

APPENDIX 1 - Site Cards and Fish Collection Forms

Site cards for all streams inventoried in 1997 relevant to cutting permits CP 541-2, CP 537-1 to 10, CP 539-2 to 6, CP 539-8 and CP 533-1.

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5056-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":	Stream B	Access:	FT
Watershed Code:	480-5056-000-000-000-000-000-000-000-000	Reach No.:	1	Reach Length (km):	0.2 Method: HC
Location:	from Babine Lk. to 150m U/S	Site No.:	1	Length surveyed (m):	200.0 Method: HC
		Map #:	93M018	Fish Card:	Y Field: Yes Historical: No
		U.T.M.:		Photos:	HFP4W: 22,23 Air Photos:
Date:	97/7/3	Time:	12:00	Agency:	SKR
		Survey Crew:	RS \MJ \ \ \ \ \ \ \ \		

Channel Characteristics

Av. Chan. Width (m):	1.6	Method Av. Chan. Width (m):	MS						
Av. Wet. Width (m):	0.9	Method Av. Wet. Width (m):	MS						
Av. Max. Rlf. Depth (cm):	7	Av. Max. Riffle Depth (cm):	MS						
Av. Max. Pool Depth (cm):	32	Av. Max. Pool Depth (cm):	7						
Gradient (%):	4.0	Method Gradient:	CL						
% Pool:	10	% Riffle:	10	% Run:	10	% Other:	70	Method:	GE
% Side Channel:	0-10	Method Side Channel:	GE						
% Debris Area:	10-40	Method Debris Area:	GE						

Specific Data

1.4	1.7	1.8	1.4	1.6	1.8
0.6	0.7	1.0	1.4	1.1	0.8
6	9	7			
20	40	35			

Bed Material

% Fines (<2mm):	90	% Fines (<2mm):	90
% Gravels:	5	Small (2-16mm):	0
		Large (16-64mm):	5
% Larges:	5	Small cobble (64-128mm):	5
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	2	Compaction:	Medium

Cover

Cover Total %:	90	Method Cover Total %:	GE
Dp Pool:	0	L.O.D.:	10
Boulder:		In Veg.:	
Over Veg:	80	Cutbanks:	10
Crown Closure %:	10	Method Crown Closure:	GE
Aspect:	W	Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

2	D	4.0	910
(Width, Valley: Channel, Slope)			(Bed Material)

Banks

Height (m):	0.3	% Unstable:	0
Textures Fines:	Yes	Gravel:	No
Confinement:	5	Larges:	No
Valley: Chan. Ratio:	4	Bedrock:	No
Stage:	M		
Flood Signs Ht(m):	0.3	Method Flood Signs:	GE
Braided:	Y	Method Braided:	GE
Bars (%):	0	Method Bars:	GE
pH:	7.8	Method pH:	PM
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	9.5	Method Temperature:	AT
Turb. (cm):	40	Method Turbidity:	GE
Cond. (µmhos):	20	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5056-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

- 1 Limited fish habitat - a little rearing, no spawning habitat
 - 2 3m of underground flow was observed 120m.
 - 3 EL 14 700v for 300 sec to 150m U/S from lake. caught no fish, observed no fish.
- NID 00656
- NIDM 93M018



Plate #1. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



04-Feb-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5056-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":	Stream B	Access:	FT
Watershed Code:	480-5056-000-000-000-000-000-000-000-000			Reach No.:	2
Location:	At Proposed road crossing 2400m U/S of Babine Lake in CP 541-2.	Map #:	93M018	Site No.:	2
		U.T.M. :		Length surveyed (m):	2400.0
				Method:	HC
		Fish Card:	N	Field:	Yes
				Historical:	No
Date: 97/7/3	Time: 14:30	Agency: SKR	Survey Crew: MJ\RS\ \ \ \ \ \ \ \	Photos:	HFP4:3,4
				Air Photos:	

Channel Characteristics

Av. Chan. Width (m):	1.3	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	1.2	Method Av. Wet. Width (m):	MS
Av. Max. Riff. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	19	Av. Max. Pool Depth (cm):	5
Gradient (%):	8.0	Method Gradient:	CL
% Pool: 5	% Riffle: 10	% Run: 0	% Other: 85
% Side Channel:	0-10	Method Side Channel:	CE
% Debris Area:	10-40	Method Debris Area:	CE

Specific Data

1.6	1.2	1.4	0.9	1.3	1.5
1.6	1.2	1.4	0.9	1.1	1.2
5	3	7			
17	21	19			

Bed Material

% Fines (<2mm):	15	% Fines (<2mm):	15
% Gravels:	30	Small (2-16mm):	10
		Large (16-64mm):	20
% Larges:	55	Small cobble (64-128mm):	40
		Large cobble (128-256mm):	10
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	20	Compaction:	Low

Cover

Cover Total % :	45	Method Cover Total %:	GE				
Dp Pool: 5 L.O.D.:	65	Boulder: 0 In Veg.:	0	Over Veg:	10	Cutbank:	20
Crown Closure % :	45	Method Crown Closure:	GE	Aspect :	W	Method Aspect:	CP

Banks

Height (m):	25.0	% Unstable:	0
Textures Fines:	Yes	Gravel:	No
		Larges:	No
		Bedrock:	No
Confinement:	3		
Valley: Chan. Ratio:	2		
Stage:	M		
Flood Signs Ht(m):	30	Method Flood Signs:	GE
Braided:	N	Method Braided:	GE
Bars (%):	5	Method Bars:	GE
pH:	8.1	Method pH:	PM
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	10.0	Method Temperature:	AT
Turb. (cm):	21	Method Turbidity:	GE
Cond. (umhos):	50	Method Conductivity:	PM

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s) :
Discharge (m³/s) :	Method Discharge (m³/s) :

Specific Data

Reach Symbol

(Fish)

1 B 8.0	235
(Width, Valley: Channel, Slope)	(Bed Material)

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek**Watershed Code:****Stream Survey Report**

480-5056-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary***Obstructions***

Comments

- | | |
|------|---|
| 1 | Limited potential fish habitat due to occasional intermittent sections and step-cascades with shallow step pools. Step pools and are definite barriers to fish migration. |
| 2 | Limited potential for D/S impacts to fish and fish habitat due to limited spawning habitat in stream. |
| NID | 00657 |
| NIDM | 93M018 |
-

Unnamed Creek (480-5056) - Reach 2



Plate #2. Reach 2 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5056-bb1-000-000-000-000-000-000-000-000-000

Header Information											
Stream Name:		Unnamed Creek		Stream "Local":		ILP 00512; Stream C		Access:		FT	
Watershed Code:		480-5056-bb1-000-000-000-000-000-000-000-000-000		Reach No.:		1		Reach Length (km):		Method:	
Location:		405m U/S from confluence at planned road crossing		Map #:		93M018		Site No.:		3	
Date:		97/7/3		U.T.M.:				Fish Card:		N	
Time:		13:30		Agency:		SKR		Field:		Yes	
Survey Crew:		MJ \RS \ \ \ \ \ \ \ \		Photos:		HFP4V: 1,2		Historical:		No	
Air Photos:											
Channel Characteristics				Specific Data				Bed Material			
Av. Chan. Width (m):		1.1		Method Av. Chan. Width (m):		MS		% Fines (<2mm):		90	
Av. Wet. Width (m):		0.7		Method Av. Wet. Width (m):		MS		% Gravels:		6	
Av. Max. Riff. Depth (cm):				Av. Max. Riffle Depth (cm):		MS		% Larges:		4	
Av. Max. Pool Depth (cm):		17		Av. Max. Pool Depth (cm):				Small (2-16mm):		3	
Gradient (%):		3.0		Method Gradient:		CL		Large (16-64mm):		3	
% Pool:		5		% Riffle:		0		Small cobble (64-128mm):		2	
% Side Channel:		0-10		% Run:		5		Large cobble (128-256mm):		2	
% Debris Area:		0-10		% Other:		90		Boulder cobble (>256mm):		0	
Method Side Channel:		GE		Method:		GE		% Bedrock:		0	
Method Debris Area:		GE						D90 (cm):		2	
								Compaction:		High	
Cover				Banks							
Cover Total % :		Method Cover Total % :		Height (m):		0.3		% Unstable:		0	
Dp Pool :		L.O.D.:		Textures Fines:		Yes		Gravel:		No	
Crown Closure % :		5		Confinement:		6		Larges:		No	
Method Crown Closure:		GE		Valley: Chan. Ratio:		4		Bedrock:		No	
Aspect :		W		Stage:		M					
Method Aspect:		CP		Flood Signs Ht(m):		0.3		Method Flood Signs:		GE	
				Braided:		N		Method Braided:		GE	
				Bars (%):		0		Method Bars:		GE	
				pH:		7.8		Method pH:		PM	
				#2 (ppm):				Method Dissolved Oxygen:			
				Water Temp. (°C):		10.0		Method Temperature:		AT	
				Turb. (cm):		20		Method Turbidity:		GE	
				Cond. (µmhos):		60		Method Conductivity:		PM	
Discharge				Reach Symbol							
Wetted Width (m) :		Method Wetted Width (m) :		(Fish)							
Mean Depth (m) :		Method Mean Depth (m) :		1 D 3.0		811					
Mean Velocity (m/s) :		Method Mean Velocity (m/s) :		(Width, Valley: Channel, Slope)		(Bed Material)					
Discharge (m3/s) :		Method Discharge (m3/s) :									

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek**Watershed Code:****Stream Survey Report**

480-5056-bb1-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Comments

1	No fish habitat
2	Limited potential for D/S impacts on fish or fish habitat.
NID	00659
NIDM	93M018
ILP	00512
ILPM	93M018



Plate #3. Reach 1 - sample site 3. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	B				
Watershed Code:	480-5413-000-000-000-000-000-000-000-000	Map #:	93M008	Reach No.:	1	Reach Length (km):	0.2	Method:	HC
Location:	25m u/s of confluence with Babine Lk.	U.T.M.:		Site No.:	1	Length surveyed (m):	150.0	Method:	HC
Date:	97/9/4	Time:	16:00	Fish Card:	Y	Field:	Yes	Historical:	No
Agency:	SKR	Survey Crew:	GT VITJ \ \ \ \ \	Photos:	B11: 1,2	Air Photos:	BCC0096147:95		

Channel Characteristics

Av. Chan. Width (m):	4.2	Method Av. Chan. Width (m):	MS	Specific Data					
Av. Wet. Width (m):	2.2	Method Av. Wet. Width (m):	MS	4.4	3.1	3.8	4.1	3.4	6.3
Av. Max. Rlf. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS	0.4	2.9	2.8	2.0	2.9	2.0
Av. Max. Pool Depth (cm):	38	Av. Max. Pool Depth (cm):	5	5	5	5			
Gradient (%):	3.0	Method Gradient:	CL	40	25	50			
% Pool:	65	% Riffle:	20	% Run:	15	% Other:	0	Method:	GE
% Side Channel:	10-40	Method Side Channel:	GE						
% Debris Area:	>40	Method Debris Area:	GE						

Cover

Cover Total %:	40	Method Cover Total %:	GE								
Dp Pool:	10	L.O.D.:	65	Boulder:	0	In Veg.:	0	Over Veg:	15	Cutbank:	10
Crown Closure %:	20	Method Crown Closure:	GE	Aspect:	SE	Method Aspect:	CP				

Discharge

Wetted Width (m):	Method Wetted Width (m):	
Mean Depth (m):	Method Mean Depth (m):	
Mean Velocity (m/s):	Method Mean Velocity (m/s):	
Discharge (m3/s):	Method Discharge (m3/s):	

Reach Symbol

(Fish)	
CO, RB, CC	
4 D 3.0	2620
(Width, Valley: Channel, Slope)	(Bed Material)

Bed Material

% Fines (<2mm):	20	% Fines (<2mm):	20
% Gravels:	65	Small (2-16mm):	30
		Large (16-64mm):	35
% Larges:	15	Small cobble (64-128mm):	15
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	8	Compaction:	Medium

Banks

Height (m):	0.3	% Unstable:	10				
Textures Fines:	Yes	Gravel:	No	Larges:	No	Bedrock:	No
Confinement:	5						
Valley: Chan. Ratio:	4						
Stage:	L						
Flood Signs Ht(m):	0.5	Method Flood Signs:	GE				
Braided:	Y	Method Braided:	GE				
Bars (%):	50	Method Bars:	GE				
pH:	7.8	Method pH:	PM				
02 (ppm):		Method Dissolved Oxygen:					
Water Temp. (°C):	10.0	Method Temperature:	AT				
Turb. (cm):	50	Method Turbidity:	GE				
Cond. (µmhos):	237	Method Conductivity:	PM				

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section**Fish Summary**

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CO	22	53-90	J	R			EL
RB	1	70	J	R			EL

Obstructions**Comments**

- C Weather - Sunny with clouds, 14C.
- 1 Electroshocked 305 seconds over 70 sq. metres of habitat, caught 22 coho, 1 rainbow - saw numerous other fish, including 2 sculpins.
- 2 Excellent fish rearing and spawning habitat.
- 3 Fork Length (mm) of fish captured: CO = 79, 90, 76, 66, 79, 75, 77, 81, 76, 74, 68, 73, 73, 74, 79, 70, 89, 53, 64, 70, 71, 78; RB = 70
- 4 Wildlife: Moose tracks.
- NID 00654
- NIDM 93M008

Unnamed Creek (480-5413) - Reach 1



Plate #4. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT								
Watershed Code:	480-5413-000-000-000-000-000-000-000-000	Map #:	93M008	Reach No.:	2	Reach Length (km):	0.8	Method:	HC				
Location:	250m u/s of Babine Lk.	U.T.M.:		Site No.:	2	Length surveyed (m):	800.0	Method:	HC				
Date:	97/9/4	Time:	18:50	Agency:	SKR	Survey Crew:	GT/VJ \ \ \ \ \ \	Fish Card:	N	Field:	Yes	Historical:	No
								Photos:	B11:7,8	Air Photos:	BCC0096147:95		

Channel Characteristics

Av. Chan. Width (m):	2.5	Method Av. Chan. Width (m):	MS						
Av. Wet. Width (m):	1.6	Method Av. Wet. Width (m):	MS						
Av. Max. Riff. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS						
Av. Max. Pool Depth (cm):	45	Av. Max. Pool Depth (cm):	5						
Gradient (%):	2.5	Method Gradient:	CL						
% Pool:	5	% Riffle:	50	% Run:	45	% Other:	0	Method:	GE
% Side Channel:	0-10	Method Side Channel:	GE						
% Debris Area:	10-40	Method Debris Area:	GE						

Specific Data					
2.6	2.3	2.7	2.1	2.8	2.6
2.1	1.9	2.1	1.0	1.1	1.4
5	5	5			
60	45	30			

Bed Material

% Fines (<2mm):	5	% Fines (<2mm):	5
% Gravels:	35	Small (2-16mm):	15
		Large (16-64mm):	20
% Larges:	60	Small cobble (64-128mm):	40
		Large cobble (128-256mm):	15
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	15	Compaction:	Low

Cover

Cover Total %:	20	Method Cover Total %:	GE								
Dp Pool:	0	L.O.D.:	25	Boulder:	25	In Veg.:	0	Over Veg.:	45	Cutbank:	5
Crown Closure %:	30	Method Crown Closure:	GE	Aspect:	SE	Method Aspect:	CP				

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

3	B	2.5	1360
(Width, Valley: Channel, Slope)		(Bed Material)	

Banks

Height (m):	0.3	% Unstable:					
Textures Fines:	Yes	Gravel:	Yes	Larges:	Yes	Bedrock:	No
Confinement:	3						
Valley: Chan. Ratio:	2						
Stage:	L						
Flood Signs Ht(m):		Method Flood Signs:					
Braided:	Y	Method Braided:	GE				
Bars (%):	40	Method Bars:	GE				
pH:	7.7	Method pH:	PM				
O2 (ppm):		Method Dissolved Oxygen:					
Water Temp. (°C):	10.0	Method Temperature:	AT				
Turb. (cm):		Method Turbidity:					
Cond. (umhos):		Method Conductivity:					

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
SP			NA				VO

Obstructions

Comments

- C Weather: Sun with cloud, 15C.
- 1 No electroshocking due to fish presence d/s and no barriers.
- 2 Very good fish habitat and potential spawning habitat. Several fish observed in this reach.
- NID 00634
- NIDM 93M008
- 3 Creek becomes dry approximately 790 m upstream of Babine Lake

Unnamed Creek (480-5413) - Reach 2



Plate #5. Reach 2 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5413-000-000-000-000-000-000-000-000			Reach No.:	3
Location:	1050 m w/s of confluence	Map #:	93M008	Reach Length (km):	1.1
		U.T.M.:		Method:	MW
Date:	97/9/4	Agency:	SKR	Site No.:	3
Time:	18:15	Survey Crew:	GT \ T J \ \ \ \ \ \ \ \	Length surveyed (m):	150.0
				Method:	HC
				Fish Card:	N
				Field:	Yes
				Historical:	No
				Photos:	B11:5,6
				Air Photos:	BCC0096147:95

Channel Characteristics

Av. Chan. Width (m):	2.8	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	NA
Av. Max. Pool Depth (cm):	0	Av. Max. Pool Depth (cm):	0
Gradient (%):	4.0	Method Gradient:	CL
% Pool:	0	% Riffle:	0
% Run:	0	% Other:	100
% Side Channel:	0	Method Side Channel:	GE
% Debris Area:	0-10	Method Debris Area:	GE

Specific Data

2.9	2.6	2.3	2.7	3.2	2.8
-----	-----	-----	-----	-----	-----

Bed Material

% Fines (<2mm):	10	% Fines (<2mm):	10
% Gravels:	30	Small (2-16mm):	10
		Large (16-64mm):	20
% Larges:	60	Small cobble (64-128mm):	30
		Large cobble (128-256mm):	20
		Boulder cobble (>256mm):	10
% Bedrock:	0	% Bedrock:	0
D90 (cm):	26	Compaction:	Low

Cover

Cover Total %:		Method Cover Total %:	
Dp Pool:	L.O.D.:	Boulder:	In Veg.:
Crown Closure %:	25	Method Crown Closure:	GE
		Aspect:	S
		Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s)
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

3	D	4.0	1360
(Width, Valley: Channel, Slope)		(Bed Material)	

Banks

Height (m):	1.0	% Unstable:	5
Textures Fines:	Yes	Gravel:	Yes
Confinement:	4	Larges:	Yes
Valley: Chan. Ratio:	4	Bedrock:	No
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	N	Method Braided:	GE
Bars (%):		Method Bars:	
pH:		Method pH:	
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):		Method Temperature:	
Turb. (cm):		Method Turbidity:	
Cond. (µmhos):		Method Conductivity:	

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Comments

C	Weather: Sun with clouds, 15C.
1	Old bank
2	No electroshocking due to dry creek.
3	Reach starts at 950m w/s of lake.
4	Good potential rearing habitat. Some potential spawning habiat.
NID	00635
NIDM	93M008

Unnamed Creek (480-5413) - Reach 3

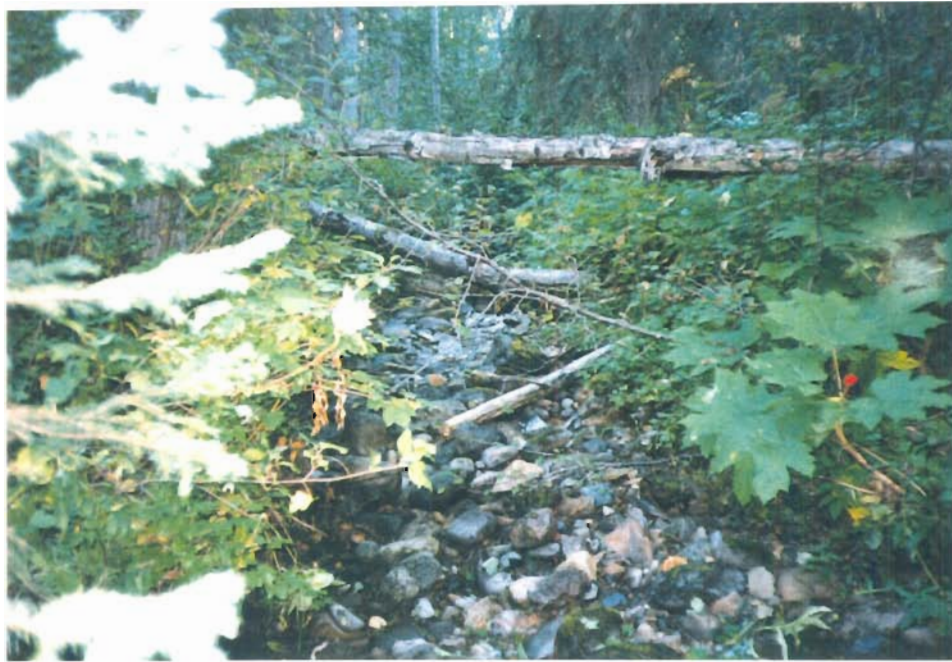


Plate #6. Reach 3 - sample site 3. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT						
Watershed Code:	480-5413-000-000-000-000-000-000-000-000-000			Reach No.:	4	Reach Length (km):	1.6	Method:	MW		
Location:	~3.2 km u/s of Babine L.k., at 100m d/s of proposed road Xing to cp 539-8.	Map #:	93M008	Site No.:	4	Length surveyed (m):	700.0	Method:	HC		
		U.T.M.:		Fish Card:	N	Field:	Yes	Historical:	No		
Date:	97/9/5	Time:	12:15	Agency:	SKR	Survey Crew:	MJ UML \ \ \ \ \ \ \ \	Photos:	E8:13,14	Air Photos:	BCC0096147:66

Channel Characteristics

Av. Chan. Width (m):	3.4	Method Av. Chan. Width (m):	T						
Av. Wet. Width (m):	2.2	Method Av. Wet. Width (m):	T						
Av. Max. Riff. Depth (cm):	7	Av. Max. Riffle Depth (cm):	MS						
Av. Max. Pool Depth (cm):	20	Av. Max. Pool Depth (cm):	7						
Gradient (%):	4.0	Method Gradient:	CL						
% Pool:	15	% Riffle:	35	% Run:	40	% Other:	10	Method:	GE
% Side Channel:	0	Method Side Channel:	GE						
% Debris Area:	10-40	Method Debris Area:	GE						

Specific Data

2.8	3.5	2.9	3.2	4.1	3.8
1.8	3.1	1.3	2.6	1.9	2.4
5	10	5			
15	25	20			

Bed Material

% Fines (<2mm):	10	% Fines (<2mm):	10
% Gravels:	25	Small (2-16mm):	10
		Large (16-64mm):	15
% Larges:	65	Small cobble (64-128mm):	35
		Large cobble (128-256mm):	25
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	19	Compaction:	Low

Cover

Cover Total %:	50	Method Cover Total %:	GE								
Dp Pool:	5	L.O.D.:	45	Boulder:	5	In Veg.:	0	Over Veg.:	30	Cutbank:	15
Crown Closure %:	30	Method Crown Closure:	GE	Aspect:	S	Method Aspect:	CP				

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s)
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)	
RB	
3 B 4.0	1270
(Width, Valley: Channel, Slope)	(Bed Material)

Banks

Height (m):	0.6	% Unstable:	0				
Textures Fines:	Yes	Gravel:	No	Larges:	No	Bedrock:	No
Confinement:	3						
Valley: Chan. Ratio:	2						
Stage:	M						
Flood Signs Ht(m):		Method Flood Signs:					
Braided:		Method Braided:					
Bars (%):	10	Method Bars:	GE				
pH:	7.6	Method pH:	PM				
02 (ppm):		Method Dissolved Oxygen:					
Water Temp. (°C):	7.0	Method Temperature:	AI				
Turb. (cm):	25	Method Turbidity:	GE				
Cond. (µmhos):	73	Method Conductivity:	PM				

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
RB	5	43-72	J	R			EL

Obstructions

Comments

- Cfor comments, see reach 4, site 5 (NID00637; 93M008)
- NID00636
- NIDM93M008
- 1Oct. 16, 1997. Electroshocked for 156 seconds (I4, 900V; cond = 34) in 15 square meters of habitat and caught five rainbow trout (FL (mm) = 72,52,51,43,48); saw one more fish. Water high due to snow melt.
- 2no photos at site - camera malfunction. Photos Eb 13, 14 are at proposed road crossing.

Unnamed Creek (480-5413) - Reach 4



Plate #7. Reach 4 - sample site 4. Upstream view (above-left), downstream view (above - right) and rainbow trout captured at site (below).

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT				
Watershed Code:	480-5413-000-000-000-000-000-000-000-000	Reach No.:	4	Reach Length (km):	1.6	Method:	MW		
Location:	~3.4km u/s of Babine Lk., at 100m u/s of proposed road Xing to cp539-8.	Site No.:	5	Length surveyed (m):	700.0	Method:	HC		
		Map #:	93M008	Fish Card:	N	Field:	Yes	Historical:	No
		U.T.M.:		Photos:	E8:15,16	Air Photos:	BCC0096147:66		
Date:	97/9/5	Time:	11:45	Agency:	SKR	Survey Crew:	MJ UML \ \ \ \ \ \ \ \		

Channel Characteristics

				Specific Data					
Av. Chan. Width (m):	2.6	Method Av. Chan. Width (m):	T	2.3	2.7	3.1	2.9	2.6	1.8
Av. Wet. Width (m):	1.7	Method Av. Wet. Width (m):	T	1.2	2.4	1.2	2.2	1.4	1.6
Av. Max. Rlf. Depth (cm):	8	Av. Max. Riffle Depth (cm):	T	5	8	12			
Av. Max. Pool Depth (cm):	27	Av. Max. Pool Depth (cm):	8	20	35	25			
Gradient (%):	3.5	Method Gradient:	GE						
% Pool: 10		% Riffle: 40		% Run: 30		% Other: 20		Method:	GE
% Side Channel:	0	Method Side Channel:	GE						
% Debris Area:	10-40	Method Debris Area:	GE						

Cover

Cover Total % :	45	Method Cover Total % :	GE							
Dp Pool: 5		L.O.D.: 25		Boulder: 5		In Veg.: 0		Over Veg: 35		Cutbank: 30
Crown Closure % :	40	Method Crown Closure:	GE	Aspect: SW		Method Aspect:	CP			

Discharge

		Specific Data	
Wetted Width (m):	Method Wetted Width (m):		
Mean Depth (m):	Method Mean Depth (m):		
Mean Velocity (m/s):	Method Mean Velocity (m/s):		
Discharge (m3/s):	Method Discharge (m3/s):		

Reach Symbol

(Fish)

3	B	3.5	1270
(Width, Valley: Channel, Slope)		(Bed Material)	

Bed Material

% Fines (<2mm):	5	% Fines (<2mm):	5
% Gravels:	25	Small (2-16mm):	10
		Large (16-64mm):	15
% Larges:	70	Small cobble (64-128mm):	40
		Large cobble (128-256mm):	20
		Boulder cobble (>256mm):	10
% Bedrock:	0	% Bedrock:	0
D90 (cm):	26	Compaction:	Low

Banks

Height (m):	0.5	% Unstable:	0	
Textures Fines:	Yes	Gravel: No	Larges: No	Bedrock: No
Confinement:	3			
Valley: Chan. Ratio:	2			
Stage:	M			
Flood Signs Ht(m):	0.3	Method Flood Signs:	GE	
Braided:	N	Method Braided:	GE	
Bars (%):	10	Method Bars:	GE	
pH:	7.6	Method pH:	PM	
02 (ppm):		Method Dissolved Oxygen:		
Water Temp. (°C):	7.0	Method Temperature:	AT	
Turb. (cm):	35	Method Turbidity:	GE	
Cond. (µmhos):	73	Method Conductivity:	PM	

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Comments

B	High potential for d/s impacts due to relatively steep gradient ~3.5% and no areas of slow water needed to remove silt.
C	Excellent potential rearing habitat, limited potential spawning habitat.
NID	00637
NIDM	93M008

Unnamed Creek (480-5413) - Reach 4



Plate #8. Reach 4 - sample site 5. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-BB1-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":	ILP 00508	Access:	FT
Watershed Code:	480-5413-BB1-000-000-000-000-000-000-000-000-000	Reach No.:	1	Reach Length (km):	Method:
Location:	50m u/s of confluence w/ mainstem (~550m u/s of creek)	Site No.:	1	Length surveyed (m):	100.0 Method:
		Map #:	93M008	Field:	Yes Historical:
		U.T.M.:	9.658977.6105095	Photos:	B11: 3,4
Date:	97/9/4	Time:	17:30	Agency:	SKR
		Survey Crew:	GT\TJ\ \ \ \ \ \ \ \	Air Photos:	BCC0096147:95

Channel Characteristics

Av. Chan. Width (m):	1.0	Method Av. Chan. Width (m):	MS	Specific Data					
Av. Wet. Width (m):	0.9	Method Av. Wet. Width (m):	MS	1.0	1.2	1.2	0.8	0.6	1.0
Av. Max. Rif. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS	1.0	1.1	1.2	0.6	0.6	1.0
Av. Max. Pool Depth (cm):	15	Av. Max. Pool Depth (cm):	5	5	5	5			
Gradient (%):	3.0	Method Gradient:	CL	20	15	10			
% Pool:	5	% Riffle:	50	% Run:	25	% Other:	20	Method:	GE
% Side Channel:	0-10	Method Side Channel:	GE						
% Debris Area:	0-10	Method Debris Area:	GE						

Cover

Cover Total % :	80	Method Cover Total % :	GE						
Dp Pool :	0	L.O.D.:	20	Boulder:	0	In Veg.:	0	Over Veg:	80
Crown Closure % :	80	Method Crown Closure:	GE	Aspect :	SW	Method Aspect:	CP	Cutbank:	0

Discharge

Wetted Width (m) :	Method Wetted Width (m) :	Specific Data	
Mean Depth (m) :	Method Mean Depth (m) :		
Mean Velocity (m/s) :	Method Mean Velocity (m/s)		
Discharge (m3/s) :	Method Discharge (m3/s) :		

Reach Symbol

(Fish)

1	D	3.0	9100
(Width, Valley: Channel, Slope)		(Bed Material)	

Bed Material

% Fines (<2mm):	90	% Fines (<2mm):	90
% Gravels:	10	Small (2-16mm):	5
		Large (16-64mm):	5
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	Medium

Banks

Height (m):	0.1	% Unstable:	
Textures Fines:	Yes	Gravel:	No
Confinement:	5	Larges:	No
Valley: Chan. Ratio:	4	Bedrock:	No
Stage:	L		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	N	Method Braided:	GE
Bars (%):	0	Method Bars:	GE
pH:	8.1	Method pH:	PM
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	5.5	Method Temperature:	AT
Turb. (cm):	10	Method Turbidity:	GE
Cond. (µmhos):	305	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5413-BB1-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Obstruction	Ht(m)	Type	Location
		UG	

Comments

- CWeather - Sun with clouds.
- 1Large areas of underground flow - (may be barriers to u/s fish migration).
- 2Limited potential fish habitat: No potential spawning habitat. No electroshocking due to low discharge and limited habitat/areas to shock.
- NID00651
- NIDM93M008
- ILP00508
- ILPM93M008

Unnamed Creek (ILP 00508) - Reach 1



Plate #9. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5458-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	B						
Watershed Code:	480-5458-000-000-000-000-000-000-000-000			Reach No.:	1	Reach Length (km):	0.5	Method:	HC		
Location:	100m u/s of confluence with Babine Lk.	Map #:	93M008	Site No.:	1	Length surveyed (m):	500.0	Method:	HC		
		U.T.M.:		Fish Card:	Y	Field:	Yes	Historical:	No		
Date:	97/9/4	Time:	12:25	Agency:	SKR	Survey Crew:	GT \TJ \ \ \ \ \ \ \ \	Photos:	B10: 17-20	Alt Photos:	BCC0096147:93

Channel Characteristics

				Specific Data					
Av. Chan. Width (m):	1.4	Method Av. Chan. Width (m):	MS	1.7	1.5	0.9	1.6	1.3	1.4
Av. Wet. Width (m):	0.6	Method Av. Wet. Width (m):	MS	0.3	0.2	0.4	0.3	1.1	1.1
Av. Max. Rif. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS	5	5	5			
Av. Max. Pool Depth (cm):	20	Av. Max. Pool Depth (cm):	5	30	20	10			
Gradient (%):	6.5	Method Gradient:	CL						
% Pool:	60	% Riffle:	20	% Run:	20	% Other:	0	Method:	GE
% Side Channel:	0	Method Side Channel:	GE						
% Debris Area:	0-10	Method Debris Area:	GE						

Cover

Cover Total % :	25	Method Cover Total % :	GE								
Dp Pool :	0	L.O.D.:	25	Boulder:	15	In Veg.:	0	Over Veg:	50	Cutbank:	10
Crown Closure % :	80	Method Crown Closure:	GE	Aspect :	S	Method Aspect:	CP				

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s)
Discharge (m3/s) :	Method Discharge (m3/s) :

Reach Symbol

(Fish)	
1 B 6.5	1540
(Width, Valley: Channel, Slope)	(Bed Material)

Bed Material

% Fines (<2mm):	10	% Fines (<2mm):	10
% Gravels:	55	Small (2-16mm):	15
		Large (16-64mm):	40
% Larges:	35	Small cobble (64-128mm):	30
		Large cobble (128-256mm):	5
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	10	Compaction:	Medium

Banks

Height (m):	0.2	% Unstable:	10				
Textures Fines:	Yes	Gravel:	No	Larges:	No	Bedrock:	No
Confinement:	3						
Valley: Chan. Ratio:	2						
Stage:	L						
Flood Signs Ht(m):		Method Flood Signs:					
Braided:	N	Method Braided:	GE				
Bars (%):	80	Method Bars:	GE				
pH:	7.8	Method pH:	PM				
02 (ppm):		Method Dissolved Oxygen:					
Water Temp. (°C):	10.0	Method Temperature:	AT				
Turb. (cm):	30	Method Turbidity:	GE				
Cond. (umhos):	289	Method Conductivity:	PM				

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

- C Weather - cloudy, 13C.
- 1 Cover of fish habitat at time of sampling.
- 2 Electroshocked ~200 seconds at 14, 400v (70 Hz, 4ms) over all available habitat in initial 100m of creek. Good potential fish rearing habitat; some potential fish spawning habitat. Creek was very low with areas of underground seepage at time of sampling.
- NID 00638
- NIDM 93M008
-

Unnamed Creek (480-5458) - Reach 1



Plate #10. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5458-000-000-000-000-000-000-000-000	Map #:	93 M 008	Reach No.:	2
Location:	about 470 m upstream of Babine Lake	U.T.M.:		Site No.:	2
Date:	97/9/4	Agency:	SKR	Fish Card:	N
Time:	14:30	Survey Crew:	GT \ T \ \ \ \ \ \ \	Field:	Yes
				Historical:	No
				Photos:	B10: 24,25
				Air Photos:	BCC96147 :093

Channel Characteristics

Av. Chan. Width (m):	0.3	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	NA
Av. Max. Pool Depth (cm):	0	Av. Max. Pool Depth (cm):	0
Gradient (%):	30.0	Method Gradient:	CL
% Pool:	0	% Riffle:	0
% Side Channel:	0	% Run:	0
% Debris Area:	0	% Other:	100
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data					
0.4	0.3	0.4	0.2	0.3	0.4

Bed Material

% Fines (<2mm):	80	% Fines (<2mm):	80
% Gravels:	10	Small (2-16mm):	10
		Large (16-64mm):	0
% Larges:	10	Small cobble (64-128mm):	10
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	11	Compaction:	Medium

Cover

Cover Total %:		Method Cover Total %:	
Dp Pool:	L.O.D.:	Boulder:	In Veg.:
Crown Closure %:	90	Method Crown Closure:	GE
		Aspect:	W
		Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

0 D 30.0	8110
(Width, Valley: Channel, Slope)	(Bed Material)

Banks

Height (m):	0.5	% Unstable:	0
Textures Fines:	Yes	Gravel:	Yes
Confinement:	5	Larges:	No
Valley: Chan. Ratio:	4	Bedrock:	No
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	N	Method Braided:	GE
Bars (%):		Method Bars:	
pH:		Method pH:	
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):		Method Temperature:	
Turb. (cm):		Method Turbidity:	
Cond. (µmhos):		Method Conductivity:	

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Obstruction	Ht(m)	Type	Location
	15	C	470.0

Comments

NID 00670

NIDM 93M008

NIDF 00580; 93M008; C1

1 15 m heigh gradient barrier located about 470 m upstream of Babine Lake

2 weather: sunny with clouds, 15C

3 no electroshocking conducted due to lack of fish habitat, dry stream channel, and steep gradient (50% in sections). Much of channel is vegetated with alluvial material only found in about 20% of channel

4 no defined channel at top of gully wall (upstream of site)

5 this card is representative of the gully wall section only, and not the reach in general.

Unnamed Creek (480-5458) - Reach 2



Plate #11. Reach 2 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT						
Watershed Code:	480-5458-000-000-000-000-000-000-000-000			Reach No.:	2	Reach Length (km):	2.5	Method:	MW		
Location:	~2.4km u/s of Babine Lk. at prosed road xing.	Map #:	93M008	Site No.:	3	Length surveyed (m):	600.0	Method:	HC		
		U.T.M.:		Fish Card:	N	Field:	Yes	Historical:	No		
Date:	97/9/5	Time:	8:00	Agency:	SKR	Survey Crew:	MJ UML \ \ \ \ \	Photos:	E8:1-4,7,8	Air Photos:	BCC0096147:46

Channel Characteristics

Av. Chan. Width (m):	Method Av. Chan. Width (m):			
Av. Wet. Width (m):	Method Av. Wet. Width (m):			
Av. Max. Rlf. Depth (cm):	Av. Max. Riffle Depth (cm):			
Av. Max. Pool Depth (cm):	Av. Max. Pool Depth (cm):			
Gradient (%):	Method Gradient:			
% Pool:	% Riffle:	% Run:	% Other:	Method:
% Side Channel:	Method Side Channel:			
% Debris Area:	Method Debris Area:			

Specific Data

Bed Material

% Fines (<2mm):	100	% Fines (<2mm):	100
% Gravels:	0	Small (2-16mm):	0
		Large (16-64mm):	0
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	Medium

Cover

Cover Total %:	Method Cover Total %:						
Dp Pool:	L.O.D.:	Boulder:	In Veg.:	Over Veg.:	Cuthank:		
Crown Closure %:	15	Method Crown Closure:	GE	Aspect:	SE	Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):	
Mean Depth (m):	Method Mean Depth (m):	
Mean Velocity (m/s):	Method Mean Velocity (m/s):	
Discharge (m3/s):	Method Discharge (m3/s):	

Specific Data

Reach Symbol

(Fish)

(Width, Valley: Channel, Slope)

(Bed Material)

Banks

Height (m):	% Unstable:			
Textures Fines:	No	Gravel: No	Larges: No	Bedrock: No
Confinement:	4			
Valley: Chan. Ratio:	3			
Stage:	Dry			
Flood Signs Ht(m):		Method Flood Signs:		
Braided:	N	Method Braided:		GE
Bars (%):		Method Bars:		
pH:		Method pH:		
O2 (ppm):		Method Dissolved Oxygen:		
Water Temp. (°C):		Method Temperature:		
Turb. (cm):		Method Turbidity:		
Cond. (µmhos):		Method Conductivity:		

DFO/MoELP Stream Survey Form*04-Feb-98***Stream:** Unnamed Creek**Watershed Code:****Stream Survey Report**

480-5458-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary***Obstructions***

Comments

1	Gradient at this site is 2%.
A	No electroshocking due to non-defined channel.
B	This "stream" is located in a shallow, moist depression ~15m wide with permanent vegetation around it. Vegetation includes: alder, grasses, ferns, horsetails, thimbleberry and highbush cranberry. Young fir and spruce saplings are scattered throughout.
C	No fish habitat.
NID	00640
NIDM	93M008

Unnamed Creek (480-5458) - Reach 2



Plate #12. Reach 2 - sample site 3. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-bb1-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":	00509	Access:	FT
Watershed Code:	480-5458-bb1-000-000-000-000-000-000-000-000-000	Reach No.:	2	Reach Length (km):	1.0 Method: MW
Location:	700m u/s of confluence with Babine Lk.	Site No.:	1	Length surveyed (m):	220.0 Method: HC
		Map #:	93M008	Field: Yes	Historical: No
		U.T.M.:	9.660171.6105012	Flash Card:	N
Date: 97/9/4	Time: 13:30	Agency: SKR	Survey Crew: GT\TJ \ \ \ \ \ \ \ \	Photos:	B10: 21-23
				Air Photos:	BCC0096147:93

Channel Characteristics

Av. Chan. Width (m):	1.3	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA
Av. Max. Riff. Depth (cm):		Av. Max. Riffle Depth (cm):	
Av. Max. Pool Depth (cm):		Av. Max. Pool Depth (cm):	
Gradient (%):	9.0	Method Gradient:	CL
% Pool:	0	% Riffle:	0
% Side Channel:	0-10	% Run:	0
% Debris Area:	10-40	% Other:	100
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data

1.2	1.5	1.3	1.1	1.4	1.1
-----	-----	-----	-----	-----	-----

Bed Material

% Fines (<2mm):	10	% Fines (<2mm):	10
% Gravels:	55	Small (2-16mm):	15
		Large (16-64mm):	40
% Larges:	35	Small cobble (64-128mm):	25
		Large cobble (128-256mm):	5
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	15	Compaction:	Low

Cover

Cover Total %:		Method Cover Total %:	
Dp Pool:	L.O.D.:	Boulder:	In Veg.:
Crown Closure %:	30	Over Veg:	Cutbank:
		Method Crown Closure:	GE
		Aspect:	SW
		Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

1	A	9.0	1540
(Width, Valley: Channel, Slope)			(Bed Material)

Banks

Height (m):	0.2	% Unstable:	15
Textures Fines:	Yes	Gravel:	Yes
Confinement:	2	Larges:	No
Valley: Chan. Ratio:	1	Bedrock:	No
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	Y	Method Braided:	GF
Bars (%):		Method Bars:	
pH:		Method pH:	
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):		Method Temperature:	
Turb. (cm):		Method Turbidity:	
Cond. (µmhos):		Method Conductivity:	

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-bb1-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Obstruction	Ht(m)	Type	Location
	1	F	800.0

Comments

C	Weather: Cloudy with sunny periods, 13C.
1	Reach Break ~600m u/s of lake.
2	No electroshocking due to dry channel. Good fish rearing habitat: Some potential spawning habitat.
3	Potential 1m high barrier to u/s fish migration, located 800m u/s of Babine Lk.
4	Wildlife - moose prints, moose droppings.
NID	00639
NIDM	93M008
NIDF	00581; 93M008; C3

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-3458-bb1-000-000-000-000-000-000-000-000-000

ILP 00509

ILPM 93M008

Unnamed Creek (ILP 00509) - Reach 2



Plate #13. Reach 2 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5458-bb1-000-000-000-000-000-000-000-000-000

Header Information

Stream Name: Unnamed Creek	Stream "Local": ILP 00509	Access: FT
Watershed Code: 480-5458-bb1-000-000-000-000-000-000-000-000-000	Reach No.: 3	Reach Length (km): 0.5 Method: MW
Location: 200m d/s from cp 539-6, ~2km w/s of Babine Lk.	Site No.: 2	Length surveyed (m): 300.0 Method: HC
Map #: 93M008	Fish Card: N	Field: Yes Historical: No
U.T.M.:	Photos: E8:11,12	Air Photos: BCC0096147:46
Date: 97/9/5	Time: 9:15	Agency: SKR Survey Crew: MJ\ML \ \ \ \ \ \ \ \

Channel Characteristics

Av. Chan. Width (m):	Method Av. Chan. Width (m):
Av. Wet. Width (m):	Method Av. Wet. Width (m):
Av. Max. Riff. Depth (cm):	Av. Max. Riffle Depth (cm):
Av. Max. Pool Depth (cm):	Av. Max. Pool Depth (cm):
Gradient (%):	Method Gradient:
% Pool:	% Riffle:
% Side Channel:	% Run:
% Debris Area:	% Other:
	Method:

Specific Data

Bed Material

% Fines (<2mm):	100	% Fines (<2mm):	100
% Gravels:	0	Small (2-16mm):	0
		Large (16-64mm):	0
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	High

Cover

Cover Total %:	Method Cover Total %:
Dp Pool:	L.O.D.:
Crown Closure %:	Method Crown Closure:
	Boulder:
	In Veg.:
	Over Veg:
	Cutbank:
	Aspect:
	Method Aspect:

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

(Width, Valley: Channel, Slope)

(Bed Material)

Banks

Height (m):	% Unstable:
Textures Fines:	No
Gravel:	No
Larges:	No
Bedrock:	No
Confinement:	
Valley: Chan. Ratio:	
Stage:	Dry
Flood Signs Ht(m):	Method Flood Signs:
Braided:	Method Braided:
Bars (%):	Method Bars:
pH:	Method pH:
02 (ppm):	Method Dissolved Oxygen:
Water Temp. (°C):	Method Temperature:
Turb. (cm):	Method Turbidity:
Cond. (µmhos):	Method Conductivity:

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

480-5458-bb1-000-000-000-000-000-000-000-000-000

I	Gradient at this site is 3.5%.
A	No electroshocking due to non-defined channel.
B	This reach is in a very shallow, wet depression, vegetation includes mature spruce and fir, spruce and fir saplings, horsetail, vaccinium spp., devil's club, alder, fern, club moss and lichens.
C	Some evidence of standing water was observed as mud and fine particulate material in small depression in the area.
NID	00652
NIDM	93M008
ILP	00509
ILPM	93M008



Plate #14. Reach 3 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5494-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	B
Watershed Code:	480-5494-000-000-000-000-000-000-000-000	Map #:	93M008	Reach No.:	1
Location:	20m u/s of confluence with Babine Lk.	U.T.M.:	9.661060.6104321	Site No.:	1
Date:	97/9/4	Agency:	SKR	Fish Card:	Y
Time:	8:15	Survey Crew:	GT\TJ\ \ \ \ \ \ \ \	Field:	Yes
				Historical:	No
				Photos:	B10: 6-10
				Air Photos:	BCC0096147:93

Channel Characteristics

Av. Chan. Width (m):	2.1	Method Av. Chan. Width (m):	NA
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	22	Av. Max. Pool Depth (cm):	0
Gradient (%):	2.0	Method Gradient:	CL
% Pool:	10	% Riffle:	0
% Side Channel:	0	% Run:	0
% Debris Area:	10-40	% Other:	90
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data					
2.2	1.3	2.9	2.4	2.1	1.8
30	15	20			

Bed Material

% Fines (<2mm):	20	% Fines (<2mm):	20
% Gravels:	35	Small (2-16mm):	20
		Large (16-64mm):	15
% Larges:	45	Small cobble (64-128mm):	45
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	9	Compaction:	Medium

Cover

Cover Total %:	40	Method Cover Total %:	GE
Dp Pool:	0	L.O.D.:	65
Crown Closure %:	60	Boulder:	0
		In Veg.:	0
		Over Veg:	25
		Cutbank:	10
		Aspect:	SW
		Method Aspect:	CP

Discharge

Wetted Width (m):		Method Wetted Width (m):	
Mean Depth (m):		Method Mean Depth (m):	
Mean Velocity (m/s):		Method Mean Velocity (m/s):	
Discharge (m3/s):		Method Discharge (m3/s):	

Specific Data	

Reach Symbol

(Fish)	
CO,CAS	
2 D 2.0	2350
(Width, Valley: Channel, Slope)	(Bed Material)

Banks

Height (m):	0.5	% Unstable:	25
Textures Fines:	Yes	Gravel:	Yes
Confinement:	5	Larges:	No
Valley: Chan. Ratio:	4	Bedrock:	No
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:		Method Braided:	
Bars (%):		Method Bars:	
pH:	7.0	Method pH:	PM
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	8.0	Method Temperature:	AT
Turb. (cm):	30	Method Turbidity:	GE
Cond. (µmhos):	90	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5494-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CO	3	67-76	J	R			EL
CAS	1	47	J	R			EL

Obstructions

Obstruction	Ht(m)	Type	Location
	1	F	150.0

Comments

- CWeather: cloudy, showers, 9C.
- 1No flow in creek - shocked puddles. Water chemistry not characteristic of stream when flowing. Electroshocked 170 seconds at I4, 600 volts in all available habitat (25 sq. metres). Caught 3 CO, 1 CAS, saw no other fish.
- 2Cover refers to cover over available fish habitat at the time of survey.
- 31.2m fall produced by sediment piling up behind log jam (not permanent), 150m u/s of lake (see pic B10: 10).
- 4Fork Length (mm) of fish captured at site: CO = 73,67,76; prickly sculpin = 47
- 5Wildlife - Bear droppings, moose tracks.
- NID00641

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5494-000-000-000-000-000-000-000-000

NIDM 93M008

NIDF 00579; 93M008; C3

Unnamed Creek (480-5494) - Reach 1



Plate #15. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5494-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5494-000-000-000-000-000-000-000-000			Reach No.:	2
Location:	520m u/s of confluence w/ Babine Lk.	Map #:	93M008	Site No.:	2
		U.T.M.:	9.601368.6104584	Length surveyed (m):	100.0
				Method:	HC
				Fish Card:	N
				Field:	Yes
				Historical:	No
Date:	97/9/4	Time:	9:20	Photos:	B10: 11,12
Agency:	SKR	Survey Crew:	GT \TJ \ \ \ \ \ \ \ \	Air Photos:	BCC0096147:93

Channel Characteristics

Av. Chan. Width (m):	1.9	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	20	Av. Max. Pool Depth (cm):	0
Gradient (%):	11.0	Method Gradient:	CL
% Pool:	15	% Riffle:	0
% Side Channel:	0	% Run:	0
% Debris Area:	10-40	% Other:	85
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data

1.2	1.4	1.5	2.5	2.2	2.5
25	25	10			

Bed Material

% Fines (<2mm):	5	% Fines (<2mm):	5
% Gravels:	45	Small (2-16mm):	15
		Large (16-64mm):	30
% Larges:	50	Small cobble (64-128mm):	30
		Large cobble (128-256mm):	15
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	24	Compaction:	Low

Cover

Cover Total %:		Method Cover Total %:	
Dp Pool:	L.O.D.:	Boulder:	In Veg.:
Crown Closure %:	40	Over Veg:	Cutbank:
		Aspect:	S
		Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

2	C	11.0	1450
(Width, Valley: Channel, Slope)			(Bed Material)

Banks

Height (m):	0.2	% Unstable:	20
Textures Fines:	Yes	Gravel:	Yes
Confinement:	3	Larges:	Yes
Valley: Chan. Rattle:	3	Bedrock:	No
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	Y	Method Braided:	GE
Bars (%):		Method Bars:	
pH:		Method pH:	
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):		Method Temperature:	
Turb. (cm):		Method Turbidity:	
Cond. (µmhos):		Method Conductivity:	

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

~~480-5494-000-000-000-000-000-000-000-000~~

Obstructions

1	Weather - rain.
2	Reach break at ~480m u/s of lake.
3	No electroshocking due to minimal available habitat. Good potential rearing and spawning habitat.
NID	00642
NIDM	93M008

Unnamed Creek (480-5494) - Reach 2



Plate #16. Reach 2 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5494-000-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT						
Watershed Code:	480-5494-000-000-000-000-000-000-000-000-000			Reach No.:	3	Reach Length (km):	3.4	Method:	MW		
Location:	4km w/s of Babine Lk, at xing by road to 537 blocks.	Map #:	93M008	Site No.:	3	Length surveyed (m):	800.0	Method:	HC		
		U.T.M.:		Fish Card:	N	Field:	Yes	Historical:	No		
Date:	97/9/4	Time:	10:20	Agency:	SKR	Survey Crew:	MJ UML \ \ \ \ \ \ \	Photos:	E7: 3-8	Alt Photos:	BCC0096147:23

Channel Characteristics

Av. Chan. Width (m):	0.9	Method Av. Chan. Width (m):	MS						
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA						
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	NA						
Av. Max. Pool Depth (cm):	0	Av. Max. Pool Depth (cm):	0						
Gradient (%):	2.5	Method Gradient:	CL						
% Pool:	0	% Riffle:	0	% Run:	0	% Other:	100	Method:	GE
% Side Channel:	0	Method Side Channel:	GE						
% Debris Area:	10-40	Method Debris Area:	GE						

Specific Data

0.9	0.8	1.2	0.9	0.8	0.6
-----	-----	-----	-----	-----	-----

Bed Material

% Fines (<2mm):	55	% Fines (<2mm):	55
% Gravels:	15	Small (2-16mm):	5
		Large (16-64mm):	10
% Larges:	30	Small cobble (64-128mm):	15
		Large cobble (128-256mm):	10
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	23	Compaction:	Medium

Cover

Cover Total %:	40	Method Cover Total %:	GE								
Dp Pool:	5	L.O.D.:	30	Boulder:	5	In Veg.:	0	Over Veg:	45	Cutbank:	15
Crown Closure %:	35	Method Crown Closure:	GE	Aspect:	S	Method Aspect:	CP				

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s)
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data

Reach Symbol

(Fish)

1	C	2.5	6130
(Width, Valley: Channel, Slope)			(Bed Material)

Banks

Height (m):	0.3	% Unstable:	0				
Textures Fines:	Yes	Gravel:	No	Larges:	No	Bedrock:	No
Confinement:	4						
Valley: Chan. Ratio:	3						
Stage:	Dry						
Flood Signs Ht(m):	0.3	Method Flood Signs:	GE				
Braided:	N	Method Braided:	GE				
Bars (%):		Method Bars:					
pH:		Method pH:					
O2 (ppm):		Method Dissolved Oxygen:					
Water Temp. (°C):		Method Temperature:					
Turb. (cm):		Method Turbidity:					
Cond. (umhos):		Method Conductivity:					

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek**Watershed Code:****Stream Survey Report**

480-5494-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Obstructions

Comments

- | | |
|------|--|
| 1 | Bank height measured from substrate. |
| 2 | No electroshocking due to dry channel at time of survey. |
| 3 | This well defined channel shows signs of brief seasonal flow; some pool areas had small puddles of stagnant water in them. |
| NID | 00643 |
| NIDM | 93M008 |
-
-

Unnamed Creek (480-5494) - Reach 3



Plate #17. Reach 3 - sample site 3. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5494-BB1-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":	ILP 00511	Access:	FT
Watershed Code:	480-5494-BB1-000-000-000-000-000-000-000-000-000	Reach No.:	1	Reach Length (km):	Method:
Location:	150m u/s of confluence w/ Babine Lk.	Site No.:	1	Length surveyed (m):	250.0 Method: HC
Date:	97/9/4	Map #:	93M008	Fish Card:	N Field: Yes Historical: No
Time:	10:00	U.T.M.:	9.661296.6104285	Photos:	B10:13-16 Akr Photos: BCC0096147:93
Agency:	SKR	Survey Crew:	GT\TJ\ \ \ \ \ \ \ \		

Channel Characteristics

Av. Chan. Width (m):	1.0	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	NA
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	NA
Av. Max. Pool Depth (cm):	0	Av. Max. Pool Depth (cm):	0
Gradient (%):	10.0	Method Gradient:	CL
% Pool:	0	% Riffle:	0
% Side Channel:	0-10	% Run:	0
% Debris Area:	0	% Other:	100
		Method:	GE

Specific Data

0.9	1.0	1.0	1.5	1.0	0.8
-----	-----	-----	-----	-----	-----

Bed Material

% Fines (<2mm):	15	% Fines (<2mm):	15
% Gravels:	75	Small (2-16mm):	20
		Large (16-64mm):	55
% Larges:	10	Small cobble (64-128mm):	10
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	7	Compaction:	Low

Cover

Cover Total % :		Method Cover Total %:	
Dp Pool :	L.O.D.:	Boulder:	In Veg.:
Crown Closure % :	50	Over Veg:	Cutbank:
		Method Crown Closure:	GE Aspect : S Method Aspect: CP

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s)
Discharge (m3/s) :	Method Discharge (m3/s) :

Specific Data

Reach Symbol

(Fish)

1	A	10.0	2710
(Width, Valley: Channel, Slope)			(Bed Material)

Banks

Height (m):	0.1	% Unstable:	10
Textures Fines:	Yes	Gravel: No	Larges: No Bedrock: No
Confinement:	2		
Valley: Chan. Ratio:	1		
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	Y	Method Braided:	GE
Bars (%):		Method Bars:	
pH:		Method pH:	
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):		Method Temperature:	
Turb. (cm):		Method Turbidity:	
Cond. (µmhos):		Method Conductivity:	

DFO/MoELP Stream Survey Form

20-Jan-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5494-BB1-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary***Obstructions***

Comments

- | | |
|------|---|
| 1 | Weather - raining, 10C, calm |
| 2 | No electroshocking due to dry channel. |
| 3 | Some potential rearing habitat, limited potential spawning habitat. |
| NID | 00655 |
| NIDM | 93M008 |
| ILP | 00511 |
| ILPM | 93M008 |
-

Unnamed Creek (ILP 00511) - Reach 1



Plate #18. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	B
Watershed Code:	480-5595-000-000-000-000-000-000-000-000			Reach No.:	1
Location:	100 m upstream of mouth (Babine I.k.)	Map #:	93M008	Site No.:	1
		U.T.M.:	09.663416.6103530	Length surveyed (m):	320.0
Date:	97/9/3	Agency:	SKR	Field:	Yes
Time:	11:00	Survey Crew:	TJ\GT \ \ \ \ \ \ \	Historical:	No
				Photos:	B10: 1,2
				Air Photos:	

Channel Characteristics

Av. Chan. Width (m):	2.2	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	1.9	Method Av. Wet. Width (m):	MS
Av. Max. Rlf. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	23	Av. Max. Pool Depth (cm):	5
Gradient (%):	0.5	Method Gradient:	CL
% Pool:	85	% Riffle:	5
% Side Channel:	0-10	% Run:	10
% Debris Area:	>40	% Other:	0
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data

1.6	2.1	1.8	2.0	3.2	2.5
1.5	1.4	1.8	2.0	2.8	2.2
5	5	5			
20	25	25			

Bed Material

% Fines (<2mm):	90	% Fines (<2mm):	90
% Gravels:	10	Small (2-16mm):	5
		Large (16-64mm):	5
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	Medium

Cover

Cover Total % :	80	Method Cover Total % :	GE
Dp Pool: 0 L.O.D.:	20	Boulder: 0	In Veg.: 5
Crown Closure % :	80	Over Veg: 75	Cutbank: 0
		Aspect: SE	Method Aspect: CP

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s) :
Discharge (m3/s) :	Method Discharge (m3/s) :

Specific Data

Reach Symbol

(Fish)	
CO, CAS	
2 D 0.5	9100
(Width, Valley: Channel, Slope)	(Bed Material)

Banks

Height (m):	0.5	% Unstable:	0
Textures Fines:	Yes	Gravel: No	Larges: No
Confinement:	5	Bedrock:	No
Valley: Chan. Ratio:	4		
Stage:	M		
Flood Signs Ht(m):	0.5	Method Flood Signs:	GE
Braided:	Y	Method Braided:	GE
Bars (%):	10	Method Bars:	GE
pH:	7.1	Method pH:	PM
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	10.0	Method Temperature:	A1
Turb. (cm):	25	Method Turbidity:	GE
Cond. (µmhos):	122	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CO	3	81-91	J	R			EL
CAS	2	49-50	J	R			EL

Obstructions

Comments

- 1 Weather - Sunny, moderate breeze - 13 C. H2O color: light tea.
 - 2 Electroshocked for 445 seconds at J4 (70 Hz, 4ms) over 100 sq. metres of habitat: caught 3 coho, 2 sculpins and saw two more fish. Fork Length of fish captured: coho= 91mm, 85mm, 81 mm; prickly sculpin = 50 mm, 49 mm
 - 3 Good fish rearing habitat; no potential spawning habitat. Most of creek bed is organic debris and mud.
 - 4 creek is < 1.0 metre. ~700m u/s of mouth - 10m long dry sections - flows at high water, signs of beaver (chewed trees).
- NID 00646
- NIDM 93M008

Unnamed Creek (480-5595) - Reach 1



Plate #19. Reach 1 - sample site 1. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5595-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:		FT
Watershed Code:	480-5595-000-000-000-000-000-000-000-000			Reach No.:	1	Reach Length (km): 2.0 Method: HC
Location:	950 m u/s of mouth	Map #:	93M008	Site No.:	2	Length surveyed (m): 1200.0 Method: HC
		U.T.M.:	09.663275.6104125	Fish Card:	N	Field: Yes Historical: No
Date: 97/9/3	Time: 12:30	Agency: SKR	Survey Crew: GT VII \ \ \ \ \ \ \ \	Photos:	B10: 3,4	Air Photos:

Channel Characteristics

Av. Chan. Width (m):	1.4	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.0	Method Av. Wet. Width (m):	MS
Av. Max. Riff. Depth (cm):	0	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	0	Av. Max. Pool Depth (cm):	0
Gradient (%):	1.5	Method Gradient:	CL
% Pool:	0	% Riffle:	0
% Side Channel:	0-10	% Run:	0
% Debris Area:	0	% Other:	100
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data

1.3	1.5	1.6	1.2	1.6	1.4
0.0	0.0	0.0	0.0	0.0	0.0
0	0	0	0	0	0
0	0	0	0	0	0

Bed Material

% Fines (<2mm):	50	% Fines (<2mm):	50
% Gravels:	35	Small (2-16mm):	10
		Large (16-64mm):	25
% Larges:	15	Small cobble (64-128mm):	15
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	7	Compaction:	Low

Cover

Cover Total %:		Method Cover Total %:	
Dp Pool:	L.O.D.:	Boulder:	In Veg.:
Crown Closure %:	30	Over Veg:	Cutbank:
		Method Crown Closure:	GE
		Aspect:	SW
		Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m ³ /s):	Method Discharge (m ³ /s):

Specific Data

Reach Symbol

(Fish)

1	A	1.5	5320
(Width, Valley: Channel, Slope)			(Bed Material)

Banks

Height (m):		% Unstable:	
Textures Fines:	Yes	Gravel:	No
Confinement:	3	Larges:	Yes
Valley: Chan. Ratio:	1	Bedrock:	No
Stage:	Dry		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	N	Method Braided:	GE
Bars (%):		Method Bars:	
pH:		Method pH:	
O ₂ (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):		Method Temperature:	
Turb. (cm):		Method Turbidity:	
Cond. (µmhos):		Method Conductivity:	

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary***Obstructions***

Comments

- | | |
|------|--|
| 1 | Weather: Sunny, strong breeze, 15.5 C. Stream bed covered in leaves. |
| 2 | No electroshocking - Dry channel - Ephemeral. |
| 3 | Some potential rearing habitat during periods of flow, limited potential spawning habitat. |
| 6 | Sites 2 and 3 - no obvious connection through a channel - Mainstem is ILP 00519 until water is diverted into ILP 00510 |
| 7 | Signs of moose (tracks) |
| NID | 00647 |
| NIDM | 93M008 |
-

Unnamed Creek (480-5595) - Reach 1



Plate #20. Reach 1 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5595-000-000-000-000-000-000-000-000	Map #:	93M008	Reach No.:	1
Location:	1400m u/s of mouth (Babine Lk.)	U.T.M.:	96.632306.104677	Site No.:	3
Date:	97/9/3	Agency:	SKR	Fish Card:	Y
Time:	13:45	Survey Crew:	GT VII \ \ \ \ \ \ \	Field:	Yes
				Historical:	No
				Photos:	B10: 5
				Air Photos:	

Channel Characteristics

Av. Chan. Width (m):	1.7	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	1.4	Method Av. Wet. Width (m):	MS
Av. Max. Riff. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	17	Av. Max. Pool Depth (cm):	5
Gradient (%):	2.5	Method Gradient:	CL
% Pool:	60	% Riffle:	35
% Side Channel:	0-10	Method Side Channel:	GE
% Debris Area:	10-40	Method Debris Area:	GE

Specific Data					
1.3	1.8	1.5	1.4	2.5	1.7
1.0	1.8	1.5	1.4	2.0	0.8
5	5	5			
25	10	15			

Bed Material

% Fines (<2mm):	25	% Fines (<2mm):	25
% Gravels:	40	Small (2-16mm):	15
		Large (16-64mm):	25
% Larges:	35	Small cobble (64-128mm):	20
		Large cobble (128-256mm):	15
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	15	Compaction:	Medium

Cover

Cover Total %:	35	Method Cover Total %:	GE
Dp Pool:	10	L.O.D.:	25
Boulder:	10	In Veg.:	0
Over Veg:	55	Cutbank:	0
Crown Closure %:	60	Method Crown Closure:	GE
Aspect:	NW	Method Aspect:	CP

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Specific Data					

Reach Symbol

(Fish)

2 B 2.5	3430
(Width, Valley: Channel, Slope)	(Bed Material)

Banks

Height (m):	0.2	% Unstable:	30
Textures Fines:	Yes	Gravel:	Yes
Confinement:	4	Larges:	Yes
Valley: Chan. Ratio:	2	Bedrock:	No
Stage:	L		
Flood Signs Ht(m):	0.5	Method Flood Signs:	GE
Braided:	Y	Method Braided:	GE
Bars (%):	10	Method Bars:	GE
pH:	7.1	Method pH:	PM
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	11.0	Method Temperature:	AI
Turb. (cm):	25	Method Turbidity:	PM
Cond. (µmhos):	123	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

- | | |
|------|---|
| 1 | Weather: sunny, strong breeze. |
| 2 | Some potential rearing and spawning habitat. |
| 3 | Electroshocked all available habitat in wetted section 85 seconds at J4, 500v over 15 square metres of habitat. No fish caught or seen. |
| NID | 00648 |
| NIDM | 93M008 |
-
-

Unnamed Creek (480-5595) - Reach 1



Plate #21. Reach 1 - sample site 3. Upstream view (above).

Stream Survey Report

Stream: Unnamed Creek

480-5595-000-000-000-000-000-000-000

Header Information									
Stream Name:		Unnamed Creek							
Watershed Code:		480-5595-0000-0000-0000-0000-0000-0000							
Location:		1600m u/s of babine Lk.							
Date:		97/9/3	Time:		14:20	Agency:		SKR	
		Survey Crew:		GT VPI					
		Map #:		93M008					
		U.T.M.:		9.663094.6104707					
		Reach No.:		2		Access:			
		Site No.:		4		Reach Length (km):		0.2 Method:	
		Fish Card:		Y		Length surveyed (m):		160.0 Method:	
		Photos:		Camera malfunction		Field:		Yes Historical:	
						Air Photos:		No	

<i>Channel Characteristics</i>						<i>Bed Material</i>							
						<i>Specific Data</i>							
A _{v.} Chan. Width (m):	5.6	Method A _{v.} Chan. Width (m):	MS	7.5	5.2	3.9	4.5	7.1	5.3	% Fines (<2mm):	5	% Fines (<2mm):	5
A _{v.} Wet. Width (m):	1.8	Method A _{v.} Wet. Width (m):	MS	1.5	1.4	1.8	2.6	1.7	1.6	% Gravel:	20	Small (2-16mm):	5
A _{v.} Max. RIF. Depth (cm):	7	A _{v.} Max. Riffle Depth (cm):	MS	5	10	5						Large (16-64mm):	15
A _{v.} Max. Pool Depth (cm):	33	A _{v.} Max. Pool Depth (cm):	7	30	30	40				% Large:	75	Small cobble (64-128mm):	40
Gradient (%):	3.5	Method Gradient:	CL	Method: GE								Large cobble (128-256mm):	25
% Pool: 2.5	% Riffle: 45	% Run: 30	% Other: 0									Boulder cobble (>256mm):	10
% Side Channel:	0-10	Method Side Channel:	GE							% Bedrock:	0	% Bedrock:	0
% Debris Area:	0-10	Method Debris Area:	GE							D ₉₀ (cm):	25	Compaction:	Low
<i>Cover</i>													

<i>Cover</i>					D90 (cm):	25	Compaction:	Low
Cover Total % :	60	Method Cover Total % :	GE					
Dp Pool : 0 L.O.D.:	20	Boulder: 60	In Veg.:	0	Over Veg:	20	Cutbank:	0
Crown Closure % :	30	Method Crown Closure:	GE	Aspect :	SE	Method Aspect:		
<i>Banks</i>					Height (m):	0.5	% Unstable:	30

Discharge		Specific Data		Confinement:	5
Wetted Width (m) :	Method Wetted Width (m) :			Valley: Chan. Ratio:	4
Mean Depth (m) :	Method Mean Depth (m) :			Stage:	L
Mean Velocity (m/s) :	Method Mean Velocity (m/s)			Flood Signus Ht(m):	Method Flood Signus:
Discharge (m ³ /s) :	Method Discharge (m ³ /s) :			Braided:	Y Method Braided:
				Bars (%):	70 Method Bars:

[illegible]

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
CO	1	77	J	R			EL
RB	25	49-122	J	R			EL

Obstructions

Comments

- 1 Weather: Sunny, light breeze: 16C
 - 2 Electroshocked for 496 seconds at J4, 400v (70Hz, 4ms) over 102 sq. metres of habitat, saw 8 more fish - caught 1 coho and 25 RB. Excellent fish rearing habitat and good spawning habitat.
 - 3 Fork Length (mm) for captured fish: CO = 77; RB = 57,55, 96, 70, 75, 122, 86, 82, 78, 84, 89, 91, 82, 49, 80, 80, 74, 72, 42, 95, 49, 78, 93, 58, 50.
- NID 00649
- NIDM 93M008
- C Camera not working - no photos

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5595-000-000-000-000-000-000-000-000	Map #:	93M008	Reach No.:	3
Location:	2250m u/s of Babine Lk	U.T.M.:		Site No.:	5
Date:	97/9/3	Agency:	SKR	Fish Card:	N
Time:	17:40	Survey Crew:	GT \ IT \ \ \ \ \ \ \ \	Photos:	camera malfunction
				Field:	Yes
				Historical:	No
				Reach Length (km):	
				Length surveyed (m):	650.0
				Method:	HC
				Air Photos:	

Channel Characteristics

Av. Chan. Width (m):	5.1	Method Av. Chan. Width (m):	HC
Av. Wet. Width (m):	3.6	Method Av. Wet. Width (m):	HC
Av. Max. Riff. Depth (cm):	47	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	7	Av. Max. Pool Depth (cm):	47
Gradient (%):	4.0	Method Gradient:	CL
% Pool:	15	% Riffle:	60
% Side Channel:	0-10	% Run:	25
% Debris Area:	10-40	% Other:	0
		Method:	GE
		Method Side Channel:	GE
		Method Debris Area:	GE

Specific Data						
4.7	4.7	5.0	5.8	5.1	5.3	
3.5	2.5	3.9	4.1	3.8	3.7	
40	45	55				
5	10	5				

Bed Material

% Fines (<2mm):	5	% Fines (<2mm):	5
% Gravels:	20	Small (2-16mm):	10
		Large (16-64mm):	10
% Larges:	75	Small cobble (64-128mm):	30
		Large cobble (128-256mm):	20
		Boulder cobble (>256mm):	25
% Bedrock:	0	% Bedrock:	0
D90 (cm):	35	Compaction:	Low

Cover

Cover Total % :	40	Method Cover Total %:	GE
Dp Pool:	0	L.O.D.:	20
Crown Closure % :	30	Method Crown Closure:	GE
		Boulder:	50
		In Veg.:	0
		Over Veg:	30
		Cutbank:	0
		Aspect :	S
		Method Aspect:	CP

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s) :
Discharge (m3/s) :	Method Discharge (m3/s) :

Specific Data	

Reach Symbol

(Fish)	
5 B 4.0	1270
(Width, Valley: Channel, Slope)	(Bed Material)

Banks

Height (m):	0.4	% Unstable:	25
Textures Fines:	Yes	Gravel:	Yes
Confinement:	3	Larges:	Yes
Valley: Chan. Ratio:	2	Bedrock:	No
Stage:	M		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	Y	Method Braided:	GE
Bars (%):		Method Bars:	
pH:	7.7	Method pH:	PM
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	10.0	Method Temperature:	AT
Turb. (cm):	55	Method Turbidity:	PM
Cond. (µmhos):	142	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
SP			NA				VO

Obstructions

Comments

- | | |
|------|--|
| 1 | Weather: Sunny, calm, 14C. |
| 2 | Abundant fish rearing habitat: Good spawning hbaitat. No electroshocking due to fish presence d/s and no barriers. In addition, numerous fish were seen in this reach. |
| NID | 00650 |
| NIDM | 93M008 |
-

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-bb1-000-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":	ILP 00519	Access:	FT
Watershed Code:	480-5595-bb1-000-000-000-000-000-000-000-000-000	Reach No.:	1	Reach Length (km):	1.3 Method: MW
Location:	1200m u/s of confluence with Babine Lake	Site No.:	6	Length surveyed (m):	250.0 Method: HC
		Map #:	93M008	Field: Yes	Historical: No
		U.T.M.:	9.663013.6104451	Photos:	camera malfunction
Date:	97/9/3	Time:	18:30	Agency:	SKR
		Survey Crew:	GT \ TJ \ \ \ \ \ \ \ \	Air Photos:	

Channel Characteristics

Av. Chan. Width (m):	4.8	Method Av. Chan. Width (m):	HC						
Av. Wet. Width (m):	2.3	Method Av. Wet. Width (m):	HC						
Av. Max. Riff. Depth (cm):	5	Av. Max. Riffle Depth (cm):	MS						
Av. Max. Pool Depth (cm):	38	Av. Max. Pool Depth (cm):	5						
Gradient (%):	2.0	Method Gradient:	CL						
% Pool:	20	% Riffle:	20	% Run:	60	% Other:	0	Method:	GE
% Side Channel:	0-10	Method Side Channel:	GE						
% Debris Area:	10-40	Method Debris Area:	GE						

Cover

Cover Total %:	25	Method Cover Total %:	GE						
Dp Pool:	10	L.O.D.:	30	Boulder:	30	In Veg.:	0	Over Veg:	30
Crown Closure %:	20	Method Crown Closure:	GE	Aspect:	S	Method Aspect:	CP	Cutbank:	0

Discharge

Wetted Width (m):	Method Wetted Width (m):
Mean Depth (m):	Method Mean Depth (m):
Mean Velocity (m/s):	Method Mean Velocity (m/s):
Discharge (m3/s):	Method Discharge (m3/s):

Reach Symbol

(Fish)	
4 D 2.0	1630
(Width, Valley: Channel, Slope)	(Bed Material)

Bed Material

% Fines (<2mm):	10	% Fines (<2mm):	10
% Gravels:	60	Small (2-16mm):	20
		Large (16-64mm):	40
% Larges:	30	Small cobble (64-128mm):	20
		Large cobble (128-256mm):	10
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	14	Compaction:	Low

Banks

Height (m):	0.1	% Unstable:	10
Textures Fines:	Yes	Gravel:	Yes
Confinement:	5	Larges:	Yes
Valley: Chan. Ratio:	4	Bedrock:	No
Stage:	L		
Flood Signs Ht(m):		Method Flood Signs:	
Braided:	Y	Method Braided:	GE
Bars (%):	60	Method Bars:	GE
pH:	7.7	Method pH:	PM
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	10.5	Method Temperature:	AI
Turb. (cm):	50	Method Turbidity:	GE
Cond. (µmhos):	135	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-bb1-000-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
SP			NA				VO

Obstructions

Comments

- 1

Weather: Sunny, 12C.
- 2

No electroshocking due to fish presence u/s, several juvenile fish seen.
- 3

Good potential fish habitat: Good potential spawning haitat.
- 4

this ILP is a distributary of 480-5595; the majority of flow from Reach 2 of 480-5595 drains via this channel prior to being diverted eastwards into ILP 00510 by a log jam and build up of sediment (NID 00674).
- 5

streams do not flow as mapped on TRIM map
- NID

00653
- NIDM

93M008
- ILP

00519

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-bb1-000-000-000-000-000-000-000-000

ILPM

93M008

NIDF

00674 ; 93M008; C4

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5595-226-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT						
Watershed Code:	480-5595-226-000-000-000-000-000-000-000			Reach No.:	1	Reach Length (km):		Method:			
Location:	100m u/s of confluence with mainstem. (1220m u/s of site 4)	Map #:	93M008	Site No.:	1	Length surveyed (m):	100.0	Method:	HC		
		U.T.M.:	9.662804.6105821	Fish Card:	Y	Field:	Yes	Historical:	No		
Date:	97/9/3	Time:	15:30	Agency:	SKR	Survey Crew:	GF\TJ\ \ \ \ \ \ \ \	Photos:	camera malfunction	Air Photos:	

Channel Characteristics

Av. Chan. Width (m):	1.8	Method	Av. Chan. Width (m):	MS					
Av. Wet. Width (m):	0.0	Method	Av. Wet. Width (m):	MS					
Av. Max. Riff. Depth (cm):	0	Method	Av. Max. Riffle Depth (cm):	MS					
Av. Max. Pool Depth (cm):	0	Method	Av. Max. Pool Depth (cm):	0					
Gradient (%):	12.0	Method	Gradient:	CL					
% Pool:	0	% Riffle:	0	% Run:	0	% Other:	100	Method:	GE
% Side Channel:	0	Method	Side Channel:	GE					
% Debris Area:	>40	Method	Debris Area:	GE					

Specific Data							
2.4	1.5	1.5	1.8	1.8	1.7		
0.0	0.0	0.0	0.0	0.0	0.0		
0	0	0					
0	0	0					

Bed Material

% Fines (<2mm):	5	% Fines (<2mm):	5
% Gravels:	25	Small (2-16mm):	10
		Large (16-64mm):	15
% Larges:	70	Small cobble (64-128mm):	45
		Large cobble (128-256mm):	20
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	19	Compaction:	Low

Cover

Cover Total % :		Method	Cover Total % :						
Dp Pool :	L.O.D.:	Boulder:	In Veg.:	Over Veg.:	Cutbank:				
Crown Closure % :	60	Method	Crown Closure:	GE	Aspect :	SE	Method	Aspect:	CP

Discharge

Wetted Width (m) :	Method	Wetted Width (m) :
Mean Depth (m) :	Method	Mean Depth (m) :
Mean Velocity (m/s) :	Method	Mean Velocity (m/s) :
Discharge (m3/s) :	Method	Discharge (m3/s) :

Specific Data							

Reach Symbol

(Fish)

2	C	12.0	1270
(Width, Valley: Channel, Slope)		(Bed Material)	

Banks

Height (m):	0.3	% Unstable:	20				
Textures Fines:	Yes	Gravel:	Yes	Larges:	Yes	Bedrock:	No
Confinement:	2						
Valley: Chan. Ratio:	3						
Stage:	Dry						
Flood Signs Ht(m):		Method	Flood Signs:				
Braided:	N	Method	Braided:		GE		
Bars (%):		Method	Bars:				
pH:		Method	pH:				
O2 (ppm):		Method	Dissolved Oxygen:				
Water Temp. (°C):		Method	Temperature:				
Turb. (cm):		Method	Turbidity:				
Cond. (µmhos):		Method	Conductivity:				

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek**Watershed Code:****Stream Survey Report**

480-5595-226-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary***Obstructions***

Comments

C	Weather: Sunny, light breeze, 14C.
1	23% gradient in initial 20m of creek up from mainstem - rest of creek has gradient of 12%.
2	Some potential fish habitat when flowing, and some potential spawning habitat.
NID	00644
NIDM	93M008

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5595-226-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5595-226-000-000-000-000-000-000-000-000	Reach No.:	1	Reach Length (km):	Method:
Location:	3km u/s confluence with 480-5595.	Site No.:	2	Length surveyed (m):	600.0 Method: HC
		Flash Card:	N	Field:	Yes Historical: No
Date: 97/9/4	Time: 12:00	Agency: SKR	Survey Crew: MJ UML \ \ \ \ \ \ \ \	Photos:	E7: 9-14 Air Photos: BCC0096147:23

Channel Characteristics

Av. Chan. Width (m):	Method Av. Chan. Width (m):	
Av. Wet. Width (m):	Method Av. Wet. Width (m):	
Av. Max. Rlf. Depth (cm):	Av. Max. Riffle Depth (cm):	
Av. Max. Pool Depth (cm):	Av. Max. Pool Depth (cm):	
Gradient (%):	Method Gradient:	
% Pool:	% Riffle:	% Run: % Other: Method:
% Side Channel:	Method Side Channel:	
% Debris Area:	Method Debris Area:	

Specific Data

Bed Material

% Fines (<2mm):	100	% Fines (<2mm):	100
% Gravels:	0	Small (2-16mm):	0
		Large (16-64mm):	0
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	High

Cover

Cover Total % :	Method Cover Total %:	
Dp Pool :	L.O.D.:	Boulder: In Veg.: Over Veg: Cutbank:
Crown Closure % :	30	Method Crown Closure: GE Aspect : S Method Aspect: CP

Banks

Height (m):	% Unstable:
Textures Fines:	No Gravel: No Larges: No Bedrock: No
Confinement:	
Valley: Chan. Ratio:	
Stage:	L
Flood Signs Ht(m):	Method Flood Signs:
Braided:	Method Braided:
Bars (%):	Method Bars:
pH:	Method pH:
O2 (ppm):	Method Dissolved Oxygen:
Water Temp. (°C):	Method Temperature:
Turb. (cm):	Method Turbidity:
Cond. (µmhos):	Method Conductivity:

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s) :
Discharge (m3/s) :	Method Discharge (m3/s) :

Specific Data

Reach Symbol

(Fish)

(Width, Valley: Channel, Slope)

(Bed Material)

04-Feb-98

Watershed Code:

480-5595-226-000-000-000-000-000-000-000-000

I	Gradient is 1% at this site.
A	No electroshocking due to non-defined channel.
B	This "stream" is located in a wet depression running from north to south. Vegetation includes: alder, horsetail, moss and scattered pine and spruce. This wetland is approximately 30m wide with small areas of soggy ground. Any crossing of this reach should include a culvert to ensure adequate drainage.
NID	00645
NIDM	93M008



Plate #22. Reach 1 - sample site 2. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-831-000-000-000-000-000-000-000-000

Header Information									
Stream Name:		Unnamed Creek		Stream "Local":		Access:		V2	
Watershed Code:		480-5988-100-831-000-000-000-000-000-000-000-000		Reach No.:		1		Reach Length (km): 0.3 Method: HC	
Location:		80 m upstream of "Large Softfish" Lake (480-5988-100-01)		Map #:		93M.018		Site No.: 202 Length surveyed (m): 287.0 Method: HC	
Date: 97/9/3		Time: 11:30		Agency: SKR		Survey Crew: MJ\ML\ \ \ \ \ \		Fish Card: N Field: Yes Historical: No	
				U.T.M.:		09.661856.6117106		Photos: E6: 4,5 Air Photos: BCC96145 :23	
Channel Characteristics				Specific Data		Bed Material			
Av. Chan. Width (m):		Method Av. Chan. Width (m):				% Fines (<2mm):		100 % Fines (<2mm): 100	
Av. Wet. Width (m):		Method Av. Wet. Width (m):				% Gravels:		0 Small (2-16mm): 0	
Av. Max. Riff. Depth (cm):		Av. Max. Riffle Depth (cm):				Large (16-64mm):		0	
Av. Max. Pool Depth (cm):		Av. Max. Pool Depth (cm):				% Larges:		0 Small cobble (64-128mm): 0	
Gradient (%):		Method Gradient:				Large cobble (128-256mm):		0	
% Pool:		% Riffle:		% Run:		% Other:		Method:	
% Side Channel:		Method Side Channel:				% Bedrock:		0 % Bedrock: 0	
% Debris Area:		Method Debris Area:				D90 (cm):		Compaction: High	
Cover						Banks			
Cover Total %:		55 Method Cover Total %:		GE		Height (m):		% Unstable:	
Dp Pool:		5 L.O.D.:		30 Boulder:		In Veg.:		5 Over Veg:	
Crown Closure %:		10 Method Crown Closure:		GE Aspect:		SE Method Aspect:		CP	
Discharge				Specific Data					
Wetted Width (m):		Method Wetted Width (m):				Textures Fines:		Yes	
Mean Depth (m):		Method Mean Depth (m):				Confinement:		5	
Mean Velocity (m/s):		Method Mean Velocity (m/s):				Valley: Chan. Ratio:		4	
Discharge (m3/s):		Method Discharge (m3/s):				Stage:		L	
Reach Symbol				(Fish)					
						Flood Signs Ht(m):		0 Method Flood Signs: GE	
						Braided:		Y Method Braided: GE	
						Bars (%):		0 Method Bars: GE	
						pH:		7.9 Method pH: PM	
						02 (ppm):		Method Dissolved Oxygen:	
						Water Temp. (°C):		9.0 Method Temperature: AT	
						Turb. (cm):		25 Method Turbidity: GE	
						Cond. (µmhos):		180 Method Conductivity: PM	

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-831-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

NID 00629

NIDM 93M.018

1 average maximum pool depth is 22 cm, gradient is 0.5%

2 electroshocked 100 square meters of habitat for 400 seconds (500 V, J4). caught no fish, saw no fish.

3 This stream braids heavily in an about 35-60 m wide alder/wetland area. The channel is not well defined.

4 About 287 m upstream of the lake, the channel is poorly defined, consisting of pools connected by areas of seepage flow (up to 3 m long).

5 typical riparian vegetation includes alder, horsetails, currants, spruce, fir and willow

Unnamed Creek (480-5988-100-831) - Reach 1



Plate #23. Reach 1 - sample site 202. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-831-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	V2
Watershed Code:	480-5988-100-831-000-000-000-000-000-000-000	Reach No.:	2	Reach Length (km):	
Location:	at end of 2000 road, about 400 m upstream of "Large Softfish" Lake 480-5988-100-01	Map #:	93M.018	Length surveyed (m):	300.0
Date:	97/9/3	U.T.M.:	09.661024.6117484	Method:	HC
Time:	10:30	Flsh Card:	Y	Field:	Yes
Agency:	SKR	Historical:	No	Air Photos:	BCC96145 :23
Survey Crew:	MJ\ML \ \ \ \ \ \	Photos:	E6: 2,3		

Channel Characteristics

Av. Chan. Width (m):	1.1	Method Av. Chan. Width (m):	MS						
Av. Wet. Width (m):	1.1	Method Av. Wet. Width (m):	MS						
Av. Max. Rif. Depth (cm):	7	Av. Max. Riffle Depth (cm):	MS						
Av. Max. Pool Depth (cm):	20	Av. Max. Pool Depth (cm):	7						
Gradient (%):	2.5	Method Gradient:	CL						
% Pool:	10	% Riffle:	5	% Run:	45	% Other:	40	Method:	GE
% Side Channel:	0-10	Method Side Channel:	GE						
% Debris Area:	>40	Method Debris Area:	GE						

Cover

Cover Total %:	45	Method Cover Total %:	GE							
Dp Pool:	5	L.O.D.:	45	Boulder:	In Veg.:	5	Over Veg:	30	Cutbank:	15
Crown Closure %:	40	Method Crown Closure:	GE	Aspect:	SE	Method Aspect:	CP			

Discharge

Wetted Width (m):		Method Wetted Width (m):							
Mean Depth (m):		Method Mean Depth (m):							
Mean Velocity (m/s):		Method Mean Velocity (m/s):							
Discharge (m3/s):		Method Discharge (m3/s):							

Reach Symbol

(Flsh)

1	C	2.5	8110
(Width, Valley: Channel, Slope)			(Bed Material)

Bed Material

% Fines (<2mm):	80	% Fines (<2mm):	80
% Gravels:	15	Small (2-16mm):	10
		Large (16-64mm):	5
% Larges:	5	Small cobble (64-128mm):	5
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):	2	Compaction:	High

Banks

Height (m):	0.5	% Unstable:	0
Textures Fines:	Yes	Gravel:	No
Confinement:	4	Larges:	No
Valley: Chan. Ratio:	3	Bedrock:	No
Stage:	M		
Flood Signs Ht(m):	0.35	Method Flood Signs:	GE
Braided:	N	Method Braided:	GE
Bars (%):	0	Method Bars:	GE
pH:	7.9	Method pH:	PM
02 (ppm):	.	Method Dissolved Oxygen:	
Water Temp. (°C):	8.0	Method Temperature:	AT
Turb. (cm):	25	Method Turbidity:	GE
Cond. (µmhos):	180	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-831-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

- NID

00627
- NIDM

93M018
- 1

electroshocked all available habitat (80 square meters of stream), J4, 500 V, 645 seconds. Caught no fish, observed no fish.
- 2

This small stream flows through many underground channels, and under lots of LOD. Limited potential fish rearing habitat, and limited potential fish spawning habitat.
- 3

Potential for downstream impacts is limited due to the poorly defined channel downstream.
- 4

Stream flows through alder patches with horsetail, spruce, pine and fir in about 15m wide riparian area.

Unnamed Creek (480-5988-100-831) - Reach 2



Plate #24. Reach 2 - sample site 201. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-844-000-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5988-100-844-000-000-000-000-000-000-000-000	Map #:	93M.018	Reach No.:	1
Location:	60 m upstream of lake	U.T.M.:	09.661750.6116744	Site No.:	203
Date:	97/9/3	Agency:	SKR	Fish Card:	Y
Time:	12:40	Survey Crew:	MJ\ML\ \ \ \ \ \ \ \	Field:	Yes
				Historical:	No
				Photos:	E6, 6, 7
				Air Photos:	BCC96145 :119

Channel Characteristics

Av. Chan. Width (m):	0.8	Method Av. Chan. Width (m):	MS
Av. Wet. Width (m):	0.6	Method Av. Wet. Width (m):	MS
Av. Max. Riff. Depth (cm):	3	Av. Max. Riffle Depth (cm):	MS
Av. Max. Pool Depth (cm):	25	Av. Max. Pool Depth (cm):	3
Gradient (%):	1.0	Method Gradient:	CL
% Pool:	30	% Riffle:	10
% Side Channel:	0	Method Side Channel:	GE
% Debris Area:	10-40	Method Debris Area:	GE

Specific Data							
0.6	0.7	0.6	0.9	0.7	1.0		
0.3	0.5	0.6	0.5	0.6	0.8		
2	3	5					
15	30	30					

Method: GE

Cover

Cover Total % :	55	Method Cover Total %:	GE
Dp Pool :	5	L.O.D.:	20
Crown Closure % :	50	Method Crown Closure:	GE
		Aspect :	E
		Method Aspect:	CP

Discharge

Wetted Width (m) :	Method Wetted Width (m) :
Mean Depth (m) :	Method Mean Depth (m) :
Mean Velocity (m/s) :	Method Mean Velocity (m/s) :
Discharge (m3/s) :	Method Discharge (m3/s) :

Specific Data

Reach Symbol

(Fish)

I	C	1.0	4420
(Width, Valley: Channel, Slope)			(Bed Material)

Bed Material

% Fines (<2mm):	35	% Fines (<2mm):	35
% Gravels:	45	Small (2-16mm):	25
		Large (16-64mm):	20
% Larges:	20	Small cobble (64-128mm):	10
		Large cobble (128-256mm):	5
		Boulder cobble (>256mm):	5
% Bedrock:	0	% Bedrock:	0
D90 (cm):	63	Compaction:	High

Banks

Height (m):	0.5	% Unstable:	0
Textures Fines:	Yes	Gravel:	No
Confinement:	4	Larges:	No
Valley: Chan. Ratio:	3	Bedrock:	No
Stage:	L		
Flood Signs Ht(m):	0.4	Method Flood Signs:	GE
Braided:	N	Method Braided:	GE
Bars (%):	10	Method Bars:	GE
pH:	7.8	Method pH:	PM
O2 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	8.5	Method Temperature:	AT
Turb. (cm):	30	Method Turbidity:	GE
Cond. (µmhos):	200	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-844-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

NID 00630

NIDM 93M.018

1 electroshocked all available habitat for 200 m upstream from lake (about 90 square meters of habitat: 14, 400 V, 740 seconds). Caught no fish, saw no fish.

2 Good potential fish rearing habitat, and good potential fish spawning habitat was identified in this reach.

Unnamed Creek (480-5988-100-844) - Reach 1



Plate #25. Reach 1 - sample site 203. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-844-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT						
Watershed Code:	480-5988-100-844-000-000-000-000-000-000-000			Reach No.:	2	Reach Length (km):	0.1	Method:	HC		
Location:	360 m upstream of "Large Softfish" Lake	Map #:	93M.018	Site No.:	204	Length surveyed (m):	140.0	Method:	HC		
		U.T.M.:	09.661781.6116828	Fish Card:	N	Field:	Yes	Historical:	No		
Date:	97/9/3	Time:	13:30	Agency:	SKR	Survey Crew:	MJ UML \ \ \ \ \	Photos:	E6: 8,9	Air Photos:	BCC 96145 :23

Channel Characteristics

Av. Chan. Width (m):	Method Av. Chan. Width (m):			
Av. Wet. Width (m):	Method Av. Wet. Width (m):			
Av. Max. Riff. Depth (cm):	Av. Max. Riffle Depth (cm):			
Av. Max. Pool Depth (cm):	Av. Max. Pool Depth (cm):			
Gradient (%):	Method Gradient:			
% Pool:	% Riffle:	% Run:	% Other:	Method:
% Side Channel:	Method Side Channel:			
% Debris Area:	Method Debris Area:			

Specific Data

Bed Material

% Fines (<2mm):	100	% Fines (<2mm):	100
% Gravels:	0	Small (2-16mm):	0
		Large (16-64mm):	0
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	High

Cover

Cover Total % :	35	Method Cover Total % :	GE							
Dp Pool :	20	L.O.D.:	10	Boulder:	In Veg.:	5	Over Veg:	65	Cutbank:	
Crown Closure % :	25	Method Crown Closure:	GE	Aspect :	S	Method Aspect:	CP			

Discharge

Wetted Width (m) :	Method Wetted Width (m) :	
Mean Depth (m) :	Method Mean Depth (m) :	
Mean Velocity (m/s) :	Method Mean Velocity (m/s)	
Discharge (m3/s) :	Method Discharge (m3/s) :	

Specific Data

Reach Symbol

(Fish)

D	0.5	1000
(Width, Valley: Channel, Slope)	(Bed Material)	

Banks

Height (m):	10.0	% Unstable:	0				
Textures Fines:	Yes	Gravel:	No	Larges:	No	Bedrock:	No
Confinement:	5						
Valley: Chan. Ratio:	4						
Stage:	L						
Flood Signs Ht(m):	0	Method Flood Signs:	GE				
Braided:	Y	Method Braided:	GE				
Bars (%):		Method Bars:					
pH:	7.8	Method pH:	PM				
O2 (ppm):		Method Dissolved Oxygen:					
Water Temp. (°C):	8.5	Method Temperature:	AT				
Turb. (cm):	30	Method Turbidity:	GE				
Cond. (µmhos):	200	Method Conductivity:	PM				

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-844-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

NID 00631

NIDM 93M.018

1 electroshocked 100 square meters of available habitat (J4, 500 V, 600 seconds). Most of habitat consisted of pools. Caught no fish, observed no fish.

2 Limited potential fish rearing habitat, no potential spawning habitat.

3 The channel is not well defined for the majority of the reach.

4 Stream braids and becomes poorly defined in this 25 m wide alder patch with willows, horsetail, and occasional spruce and fir.

Unnamed Creek (480-5988-100-844) - Reach 2



Plate #26. Reach 2 - sample site 204. Upstream view (above) and downstream view (below).



DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Stream Survey Report

Watershed Code:

480-5988-100-844-000-000-000-000-000-000-000

Header Information

Stream Name:	Unnamed Creek	Stream "Local":		Access:	FT
Watershed Code:	480-5988-100-844-000-000-000-000-000-000-000	Reach No.:	3	Reach Length (km):	
Location:	710 m upstream of "Large Softfish" Lake, at proposed road crossing	Site No.:	205	Length surveyed (m):	370.0
Date:	97/9/3	Map #:	93M018	Method:	HC
Time:	14:10	U.T.M.:		Fish Card:	Y
Agency:	SKR	Survey Crew:	MJ \ML \ \ \ \ \ \ \ \	Field:	Yes
				Historical:	No
				Photos:	E6:10,11
				Air Photos:	BCC 96145 :22

Channel Characteristics

Av. Chan. Width (m):	1.0	Method Av. Chan. Width (m):	MS	Specific Data
Av. Wet. Width (m):	0.9	Method Av. Wet. Width (m):	MS	0.8 0.7 1.2 1.4 0.6 1.1
Av. Max. Riff. Depth (cm):	3	Av. Max. Riffle Depth (cm):	MS	0.8 0.6 1.0 1.4 0.5 1.0
Av. Max. Pool Depth (cm):	20	Av. Max. Pool Depth (cm):	3	2 2 4
Gradient (%):	2.5	Method Gradient:	CL	20 15 25
% Pool:	45	% Riffle:	5	
% Side Channel:	0	% Run:	20	
% Debris Area:	10-40	% Other:	30	
		Method Side Channel:	GE	
		Method Debris Area:	GE	
		Method:	GE	

Cover

Cover Total % :	40	Method Cover Total %:	GE
Dp Pool :	5	L.O.D.:	10
Crown Closure % :	30	Boulder:	In Veg.:
		Over Veg:	80
		Cutbank:	5
		Method Crown Closure:	GE
		Aspect :	SE
		Method Aspect:	CP

Discharge

Wetted Width (m) :		Method Wetted Width (m) :		Specific Data
Mean Depth (m) :		Method Mean Depth (m) :		
Mean Velocity (m/s) :		Method Mean Velocity (m/s) :		
Discharge (m3/s) :		Method Discharge (m3/s) :		

Reach Symbol

(Fish)

1	C	2.5	1000
(Width, Valley: Channel, Slope)			(Bed Material)

Bed Material

% Fines (<2mm):	100	% Fines (<2mm):	100
% Gravels:	0	Small (2-16mm):	0
		Large (16-64mm):	0
% Larges:	0	Small cobble (64-128mm):	0
		Large cobble (128-256mm):	0
		Boulder cobble (>256mm):	0
% Bedrock:	0	% Bedrock:	0
D90 (cm):		Compaction:	High

Banks

Height (m):	0.3	% Unstable:	0
Textures Fines:	Yes	Gravel:	No
Confinement:	4	Larges:	No
Valley: Chan. Ratio:	3	Bedrock:	No
Stage:	L		
Flood Signs Ht(m):	0.2	Method Flood Signs:	GE
Braided:	N	Method Braided:	GE
Bars (%):	0	Method Bars:	GE
pH:	7.8	Method pH:	PM
02 (ppm):		Method Dissolved Oxygen:	
Water Temp. (°C):	9.0	Method Temperature:	AI
Turb. (cm):	25	Method Turbidity:	GE
Cond. (µmhos):	204	Method Conductivity:	PM

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-844-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary

Species	Number	Size Range (mm)	Life Phase	Use 1	Use 2	Use 3	Method/Reference
NF			NA				EL

Obstructions

Comments

- NID 00632
- NIDM 93M018
- 1 electroshocked 110 square meters of habitat (14, 400 V, 700 seconds), caught no fish, observed no fish.
- 2 Limited potential rearing habitat, no potential spawning habitat
- 3 Limited potential for downstream impacts due to low gradient, and poorly defined channel in reach 2.
- 4 Stream has well defined channel with some areas of intermittent / underground flow (see photos E6: 11).

Unnamed Creek (480-5988-100-844) - Reach 3



Plate #27. Reach 3 - sample site 205. Upstream view (above) and downstream view (below).



04-Feb-98

Stream: Unnamed Creek

480-5988-100-aa2-000-000-000-000-000-000-000-000-000

Header Information							
Stream Name:	Unnamed Creek		Stream "Local":		Access:	FT	
Watershed Code:	480-5988-100-aa2-000-000-000-000-000-000-000			Reach No.:	1	Reach Length (km):	Method:
Location:	150 m upstream of lake		Map #:	93M018	Site No.:	206	Length surveyed (m):
			U.T.M. :	09.661177.6116473	Fish Card:	N	Field: Yes
Date: 97/9/3	Time: 15:30	Agency: SKR	Survey Crew: MJ \ML\ \ \ \ \ \ \		Photos:	E6; 12,13	Air Photos:
					BCC96145 :49		
Channel Characteristics				Bed Material			
				Specific Data			
Av. Chan. Width (m): Method Av. Chan. Width (m):				% Fines (<2mm): 100 % Fines (<2mm): 100			
Av. Wet. Width (m): Method Av. Wet. Width (m):				% Gravels: 0 Small (2-16mm): 0			
Av. Max. Rlf. Depth (cm): Av. Max. Riffle Depth (cm):				Large (16-64mm): 0			
Av. Max. Pool Depth (cm): Av. Max. Pool Depth (cm):				% Larges: 0 Small cobble (64-128mm): 0			
Gradient (%): Method Gradient:				Large cobble (128-256mm): 0			
% Pool:	% Riffle:	% Run:	% Other:	Boulder cobble (>256mm): 0			
Method:				% Bedrock: 0 % Bedrock: 0			
% Side Channel: Method Side Channel:				D90 (cm): Compaction: High			
% Debris Area: Method Debris Area:							
Cover				Banks			
Cover Total % : Method Cover Total % :				Height (m): % Unstable:			
Dp Pool:	L.O.D.:	Boulder:	In Veg.:	Over Veg:	Cutbank:	Textures Fines: No Gravel: No Larges: No Bedrock: No	
Crown Closure % :	20	Method Crown Closure:	GE	Aspect :	SE	Method Aspect:	CP
Discharge				Specific Data			
Wetted Width (m) : Method Wetted Width (m) :				Confinement: 6			
Mean Depth (m) : Method Mean Depth (m) :				Valley: Chan. Ratio: 5			
Mean Velocity (m/s) : Method Mean Velocity (m/s)				Stage: L			
Discharge (m3/s) : Method Discharge (m3/s) :				Flood Signs Ht(m): Method Flood Signs:			
				Braided: N Method Braided: GE			
				Bars (%): Method Bars:			
				pH: Method pH:			
				O2 (ppm): Method Dissolved Oxygen:			
				Water Temp. (°C): Method Temperature:			
				Turb. (cm): Method Turbidity:			
				Cond. (µmhos): Method Conductivity:			
Reach Symbol							
(Fish)							
(Width, Valley: Channel, Slope) (Bed Material)							

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-aa2-000-000-000-000-000-000-000-000

Stream/Valley Cross-Section

Fish Summary***Obstructions***

Comments

NID 00633

NIDM 93M018

ILP 00506

ILPM 93M018

1 no defined channel could be located in this reach

2 no electroshocking was conducted due to the lack of a defined channel.

3 stream consists of moist patches of mud and soil in a wetland composed of moss, alder, willow, horsetail, and scattered spruce.

4 no potential fish habitat was identified in this reach.

DFO/MoELP Stream Survey Form

04-Feb-98

Stream: Unnamed Creek

Watershed Code:

Stream Survey Report

480-5988-100-aa2-000-000-000-000-000-000-000-000

5

limited potential downstream impacts due to wetland nature of reach, and the lack of a defined channel.

Unnamed Creek (ILP 00506) - Reach 1



Plate #28. Reach 1 - sample site 206. Upstream view (above) and downstream view (below).

