345	1.0		
093L.035	11283	3601	3.0		
093L.035	11187	3357	1.0		
093L.046	10817	2913	1.0		
093L.035	11205	3628	1.0		
093L.035	11207	3628	3.0		
093L.035	11208	3628	4.0		
093L.035	11215	3375	3.0		
093L.035	11235	3225	1.0		
093L.035	11243	3219	2.0		
093L.035	11184	3355	1.0		
093L.045	10235	2506	1.0		
093L.045	10304	2941	7.0		
093L.056	10133	3007	4.0		
093L.045	10165	2981	3.0		
093L.045	10166	2981	4.0		
093L.045	10169	2981	7.0		
093L.056	10130	2453	1.0		
093L.045	10174	2981	12.0		
093L.056	10117	2450	6.0		
093L.045	10270	2593	1.0		
093L.045	10271	2593	2.0		
093L.045	10272	2593	3.0		
093L.045	10273	2593	4.0		
093L.045	10301	2941	4.0		
093L.046	10825	2868	1.0		
093L.045	10170	2981	8.0		
093L.056	10087	2445	5.0		
093L.055	10004	2445	8.0		
093L.055	10005	2445	9.0		
093L.055	10009	2445	13.0		
093L.055	10010	2445	14.0		
093L.055	10038	2435	1.0		
093L.056	10131	2453	2.0		
093L.056	10077	2477	1.0		
093L.045	10336	2868	8.0		
093L.056	10100	2463	1.0		
093L.056	10105	2461	1.0		
093L.056	10109	2445	2.0		
093L.056	10112	2450	1.0		
093L.056	10113	2450	2.0		
093L.056	10114	2450	3.0		
093L.055	10052	2549	3.0		

MAPSHEET	NID	ILP	REACH
093L.046	10768	2912	3.0
093L.045	10302	2941	5.0
093L.046	10742	2942	3.0
093L.046	10755	2944	2.0
093L.046	10757	2937	1.0
093L.046	10758	2937	2.0
093L.046	10730	2956	2.0
093L.046	10766	2912	1.0
093L.046	10717	2999	3.0
093L.046	10770	2912	5.0
093L.046	10779	2934	1.0
093L.046	10789	2929	2.0
093L.046	10791	2925	1.0
093L.046	10806	2915	3.0
093L.046	10813	2917	2.0
093L.046	10762	2939	2.0
093L.045	10547	3678	8.0
093L.045	10337	2868	9.0
093L.045	10337	2868	10.0
093L.045	10423	2641	1.0
093L.045	10424	2641	2.0
093L.045	10465	3406	8.0
093L.046	10740	2942	1.0
093L.045	10531	2774	2.0
093L.035	11471	3121	1.0
093L.046	10630	2941	1.0
093L.046	10632	2941	3.0
093L.046	10636	2989	2.0
093L.046	10662	2974	3.0
093L.046	10689	2448	2.0
093L.046	10691	2445	3.0
093L.045	10530	2774	1.0
093L.026	12180	3682	1.0
093L.026	12205	3715	4.0
093L.026	12161	3688	4.0
093L.026	12166	3681	1.0
093L.026	12170	3675	2.0
093L.026	12172	3675	4.0
093L.026	12149	3698	1.0
093L.026	12177	3701	2.0
093L.026	12143	3693	2.0
093L.026	12185	3685	1.0
093L.026	12187	3684	1.0
093L.026	12192	3633	2.0
093L.026	12193	3633	3.0
093L.026	12196	3633	6.0
093L.035	11443	3089	4.0
093L.026	12175	3679	2.0

MAPSHEET	NID	ILP	REACH
093L.025	12013	3725	7.0
093L.025	11971	3607	1.0
093L.025	11974	3607	4.0
093L.025	11980	3609	3.0
093L.025	11986	3608	1.0
093L.025	12003	3597	2.0
093L.026	12151	3698	3.0
093L.025	12010	3725	4.0
093L.026	12206	3715	5.0
093L.025	12018	3590	1.0
093L.025	12040	3723	1.0
093L.025	12045	3801	4.0
093L.025	12051	3635	1.0
093L.025	12106	3637	5.0
093L.025	12113	3638	1.0
093L.025	12007	3725	1.0
093L.013	12341	3749	1.0
093L.026	12199	3724	2.0
093L.013	12311	3737	2.0
093L.013	12315	3740	2.0
093L.013	12323	3742	2.0
093L.013	12325	3742	4.0
093L.013	12289	3787	3.0
093L.013	12334	3746	2.0
093L.013	12285	3789	2.0
093L.013	12342	3749	2.0
093L.013	12352	3753	2.0
093L.014	12403	3787	1.0
093L.014	12408	3783	2.0
093L.014	12412	3781	3.0
093L.014	12416	3776	2.0
093L.013	12330	3743	3.0
093L.026	12248	3707	1.0
093L.026	12207	3715	6.0
093L.026	12210	3715	9.0
093L.026	12217	3721	2.0
093L.026	12222	3716	3.0
093L.026	12235	3710	3.0
093L.013	12292	3791	1.0
093L.026	12245	3706	3.0
093L.025	11950	3618	5.0
093L.026	12251	3705	1.0
093L.013	12270	3776	3.0
093L.013	12275	3783	3.0
093L.013	12276	3783	4.0
093L.013	12277	3783	5.0
093L.013	12282	3731	2.0
093L.026	12243	3706	1.0

MAPSHEET	NID	ILP	REACH	
093L.036	11619	3406	2.0	
093L.025	11956	3620	1.0	
093L.036	11590	3540	3.0	
093L.036	11596	3544	1.0	
093L.036	11597	3545	1.0	
093L.036	11603	3525	2.0	
093L.036	11574	3532	1.0	
093L.036	11608	3520	1.0	
093L.036	11572	3530	1.0	
093L.036	11620	3406	3.0	
093L.036	11621	3406	4.0	
093L.036	11622	3406	5.0	
093L.036	11623	3406	6.0	
093L.036	11631	3412	1.0	
093L.036	11634	3412	4.0	
093L.036	11606	3524	2.0	
093L.036	11553	3526	3.0	
093L.014	12417	3777	1.0	
093L.035	11472	3112	1.0	
093L.035	11511	3065	1.0	
093L.035	11516	3067	1.0	
093L.035	11520	3406	9.0	
093L.036	11578	3532	5.0	
093L.036	11551	3526	1.0	
093L.036	11661	3426	1.0	
093L.036	11557	3528	2.0	
093L.036	11558	3528	3.0	
093L.036	11559	3528	4.0	
093L.036	11562	3528	7.0	
093L.036	11565	3529	1.0	
093L.036	11567	3529	3.0	
093L.035	11528	3073	1.0	
093L.024	11918	3629	7.0	
093L.036	11877	3562	1.0	
093L.036	11884	3547	1.0	
093L.036	11890	3138	4.0	
093L.037	11901	3570	2.0	
093L.037	11902	3571	1.0	
093L.036	11647	3418	1.0	
093L.024	11916	3629	5.0	
093L.036	11832	2881	2.0	
093L.025	11935	3617	3.0	
093L.025	11938	3626	1.0	
093L.025	11940	3636	3.0	
093L.025	11944	3625	2.0	
093L.025	11947	3618	2.0	
093L.035	11457	3100	2.0	
093L.037	11903	3571	2.0	

MAPSHEET	NID	ILP	REACH
093L.036	11746	3500	1.0
093L.025	11951	3618	6.0
093L.036	11677	3435	2.0
093L.036	11679	3436	2.0
093L.036	11684	3439	1.0
093L.036	11685	3439	2.0
093L.036	11705	3450	4.0
093L.036	11874	3695	7.0
093L.036	11741	3471	2.0
093L.036	11845	3549	2.0
093L.036	11798	3405	1.0
093L.036	11802	3401	2.0
093L.036	11804	3401	4.0
093L.036	11807	3402	1.0
093L.036	11823	2877	4.0
093L.036	11650	3420	1.0
093L.036	11733	3466	1.0

Planning QA Report

NID/UTM Import Complete:

ILP/WSC Import Complete:

Elevation tolerance (m) (+/-):

Maximum

Project Elevation (m):

0 4020

5 Minimum

0.1

Reach Length Maximum (km):

5

From File: C:\Canfor FDIS 2002\Fdisdat.mdb

REACH CARD

Field Name	Watershed Code	ILP Map#	ILP#	Reach ID	Site ID	NID Map#	NID#	Comment
CONF_CODE	000-000000-00000-00000-0000-000-000-000-000-000-000	093L.045	2545	1.0		093L.045	10214	Wetland cannot have a confinement of CO

END OF REPORT