

Appendix - Phase 1 Fish Passage Assessment Data and Photos

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-08-30	Crossing Sub Type	Bridge
PSCIS ID	197900	Diameter (m)	13.5
External ID	1805532	Length (m)	6
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	685314.1	Resemble Channel	-
Northing	6030317	Backwatered	-
Stream	Crow Creek	Percent Backwatered	-
Road	CN Railway	Fill Depth (m)	-
Road Tenure	Canadian National	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197900. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 9:46			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-30	Crossing Sub Type	Bridge	
PSCIS ID	197901	Diameter (m)	8	
External ID	1801185	Length (m)	4	
Crew	AI KP	Embedded	-	
UTM Zone	9	Depth Embedded (m)	-	
Easting	684767	Resemble Channel	-	
Northing	6029867	Backwatered	-	
Stream	Crow Creek	Percent Backwatered	-	
Road	Private	Fill Depth (m)	-	
Road Tenure	Unclassified	Outlet Drop (m)	-	
Channel Width (m)	-	Outlet Pool Depth (m)	-	
Stream Slope (%)	-	Inlet Drop	-	
Beaver Activity	-	Slope (%)	-	
Habitat Value	-	Valley Fill	-	
Final score	0	Barrier Result	Passable	
Fix type	-	Fix Span / Diameter	-	

Photos: PSCIS ID 197901. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 10:36			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197902	Diameter (m)	0.6
External ID	1800360	Length (m)	14
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	685353.3	Resemble Channel	No
Northing	6030520	Backwatered	No
Stream	Tributary to Bulkley River	Percent Backwatered	—
Road	Rose Lake Cutoff Road	Fill Depth (m)	1
Road Tenure	MoTi Local	Outlet Drop (m)	0.1
Channel Width (m)	1.5	Outlet Pool Depth (m)	0.1
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197902. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	.	Crossing Characteristics	-
Comments: Dry, small channel. 10:53			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197903	Diameter (m)	0.9
External ID	1800180	Length (m)	23
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	683420.7	Resemble Channel	No
Northing	6032258	Backwatered	No
Stream	Tributary to Bulkley River	Percent Backwatered	–
Road	Rose Lake Cutoff Road	Fill Depth (m)	1
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	1.5	Outlet Pool Depth (m)	0
Stream Slope (%)	12	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197903. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry, small stream. Runs in ditch beside the road. 11:09			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197904	Diameter (m)	0.9
External ID	1800372	Length (m)	15
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	681279	Resemble Channel	No
Northing	6032345	Backwatered	No
Stream	Tributary to Bulkley River	Percent Backwatered	–
Road	Crow Creek Road	Fill Depth (m)	1.5
Road Tenure	Resource	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	8
Habitat Value	Low	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197904. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry with dredged channel. Double pipe (0.9 x 0.9). 11:26			
			
			
2021-08-30, 11:29 AM HU 85127J 003233		2021-08-30, 11:30 AM HU 85127J 003233	

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-08-30	Crossing Sub Type	Bridge
PSCIS ID	197905	Diameter (m)	10
External ID	1803682	Length (m)	5
Crew	AI KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	682026.1	Resemble Channel	-
Northing	6028531	Backwatered	-
Stream	Crow Creek	Percent Backwatered	-
Road	Maxan Creek FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 7735	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197905. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 12:05			
NO IMAGE AVAILABLE			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197906	Diameter (m)	0.5
External ID	1803706	Length (m)	30
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	683683.9	Resemble Channel	No
Northing	6024930	Backwatered	No
Stream	Tributary to Maxan Creek	Percent Backwatered	—
Road	Maxan Creek FSR	Fill Depth (m)	3
Road Tenure	FLNR DND 7735	Outlet Drop (m)	0.6
Channel Width (m)	1.2	Outlet Pool Depth (m)	0.3
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	42	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

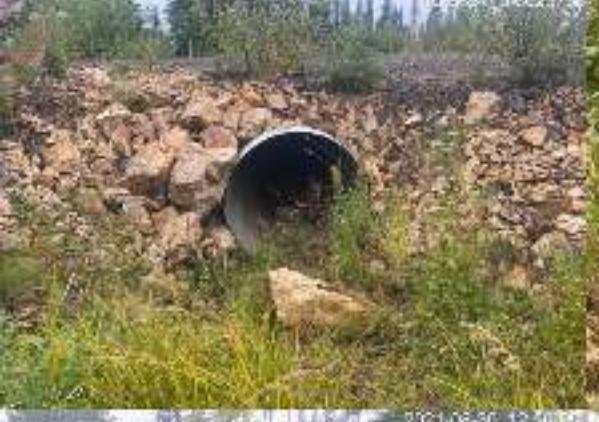
Photos: PSCIS ID 197906. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel. Two pipes (0.5 x 0.5). FISS site downstream. 12:29			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197907	Diameter (m)	1.2
External ID	1802611	Length (m)	23
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	685706	Resemble Channel	No
Northing	6023769	Backwatered	No
Stream	Tributary to Maxan Creek	Percent Backwatered	–
Road	Maxan Creek FSR	Fill Depth (m)	1
Road Tenure	Unknown	Outlet Drop (m)	0
Channel Width (m)	1.3	Outlet Pool Depth (m)	0
Stream Slope (%)	2.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Low	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197907. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel at time of survey. Runs in ditch on low side of road. Recently replaces. 12:49			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197908	Diameter (m)	0.3
External ID	1803697	Length (m)	15
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	687646.9	Resemble Channel	No
Northing	6021923	Backwatered	No
Stream	Tributary to Maxan Creek	Percent Backwatered	–
Road	Maxan Creek FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 7735	Outlet Drop (m)	0.1
Channel Width (m)	1	Outlet Pool Depth (m)	0
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	1.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	24	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197908. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel at time of survey. Very small stream. ID # on card in road photo is incorrect. 13:10			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-30	Crossing Sub Type	Round Culvert
PSCIS ID	197909	Diameter (m)	0.6
External ID	1804693	Length (m)	16
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	687557	Resemble Channel	No
Northing	6020572	Backwatered	No
Stream	Tributary to Maxan Creek	Percent Backwatered	–
Road	Maxan Creek FSR	Fill Depth (m)	2.5
Road Tenure	FLNR DND 7735	Outlet Drop (m)	0
Channel Width (m)	0.9	Outlet Pool Depth (m)	0.65
Stream Slope (%)	4	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	3
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197909. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics
<p>Comments: Habitat value is low to medium. Large beaver influenced lake upstream with two dams ~1.5m high at 10m and 30m upstream. Inlet blocked. Water at inlet is level with the top of the culvert. At 4m downstream is a 1m high beaver dam. 13:23</p>	
	
	
	

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-08-30	Crossing Sub Type	Bridge
PSCIS ID	197910	Diameter (m)	12
External ID	1804694	Length (m)	5
Crew	AI KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	688604	Resemble Channel	-
Northing	6019911	Backwatered	-
Stream	Tributary to Maxan Creek	Percent Backwatered	-
Road	Spur 30	Fill Depth (m)	-
Road Tenure	FLNR DND 7735	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197910. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:15			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-30	Crossing Sub Type	Ford	
PSCIS ID	197911	Diameter (m)	-	
External ID	2021083003	Length (m)	-	
Crew	AI	Embedded	-	
UTM Zone	9	Depth Embedded (m)	-	
Easting	686933	Resemble Channel	-	
Northing	6023054	Backwatered	-	
Stream	Foxy Creek	Percent Backwatered	-	
Road	unnamed	Fill Depth (m)	-	
Road Tenure	Unclassified	Outlet Drop (m)	-	
Channel Width (m)	-	Outlet Pool Depth (m)	-	
Stream Slope (%)	-	Inlet Drop	-	
Beaver Activity	-	Slope (%)	-	
Habitat Value	-	Valley Fill	-	
Final score	0	Barrier Result	Unknown	
Fix type	-	Fix Span / Diameter	-	

Photos: PSCIS ID 197911. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 15:55        			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-31		Crossing Sub Type	Bridge
PSCIS ID	197912		Diameter (m)	12
External ID	1802106		Length (m)	7
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	670963		Resemble Channel	-
Northing	6046221		Backwatered	-
Stream	Robert Hatch Creek		Percent Backwatered	-
Road	Private		Fill Depth (m)	-
Road Tenure	Unclassified		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197912. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge has collapsed and is impediment to upstream fish passage. Habitat confirmation conducted. 16:56			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-31		Crossing Sub Type	Ford
PSCIS ID	197913		Diameter (m)	-
External ID	1802088		Length (m)	-
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	669947		Resemble Channel	-
Northing	6047217		Backwatered	-
Stream	Robert Hatch Creek		Percent Backwatered	-
Road	Private		Fill Depth (m)	-
Road Tenure	Unclassified		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Unknown
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197913. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 17:46			
			
			

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-08-31	Crossing Sub Type	Ford
PSCIS ID	197914	Diameter (m)	–
External ID	1802089	Length (m)	–
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	668873	Resemble Channel	–
Northing	6046967	Backwatered	–
Stream	Johnny David Creek	Percent Backwatered	–
Road	Private	Fill Depth (m)	–
Road Tenure	Unclassified	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 197914. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. Area is extensively impacted by cattle trampling of banks. 17:56			
			
			

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Ford
PSCIS ID	197915	Diameter (m)	-
External ID	14000613	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	588885	Resemble Channel	-
Northing	6003123	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	-	Fill Depth (m)	-
Road Tenure	Unknown	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197915. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. Road deactivated and grown in. Not ATV accessible beyond this point. 12:15			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Oval Culvert
PSCIS ID	197916		Diameter (m)	1.95
External ID	14000621		Length (m)	16
Crew	AI		Embedded	Yes
UTM Zone	9		Depth Embedded (m)	0.15
Easting	589552.5		Resemble Channel	Yes
Northing	6003685		Backwatered	No
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	2
Road Tenure	Canfor R04078		Outlet Drop (m)	0
Channel Width (m)	2.8		Outlet Pool Depth (m)	0.05
Stream Slope (%)	7		Inlet Drop	No
Beaver Activity	No		Slope (%)	0.8
Habitat Value	Medium		Valley Fill	Deep Fill
Final score	14		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197916. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Old Crystal Ck FSR. Flat bottom structure. Good flow with abundant gravels and LWD. Nice stream. Appears passable to all life stages. Culvert slope was estimated with clinometer so may be slightly off. If slope was entered as 1% this crossing would rank as a "potential" barrier. 12:26			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197917	Diameter (m)	12.5
External ID	14000614	Length (m)	5
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	590839.4	Resemble Channel	-
Northing	6004385	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	Crystal Creek FSR	Fill Depth (m)	-
Road Tenure	Canfor R04078	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197917. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel at time of survey. Should this bridge be removed and girders salvaged? 13:05			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197918	Diameter (m)	9
External ID	14000944	Length (m)	5
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	591400.3	Resemble Channel	-
Northing	6004533	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	Crystal Creek FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9785	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197918. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. Wood abutments and girders. 13:12			
			
			
			

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Ford
PSCIS ID	197919	Diameter (m)	-
External ID	14001249	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	591715	Resemble Channel	-
Northing	6005282	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	-	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197919. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 13:24			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197920		Diameter (m)	14
External ID	14000725		Length (m)	5
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	598299.8		Resemble Channel	-
Northing	6007626		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	-
Road Tenure	Canfor R04078		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197920. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:31			
	202-09-01, 2:32 PM SU 590285 6007637		202-09-01, 2:32 PM SU 590285 6007637
	202-09-01, 2:32 PM SU 590285 6007637		202-09-01, 2:32 PM SU 590285 6007637
	202-09-01, 2:32 PM SU 590285 6007637		202-09-01, 2:32 PM SU 590285 6007637

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Ford
PSCIS ID	197921		Diameter (m)	-
External ID	14001542		Length (m)	-
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	595641.5		Resemble Channel	-
Northing	6007685		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Spur		Fill Depth (m)	-
Road Tenure	Resource		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Unknown
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197921. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	.	Crossing Characteristics	-
Comments: Road deactivated. 15:02			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Round Culvert
PSCIS ID	197922		Diameter (m)	1
External ID	14000828		Length (m)	14
Crew	AI		Embedded	Yes
UTM Zone	9		Depth Embedded (m)	0.05
Easting	599394		Resemble Channel	Yes
Northing	6008489		Backwatered	No
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Spur		Fill Depth (m)	1
Road Tenure	Canfor R04078		Outlet Drop (m)	0
Channel Width (m)	0.8		Outlet Pool Depth (m)	0
Stream Slope (%)	0		Inlet Drop	No
Beaver Activity	No		Slope (%)	1
Habitat Value	Low		Valley Fill	Deep Fill
Final score	10		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197922. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry at time of survey. Channel poorly defined. Likely flows for only short periods. 15:40			
		 	

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197923	Diameter (m)	1.2
External ID	14000949	Length (m)	28
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	601529	Resemble Channel	No
Northing	6006865	Backwatered	No
Stream	Tributary to Gosnell Creek	Percent Backwatered	–
Road	Crystal Creek FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0.5
Channel Width (m)	0.9	Outlet Pool Depth (m)	0.1
Stream Slope (%)	0.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197923. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Fill depth estimated. 16:02			
			
		NO IMAGE AVAILABLE	
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197924	Diameter (m)	0.5
External ID	14000954	Length (m)	18
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	603333.1	Resemble Channel	No
Northing	6007072	Backwatered	No
Stream	Tributary to Gosnell Creek	Percent Backwatered	–
Road	Crystal Creek FSR	Fill Depth (m)	1.5
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0
Channel Width (m)	1.3	Outlet Pool Depth (m)	0
Stream Slope (%)	0.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Low	Valley Fill	Deep Fill
Final score	24	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197924. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry. Channel partially covered in moss. Very like flows for only short periods of the year. 16:18			
  	•	  	-

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Ford
PSCIS ID	197925	Diameter (m)	-
External ID	14000908	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	604357.3	Resemble Channel	-
Northing	6009291	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	-	Fill Depth (m)	-
Road Tenure	Canfor R04078	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197925. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. Quad bridge in place made from logs. 16:38			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197926	Diameter (m)	1.1
External ID	14001002	Length (m)	30
Crew	AI	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.15
Easting	606615	Resemble Channel	Yes
Northing	6006104	Backwatered	No
Stream	Tributary to Morice River	Percent Backwatered	—
Road	Morice West FSR	Fill Depth (m)	2
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0.1
Stream Slope (%)	5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	1
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	22	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197926. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Observed 60mm fish swimming into the outlet. Nicely embedded. Inlet drop of large cobbles may be issue for smaller fish. 16:54			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197927	Diameter (m)	12
External ID	14001000	Length (m)	6
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	613231.1	Resemble Channel	-
Northing	6005506	Backwatered	-
Stream	Tributary to Morice River	Percent Backwatered	-
Road	Morice West FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9785	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197927. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 17:30			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197928	Diameter (m)	0.6
External ID	14000997	Length (m)	20
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	613579	Resemble Channel	No
Northing	6005551	Backwatered	No
Stream	Tributary to Morice River	Percent Backwatered	–
Road	Morice West FSR	Fill Depth (m)	2.5
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0.5
Channel Width (m)	1.2	Outlet Pool Depth (m)	0
Stream Slope (%)	5	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197928. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry. Small stream. DV point upstream in FISS. May be flowing at point upstream. 17:41			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197929	Diameter (m)	7
External ID	14000988	Length (m)	27
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	618098.1	Resemble Channel	-
Northing	6005788	Backwatered	-
Stream	Tributary to Morice River	Percent Backwatered	-
Road	Morice West FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9785	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	3	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197929. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge with only 0.7 clearance at outlet. 18:07			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Ford
PSCIS ID	197930	Diameter (m)	-
External ID	14000931	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	601878.2	Resemble Channel	-
Northing	5984146	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Canfor R06951	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197930. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

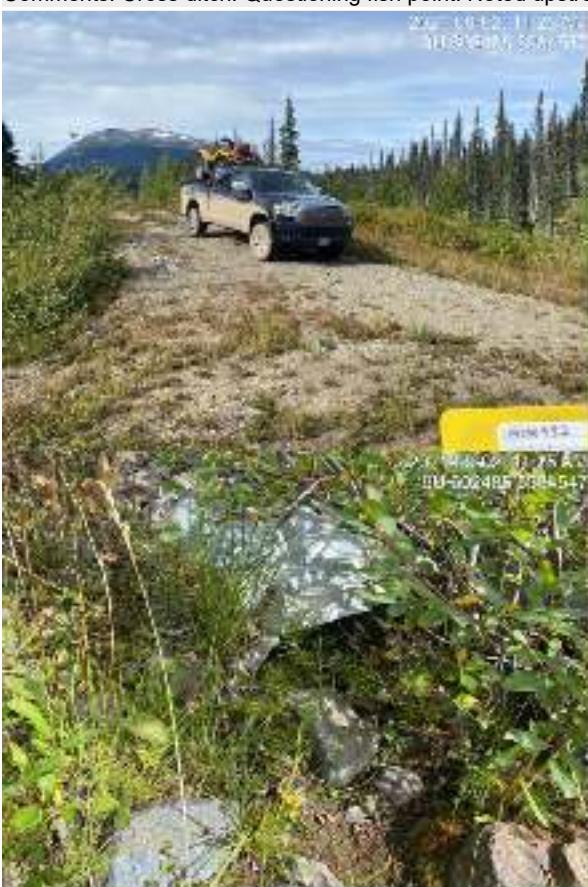
Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 11:14			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	197931	Diameter (m)	0.5
External ID	14000932	Length (m)	17
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	602457.8	Resemble Channel	No
Northing	5984532	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	—
Road	Spur	Fill Depth (m)	0.3
Road Tenure	Canfor R06951	Outlet Drop (m)	0
Channel Width (m)	0.4	Outlet Pool Depth (m)	0
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197931. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Cross ditch. Questioning fish point. Noted upstream in FISS. Not fish habitat. 11:24			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	197932	Diameter (m)	8
External ID	14001721	Length (m)	2
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	603204.6	Resemble Channel	-
Northing	5988286	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Resource	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197932. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Temporary log bridge for ATVs. Within young cutblock. 11:51			
			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	197933	Diameter (m)	13
External ID	14001775	Length (m)	2
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	607923.6	Resemble Channel	-
Northing	5987441	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Canfor R10644	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197933. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Quad bridge of logs and 2x6. 12:23			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	197934	Diameter (m)	0.4
External ID	14001414	Length (m)	6
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	607342.9	Resemble Channel	No
Northing	5987705	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	—
Road	Spur	Fill Depth (m)	0.2
Road Tenure	Canfor R10644	Outlet Drop (m)	0
Channel Width (m)	1	Outlet Pool Depth (m)	0.2
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	No	Slope (%)	0
Habitat Value	Low	Valley Fill	Deep Fill
Final score	16	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197934. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Temporary road to cutblock. Suspect main stream flows elsewhere. This is dry currently but wetland type depression. Channel poorly defined. Drains to ground. 12:40			
			
			NO IMAGE AVAILABLE
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	197935	Diameter (m)	5
External ID	14001411	Length (m)	11
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	607303.3	Resemble Channel	-
Northing	5987119	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Canfor R10644	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

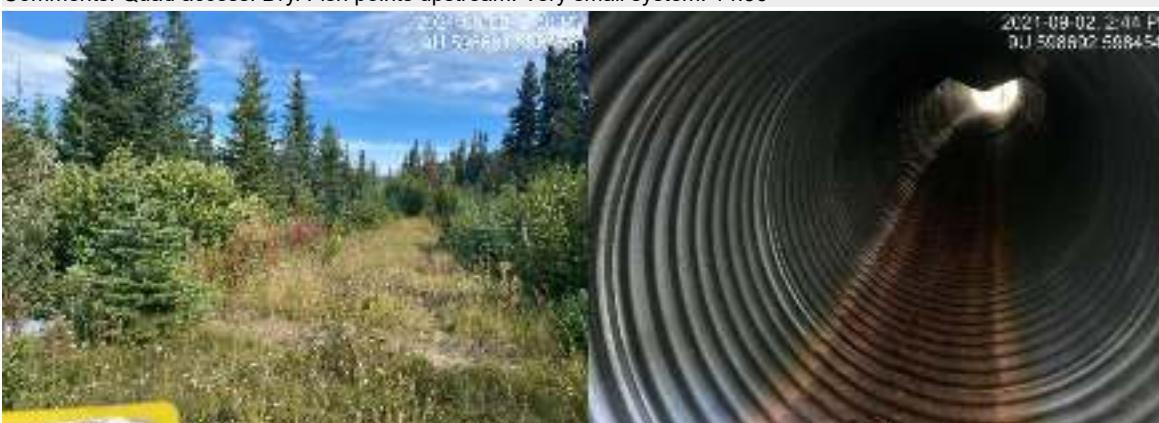
Photos: PSCIS ID 197935. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Temporary bridge with wood abutments. 12:56			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	197936	Diameter (m)	1
External ID	2021090299	Length (m)	15
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	598684	Resemble Channel	No
Northing	5984563	Backwatered	No
Stream	–	Percent Backwatered	–
Road	Spur	Fill Depth (m)	0.3
Road Tenure	Canfor R08817	Outlet Drop (m)	0.1
Channel Width (m)	0.9	Outlet Pool Depth (m)	0.25
Stream Slope (%)	10	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197936. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Quad access. Dry. Fish points upstream. Very small system. 14:36			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	197937	Diameter (m)	1
External ID	14000536	Length (m)	16
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	598400.6	Resemble Channel	No
Northing	5984485	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	—
Road	Spur	Fill Depth (m)	1
Road Tenure	Canfor R08817	Outlet Drop (m)	0.2
Channel Width (m)	0.8	Outlet Pool Depth (m)	0.01
Stream Slope (%)	5	Inlet Drop	No
Beaver Activity	No	Slope (%)	2.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197937. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Quad road (remove?). Some flow. Fish points upstream. 14:55			
		NO IMAGE AVAILABLE	

Location and Stream Data		Crossing Characteristics	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197938	Diameter (m)	0.9
External ID	2021083150	Length (m)	22
Crew	KP AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	691169	Resemble Channel	No
Northing	6031458	Backwatered	Yes
Stream	Bulkley River Side Channel	Percent Backwatered	100
Road	Railway	Fill Depth (m)	3
Road Tenure	Canadian National	Outlet Drop (m)	0
Channel Width (m)	3	Outlet Pool Depth (m)	0.85
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	0.2
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	19	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197938. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	Crossing Characteristics
Comments: Side channel of main stream. Shallow. Old beaver dam ~15m upstream. 100% backwatered. Top of outlet culvert is covered. 10:20	
	
	
	

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	197939	Diameter (m)	10
External ID	2021090202	Length (m)	5
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	605230	Resemble Channel	-
Northing	5992698	Backwatered	-
Stream	Tributary to McBride River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Unknown	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197939. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: Good flow. Nice stream. Not sure why it didn't map. 15:57	
	
	
	

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Ford
PSCIS ID	197940	Diameter (m)	-
External ID	14000312	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	602253.5	Resemble Channel	-
Northing	5994059	Backwatered	-
Stream	Tributary to McBride River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Canfor R10640	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197940. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Road deactivated. No visible channel. 17:02			
	•		-
	•		-
	•		-

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Ford
PSCIS ID	197941	Diameter (m)	-
External ID	14000477	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	602529	Resemble Channel	-
Northing	5994071	Backwatered	-
Stream	Tributary to McBride River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Canfor R10640	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197941. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	.	Crossing Characteristics	-
Comments: Road deactivated. Channel moist. 17:06			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	197942	Diameter (m)	18
External ID	14000564	Length (m)	5
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	608289.8	Resemble Channel	-
Northing	6021336	Backwatered	-
Stream	Tributary to Thaulit River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	West Fraser R05232	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197942. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Thault River. 11:34			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-03		Crossing Sub Type	Bridge
PSCIS ID	197943		Diameter (m)	18
External ID	14000689		Length (m)	5
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	608006.4		Resemble Channel	-
Northing	6018209		Backwatered	-
Stream	Hagman Creek		Percent Backwatered	-
Road	Chisholm FSR		Fill Depth (m)	-
Road Tenure	FLNR DND 9946		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197943. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 13:40			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	197944	Diameter (m)	0.5
External ID	14000695	Length (m)	16
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	607829	Resemble Channel	No
Northing	6016958	Backwatered	No
Stream	Tributary to Thaulit River	Percent Backwatered	—
Road	Chisholm FSR	Fill Depth (m)	2.5
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0.7
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.3
Stream Slope (%)	6.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	4.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

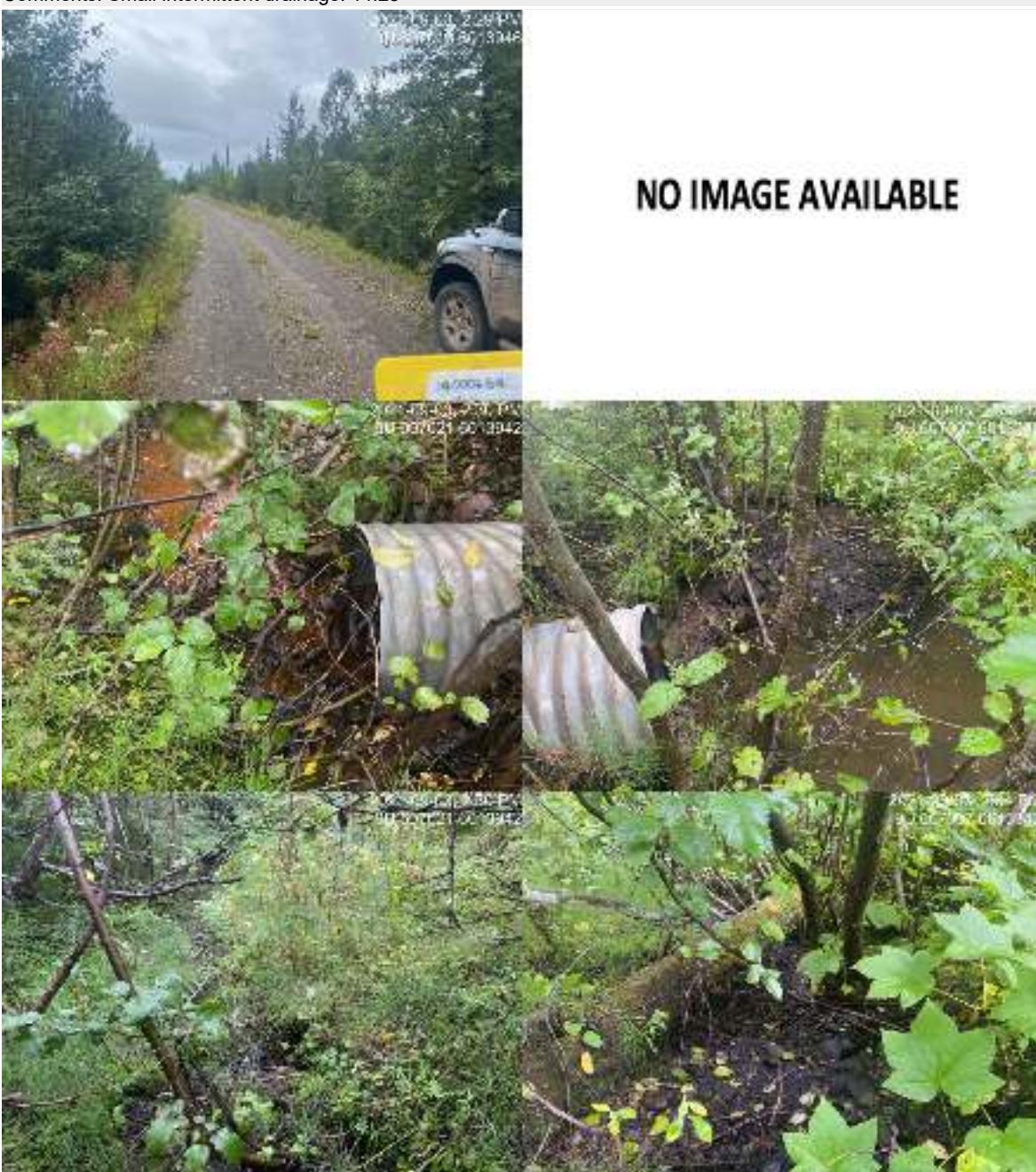
Photos: PSCIS ID 197944. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	.	Crossing Characteristics	-
Comments: Models as non-fish but DV below. 13:55			
			2021-09-03, 1:57 PM AH-607823-6018098
			2021-09-03, 1:57 PM AH-607823-6018098
			2021-09-03, 1:57 PM AH-607823-6018098
			2021-09-03, 1:57 PM AH-607823-6018098
			2021-09-03, 1:57 PM AH-607823-6018098

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	197945	Diameter (m)	0.6
External ID	14000684	Length (m)	15
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	607024.3	Resemble Channel	No
Northing	6013942	Backwatered	No
Stream	Tributary to Thaulit River	Percent Backwatered	—
Road	Chisholm FSR	Fill Depth (m)	0.5
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0.1
Channel Width (m)	1	Outlet Pool Depth (m)	0.1
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Low	Valley Fill	Deep Fill
Final score	24	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197945. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	.	Crossing Characteristics	-
Comments: Small intermittent drainage. 14:28			
 <p>NO IMAGE AVAILABLE</p>			

Location and Stream Data		Crossing Characteristics	
	•		–
Date	2021-09-03	Crossing Sub Type	Oval Culvert
PSCIS ID	197946	Diameter (m)	1.5
External ID	14000678	Length (m)	26
Crew	AI	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.15
Easting	608209	Resemble Channel	Yes
Northing	6010247	Backwatered	Yes
Stream	Tributary to Thaulit River	Percent Backwatered	95
Road	Chisholm FSR	Fill Depth (m)	3
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0
Channel Width (m)	1.4	Outlet Pool Depth (m)	0.15
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	8	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 197946. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: WP375. Sedges almost completely block culvert. Likely passable at near all flows for all species and life stages. 14:47	
NO IMAGE AVAILABLE	
	NO IMAGE AVAILABLE
NO IMAGE AVAILABLE	

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	197947	Diameter (m)	8
External ID	14000680	Length (m)	5
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	612913.4	Resemble Channel	-
Northing	6009067	Backwatered	-
Stream	Tributary to Morice River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9946	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197947. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 15:14			
			

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-03	Crossing Sub Type	Ford
PSCIS ID	197948	Diameter (m)	–
External ID	14001323	Length (m)	–
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	612980.5	Resemble Channel	–
Northing	6011439	Backwatered	–
Stream	Tributary to Tagit Creek	Percent Backwatered	–
Road	15 Rd	Fill Depth (m)	–
Road Tenure	West Fraser R05232	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 197948. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Deactivated road. ATV could get through. 15:40			
 14001383 2021-09-03 3:42 PM SU 613069 501134		 0113973 2021-09-03 3:42 PM SU 613069 501134	

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	197949	Diameter (m)	1.2
External ID	2021090303	Length (m)	14
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	614402	Resemble Channel	No
Northing	6010350	Backwatered	No
Stream	Tributary to Tagit Creek	Percent Backwatered	—
Road	11 Rd	Fill Depth (m)	1.5
Road Tenure	Charles Priest R20078	Outlet Drop (m)	0.5
Channel Width (m)	2	Outlet Pool Depth (m)	0.6
Stream Slope (%)	2.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	2.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197949. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Good flow. Nice gravels. Deep undercut banks. CT upstream and downstream in FISS. ~40mm fish upstream. 15:52			
			
			

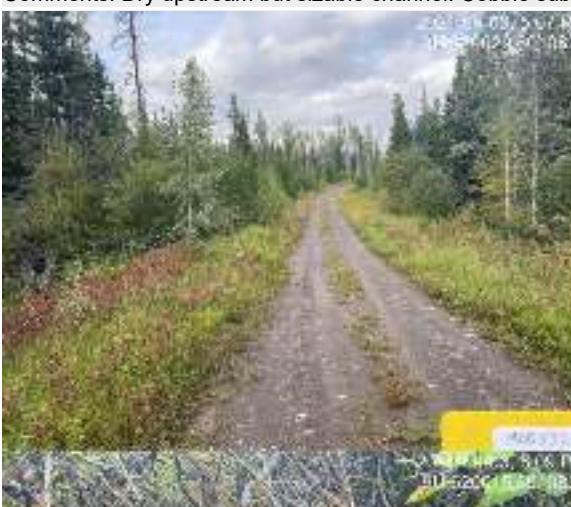
Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-03		Crossing Sub Type	Bridge
PSCIS ID	197950		Diameter (m)	19
External ID	2021090399		Length (m)	5
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	614676		Resemble Channel	-
Northing	6007859		Backwatered	-
Stream	Tagit Creek		Percent Backwatered	-
Road	Chisholm FSR		Fill Depth (m)	-
Road Tenure	FLNR DND 9946		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197950. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 16:27			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-03	Crossing Sub Type	Oval Culvert
PSCIS ID	197951	Diameter (m)	1.6
External ID	14001177	Length (m)	22
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	620026.2	Resemble Channel	No
Northing	6010831	Backwatered	No
Stream	Tributary to Morice River	Percent Backwatered	–
Road	False Tagit FSR	Fill Depth (m)	1.5
Road Tenure	FLNR DND 9946	Outlet Drop (m)	1.1
Channel Width (m)	3	Outlet Pool Depth (m)	0.6
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	4.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197951. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry upstream but sizable channel. Cobble substrate. ~20 fish 50-80mm in outlet pool. 17:05			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	197952	Diameter (m)	1
External ID	14000690	Length (m)	24
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	625491.4	Resemble Channel	No
Northing	6008365	Backwatered	No
Stream	Tributary to Morice River	Percent Backwatered	–
Road	Chisholm FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0.35
Channel Width (m)	2.1	Outlet Pool Depth (m)	0.5
Stream Slope (%)	6	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	4.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197952. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry except small outlet pool. Cobble substrate. Some gravels present. 17:41			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Ford
PSCIS ID	197953	Diameter (m)	-
External ID	14001563	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	630001.2	Resemble Channel	-
Northing	6009752	Backwatered	-
Stream	Tributary to Morice River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Resource	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197953. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Full deactivation. No ATV passability. 18:01			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	197954	Diameter (m)	1.25
External ID	14000696	Length (m)	30
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	630596.4	Resemble Channel	No
Northing	6010650	Backwatered	Yes
Stream	Tributary to Morice River	Percent Backwatered	25
Road	Chisholm FSR	Fill Depth (m)	3
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0
Channel Width (m)	1.7	Outlet Pool Depth (m)	0.6
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	22	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197954. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
<p>Comments: Nice stream downstream at deactivated crossing. Riparian shrub cover is extremely thick. Difficult to get width and gradient. Stream may be bigger. 18:13</p>	
	
	
	

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-04	Crossing Sub Type	Ford
PSCIS ID	197955	Diameter (m)	-
External ID	1800422	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	679525.4	Resemble Channel	-
Northing	6039649	Backwatered	-
Stream	Airport Creek	Percent Backwatered	-
Road	Powerline	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197955. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 19:49			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-05	Crossing Sub Type	Ford
PSCIS ID	197956	Diameter (m)	-
External ID	1801133	Length (m)	-
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	674339.1	Resemble Channel	-
Northing	6039595	Backwatered	-
Stream	Tributary to Bulkley River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197956. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Beaver dam. 12:41			
A photograph showing a beaver dam across a stream. The dam is made of logs and brush, creating a low, wide obstacle. The water is calm and reflects the surrounding green forest and blue sky.		A photograph showing a beaver dam crossing from a different angle. It features a large log standing vertically in the water, with other logs and brush forming a low dam structure. The water is shallow and reflects the sky.	
A photograph showing a beaver dam crossing from another perspective. The dam is low and made of logs, allowing water to flow through. The surrounding vegetation is dense green trees and shrubs.		A photograph showing a beaver dam crossing. The dam is low and made of logs, allowing water to flow through. The surrounding vegetation is dense green trees and shrubs.	
A photograph showing a beaver dam crossing. The dam is low and made of logs, allowing water to flow through. The surrounding vegetation is dense green trees and shrubs.		A photograph showing a beaver dam crossing. The dam is low and made of logs, allowing water to flow through. The surrounding vegetation is dense green trees and shrubs.	

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-05	Crossing Sub Type	Bridge
PSCIS ID	197957	Diameter (m)	7
External ID	1801969	Length (m)	4
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	673797	Resemble Channel	–
Northing	6038906	Backwatered	–
Stream	Tributary to Elwin Lake	Percent Backwatered	–
Road	Spur	Fill Depth (m)	–
Road Tenure	Unclassified	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 197957. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: 2 washed out CV's below. 13:20			
 <p>2021-08-05 14:20 PM 011-875815-5038012</p> <p>1801969</p> <p>2021-08-05 14:20 PM 011-875804-5038012</p> <p>2021-08-05 14:20 PM 011-875804-5038012</p> <p>2021-08-05 14:20 PM 011-875804-5038012</p>	•		-

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-05	Crossing Sub Type	Bridge
PSCIS ID	197958	Diameter (m)	15
External ID	1803828	Length (m)	5
Crew	AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	674549	Resemble Channel	-
Northing	6038014	Backwatered	-
Stream	Tributary to Bulkley River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Solid Ground R12370	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197958. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 13:47			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-05		Crossing Sub Type	Bridge
PSCIS ID	197959		Diameter (m)	19
External ID	1804238		Length (m)	4
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	675156		Resemble Channel	-
Northing	6039878		Backwatered	-
Stream	Tributary to Bulkley River		Percent Backwatered	-
Road	Spur		Fill Depth (m)	-
Road Tenure	Solid Ground R12370		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197959. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Newer, 13:55			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-13	Crossing Sub Type	Round Culvert
PSCIS ID	197960	Diameter (m)	3.4
External ID	24704566	Length (m)	24
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605785.6	Resemble Channel	No
Northing	6099884	Backwatered	No
Stream	Corya Creek	Percent Backwatered	—
Road	Railway	Fill Depth (m)	1.5
Road Tenure	Unknown	Outlet Drop (m)	0.65
Channel Width (m)	18	Outlet Pool Depth (m)	3
Stream Slope (%)	2.8	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	2.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	34	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	23

Photos: PSCIS ID 197960. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Outlet is cracked and drops. Inlet embedded to 2/3 way. 10:33			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-15	Crossing Sub Type	Bridge
PSCIS ID	197961	Diameter (m)	12
External ID	1805496	Length (m)	5
Crew	AI DN	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	609393	Resemble Channel	-
Northing	6087111	Backwatered	-
Stream	Owens Creek	Percent Backwatered	-
Road	CN Railway	Fill Depth (m)	-
Road Tenure	Canadian National	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197961. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:50	•		-
	•	 2021-09-15, 11:54 AM SU A00382 8087117	-
	•		-
	•		-

Location and Stream Data		Crossing Characteristics	
Date	2021-09-07	Crossing Sub Type	Oval Culvert
PSCIS ID	197962	Diameter (m)	3.6
External ID	14000798	Length (m)	15
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	643460.3	Resemble Channel	No
Northing	6025890	Backwatered	No
Stream	Peacock Creek	Percent Backwatered	—
Road	Morice FSR	Fill Depth (m)	3.5
Road Tenure	FLNR DND 4656	Outlet Drop (m)	1.2
Channel Width (m)	9.3	Outlet Pool Depth (m)	0
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	15.8

Photos: PSCIS ID 197962. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Historic side channel for fish passage not functioning. 17:47			
			2021-08-07 16:00 9.1E43459.E025878
			2021-08-07 16:00 9.1E43448.E025878
			2021-08-07 16:00 9.1E43449.E025878

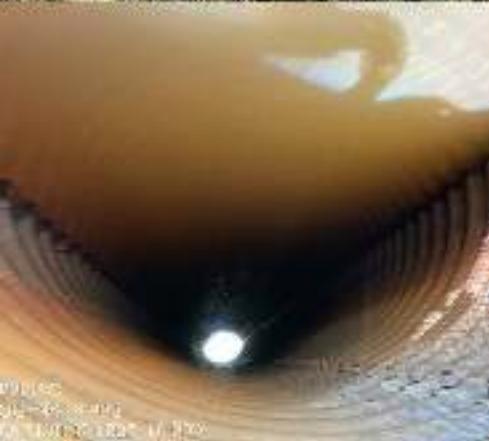
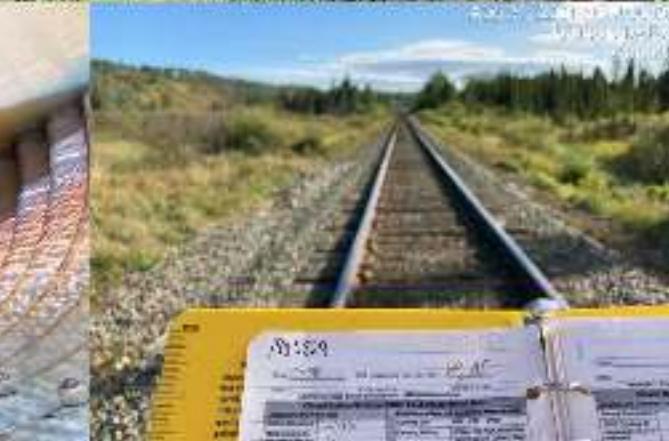
Location and Stream Data		Crossing Characteristics –	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197963	Diameter (m)	1.2
External ID	1805531	Length (m)	19
Crew	KP AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	690763.8	Resemble Channel	No
Northing	6031192	Backwatered	No
Stream	Tributary to Bulkley River	Percent Backwatered	—
Road	Railway	Fill Depth (m)	1
Road Tenure	Canadian National	Outlet Drop (m)	0.4
Channel Width (m)	4	Outlet Pool Depth (m)	0.35
Stream Slope (%)	0	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	34	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197963. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics
<p>Comments: Beavers have clogged both inlets (double barrel). Significant sized marsh ~40m upstream with beaver dam 1.5 - 2m high on outlet of wetland. 9:40</p>	
	
	
	 <p>Aug 31, 2021 4:09:44:26 Burnt Lake BC Canada</p>

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197964	Diameter (m)	1.5
External ID	1805529	Length (m)	21
Crew	KP AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	691218.3	Resemble Channel	No
Northing	6031478	Backwatered	Yes
Stream	Bulkley River	Percent Backwatered	100
Road	Railway	Fill Depth (m)	3
Road Tenure	Canadian National	Outlet Drop (m)	0
Channel Width (m)	9	Outlet Pool Depth (m)	0.8
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.7
Habitat Value	High	Valley Fill	Deep Fill
Final score	19	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	14

Photos: PSCIS ID 197964. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
<p>Comments: Backwatered fully, appears fully passable. Fish sighted at outlet. Distance from water surface to top of culvert is 70cm. 9:58</p>	
	
	
	 <p>A photograph of a railway track receding into the distance. In the foreground, a yellow sign is mounted on a post. The sign has a white label with black text and a yellow border. The text on the sign includes "80589" and "PAC".</p>

Location and Stream Data		Crossing Characteristics	
Date	2021-08-09	Crossing Sub Type	Round Culvert
PSCIS ID	197965	Diameter (m)	0.95
External ID	14000820	Length (m)	10
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	617037	Resemble Channel	No
Northing	5997095	Backwatered	No
Stream	Tributary to Collins Lake	Percent Backwatered	–
Road	Morice R FSR	Fill Depth (m)	1.3
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0.4
Channel Width (m)	0.35	Outlet Pool Depth (m)	0.9
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	25	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197965. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: rock retaining wall (hand built), wood culvert, mainline, post code logging			
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-08-31	Crossing Sub Type	Bridge
PSCIS ID	197966	Diameter (m)	12
External ID	1800049	Length (m)	9
Crew	KP AI	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	692281.2	Resemble Channel	-
Northing	6032072	Backwatered	-
Stream	Bulkley River	Percent Backwatered	-
Road	Rose Lake Cutoff Road	Fill Depth (m)	-
Road Tenure	MoTi Local	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197966. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Rose Lake cut-off bridge. 11:38			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197967	Diameter (m)	3
External ID	1800050	Length (m)	30
Crew	KP AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	692434.6	Resemble Channel	No
Northing	6032331	Backwatered	No
Stream	Taman Creek	Percent Backwatered	—
Road	Highway 16	Fill Depth (m)	9.99
Road Tenure	Highway	Outlet Drop (m)	0
Channel Width (m)	5.3	Outlet Pool Depth (m)	0.4
Stream Slope (%)	1.7	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	2.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	27	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	31

Photos: PSCIS ID 197967. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics
Comments: Beaver dam at inlet ~1.5m high. Rocks placed at outlet reducing drop to 0, rocks about long, and have staggered drop of 0.7m. 12:20	
 	 
	
	

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-31	Crossing Sub Type	Bridge	
PSCIS ID	197968	Diameter (m)	11	
External ID	1801117	Length (m)	4	
Crew	KP	Embedded	-	
UTM Zone	9	Depth Embedded (m)	-	
Easting	690733	Resemble Channel	-	
Northing	6032353	Backwatered	-	
Stream	Bulkley River	Percent Backwatered	-	
Road	Spur	Fill Depth (m)	-	
Road Tenure	Unclassified	Outlet Drop (m)	-	
Channel Width (m)	-	Outlet Pool Depth (m)	-	
Stream Slope (%)	-	Inlet Drop	-	
Beaver Activity	-	Slope (%)	-	
Habitat Value	-	Valley Fill	-	
Final score	0	Barrier Result	Passable	
Fix type	-	Fix Span / Diameter	-	

Photos: PSCIS ID 197968. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Observed water pump and intake hose below bridge (downstream). 13:42			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-31		Crossing Sub Type	Bridge
PSCIS ID	197969		Diameter (m)	10
External ID	1800583		Length (m)	4
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	689262		Resemble Channel	-
Northing	6033535		Backwatered	-
Stream	Bulkley River		Percent Backwatered	-
Road	Raymond Road		Fill Depth (m)	-
Road Tenure	Unclassified		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197969. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge at outflow of Conrad Lake, on Bulkley River. Access via Mulligan road, then start of Raymond Road. 14:08			
	Aug 31, 2021 at 14:10:40 Burnt Lake BC Canada		Aug 31, 2021 at 14:11:27 Burnt Lake BC Canada
	Aug 31, 2021 at 14:11:12 Burnt Lake BC Canada		Aug 31, 2021 at 14:11:40 Burnt Lake BC Canada
	Aug 31, 2021 at 14:10:55 Burnt Lake BC Canada		

Location and Stream Data		Crossing Characteristics	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197970	Diameter (m)	0.6
External ID	1803813	Length (m)	13
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	684415	Resemble Channel	No
Northing	6035809	Backwatered	No
Stream	Tributary to Broman Lake	Percent Backwatered	—
Road	Broman Lake FSR	Fill Depth (m)	0.5
Road Tenure	Chinook Comfor R21201	Outlet Drop (m)	0.18
Channel Width (m)	0.7	Outlet Pool Depth (m)	0.5
Stream Slope (%)	5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	28	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197970. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Just before km 3. Inlet embedded with vegetation ~0.2m. Channel dry, small amount of water in pool downstream. ~5cm. Hard to see channel downstream. 15:14			
			
 NO IMAGE AVAILABLE			

Location and Stream Data		.	Crossing Characteristics	-
Date	2021-08-31		Crossing Sub Type	Pipe Arch
PSCIS ID	197971		Diameter (m)	1.8
External ID	1805000		Length (m)	30
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	685301		Resemble Channel	-
Northing	6036065		Backwatered	-
Stream	Bulkley River		Percent Backwatered	-
Road	Broman Lake FSR		Fill Depth (m)	-
Road Tenure	Chinook Comfor R21201		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	No		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	6		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197971. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Channel mostly dry. Pool at inlet and another 30m upstream. Water depth 22cm at inlet. Pool at outlet and water throughout culvert. Open bottomed pipe arch. Looks very passable. Additional closed bottom structure higher and beside (river right), doesn't appear to get use. 15:56			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197972	Diameter (m)	0.6
External ID	1802040	Length (m)	8
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	684950.1	Resemble Channel	No
Northing	6035440	Backwatered	No
Stream	Tributary to Broman Lake	Percent Backwatered	—
Road	Powerline	Fill Depth (m)	0.3
Road Tenure	Unclassified	Outlet Drop (m)	0
Channel Width (m)	0.8	Outlet Pool Depth (m)	0.6
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197972. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
<p>Comments: Powerline ascend via Broman Lake road, does not have outlet drop but does have gentle height change that could be a challenge for passage. Channel upstream dry, downstream dry except 5-10cm pool. Salamander young found in outlet pool. 16:27</p>			
	•		-
	•		-
	•		-

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-31	Crossing Sub Type	Bridge	
PSCIS ID	197973	Diameter (m)	11	
External ID	1802039	Length (m)	5	
Crew	KP	Embedded	-	
UTM Zone	9	Depth Embedded (m)	-	
Easting	685413.5	Resemble Channel	-	
Northing	6035362	Backwatered	-	
Stream	Bulkley River	Percent Backwatered	-	
Road	Powerline	Fill Depth (m)	-	
Road Tenure	Unclassified	Outlet Drop (m)	-	
Channel Width (m)	-	Outlet Pool Depth (m)	-	
Stream Slope (%)	-	Inlet Drop	-	
Beaver Activity	-	Slope (%)	-	
Habitat Value	-	Valley Fill	-	
Final score	0	Barrier Result	Passable	
Fix type	-	Fix Span / Diameter	-	

Photos: PSCIS ID 197973. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Powerline accessed via Broman Lake FSR bridge. 16.55			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197974	Diameter (m)	0.9
External ID	1800356	Length (m)	33
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	680383.2	Resemble Channel	No
Northing	6040056	Backwatered	No
Stream	Watson Creek	Percent Backwatered	—
Road	Highway 16	Fill Depth (m)	3
Road Tenure	Highway	Outlet Drop (m)	0.93
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.92
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Low	Valley Fill	Deep Fill
Final score	42	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197974. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Channel dry. Small pool at inlet. Inlet perched above water 3cm and substrate 17cm. Channel upstream is not aligned with culvert at all. 17:24			
	•		-
	•		-
	•		-

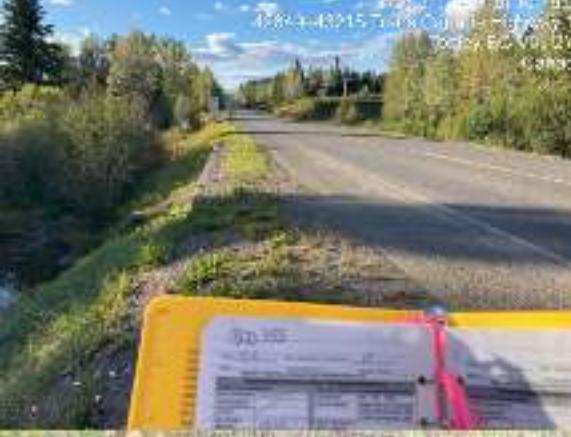
Location and Stream Data		Crossing Characteristics –	
Date	2021-08-31	Crossing Sub Type	Round Culvert
PSCIS ID	197975	Diameter (m)	3
External ID	1801122	Length (m)	10
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	680832	Resemble Channel	No
Northing	6040045	Backwatered	No
Stream	Ailport Creek	Percent Backwatered	—
Road	Private Driveway	Fill Depth (m)	0.5
Road Tenure	Unclassified	Outlet Drop (m)	0.3
Channel Width (m)	6.5	Outlet Pool Depth (m)	1.45
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	11.5

Photos: PSCIS ID 197975. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dredging upstream, channel width not natural. Signs of major flooding including wear on upstream sides of culvert. No riparian zone on river left upstream. Culvert 4% but has bend at last 2m outlet drop and outlet pool depth are estimates. This stream could use some restoration. 17:46			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-31	Crossing Sub Type	Oval Culvert
PSCIS ID	197976	Diameter (m)	3.5
External ID	1800355	Length (m)	23
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	680644.8	Resemble Channel	No
Northing	6039756	Backwatered	Yes
Stream	Airport Creek	Percent Backwatered	50
Road	Highway 16	Fill Depth (m)	3
Road Tenure	Highway	Outlet Drop (m)	0
Channel Width (m)	7.5	Outlet Pool Depth (m)	0.55
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	High	Valley Fill	Deep Fill
Final score	24	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	12.5

Photos: PSCIS ID 197976. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
<p>Comments: Fish sighted upstream, not aligned with stream, channel runs into rip rap berm of highway then over to closed bottom structure. Pool (40cn) on upstream inlet. Fish sighted in downstream pool. 18:16</p>			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197977		Diameter (m)	11
External ID	2021090150		Length (m)	5
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	592509.8		Resemble Channel	-
Northing	6004823		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	-
Road Tenure	Unknown		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197977. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:10			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197978		Diameter (m)	10
External ID	14000935		Length (m)	5
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	592921.9		Resemble Channel	-
Northing	6005009		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	-
Road Tenure	Unknown		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197978. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:17			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197979		Diameter (m)	10
External ID	14000934		Length (m)	5
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	595765.3		Resemble Channel	-
Northing	6006122		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	-
Road Tenure	Unknown		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197979. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:33			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Round Culvert
PSCIS ID	197980		Diameter (m)	2
External ID	14000956		Length (m)	23
Crew	KP		Embedded	Yes
UTM Zone	9		Depth Embedded (m)	0.3
Easting	596610.5		Resemble Channel	Yes
Northing	6006123		Backwatered	No
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	2.5
Road Tenure	FLNR DND 9785		Outlet Drop (m)	0
Channel Width (m)	0.9		Outlet Pool Depth (m)	0.1
Stream Slope (%)	6		Inlet Drop	No
Beaver Activity	No		Slope (%)	2
Habitat Value	Medium		Valley Fill	Deep Fill
Final score	13		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197980. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: Appears passable. Nice little stream with plenty of gravel. 11:38	
 <p>Sep 1, 2021 at 11:41:39 54.193078,-127.519235</p> <p>1/1000.972</p>	 <p>Sep 1, 2021 at 11:41:39 54.193078,-127.519235</p>
 <p>Sep 1, 2021 at 11:41:39 54.193078,-127.519235</p>	 <p>Sep 1, 2021 at 11:41:39 54.193078,-127.519235</p>
 <p>Sep 1, 2021 at 11:41:39 54.193078,-127.519235</p>	 <p>Sep 1, 2021 at 11:41:39 54.193078,-127.519235</p>

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197981	Diameter (m)	2
External ID	14000951	Length (m)	24
Crew	KP	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.4
Easting	596697.9	Resemble Channel	Yes
Northing	6006213	Backwatered	Yes
Stream	Tributary to Gosnell Creek	Percent Backwatered	25
Road	Crystal Creek FSR	Fill Depth (m)	2
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0
Channel Width (m)	1.9	Outlet Pool Depth (m)	0.2
Stream Slope (%)	6	Inlet Drop	No
Beaver Activity	No	Slope (%)	1.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	13	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 197981. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Appears passable. Similar to previous but bigger stream. Nice gravels on both sides. 11:55			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197982	Diameter (m)	1.8
External ID	14000941	Length (m)	24
Crew	KP	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.3
Easting	598157.4	Resemble Channel	Yes
Northing	6006329	Backwatered	Yes
Stream	Tributary to Gosnell Creek	Percent Backwatered	25
Road	Crystal Creek FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.2
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197982. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
<p>Comments: Only left (facing downstream) is embedded, right one backwatered 25%. Nice gravel on upstream and downstream side. 12:23</p>	
	
	
	

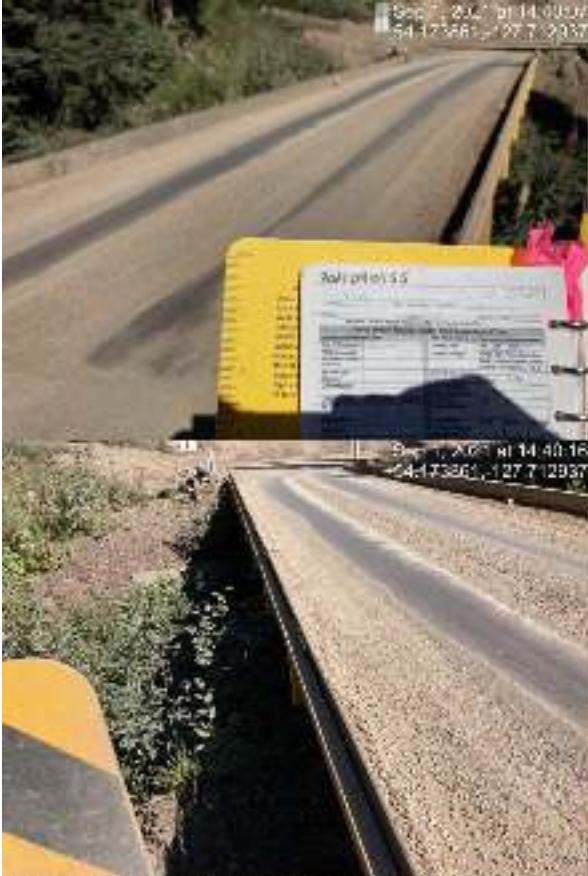
Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197983		Diameter (m)	5
External ID	14000488		Length (m)	12
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	584581		Resemble Channel	-
Northing	6003388		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	Crystal Creek FSR		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197983. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:19			
	Sep. 1, 2021, 14:19:51 +64.171659, -127.704716		Sep. 1, 2021, 14:21:32 +64.171659, -127.704716
	Sep. 1, 2021, 14:21:31 +64.171659, -127.704716		Sep. 1, 2021, 14:21:32 +64.171659, -127.704716
	Sep. 1, 2021, 14:21:30 +64.171659, -127.704716		Sep. 1, 2021, 14:21:30 +64.171659, -127.704716

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197984	Diameter (m)	22
External ID	14000503	Length (m)	6
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	584043.6	Resemble Channel	-
Northing	6003655	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	6 Road	Fill Depth (m)	-
Road Tenure	Canfor R07593	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197984. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:38			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197985		Diameter (m)	19
External ID	14000500		Length (m)	5
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	584889.5		Resemble Channel	-
Northing	6003492		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197985. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:46			
			
			
			

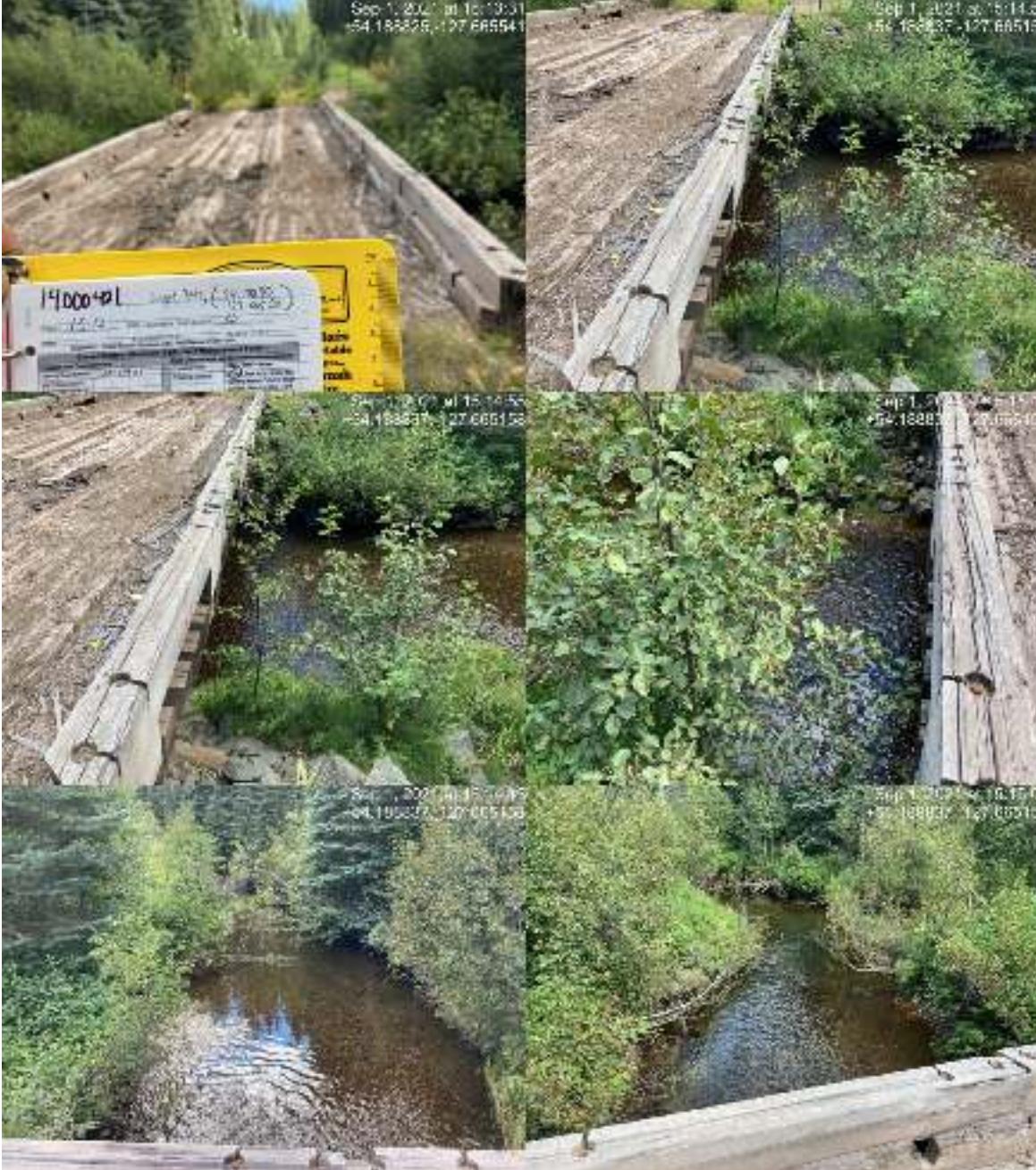
Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197986		Diameter (m)	16
External ID	14000495		Length (m)	6
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	585701.7		Resemble Channel	-
Northing	6004480		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197986. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 15:03			
			
150° 1' 29.7" N 101° 0' 0.1" W 134.181195 -127.628827			
150° 1' 29.7" N 101° 0' 0.1" W 134.181195 -127.628827			
150° 1' 29.7" N 101° 0' 0.1" W 134.181195 -127.628827			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197987	Diameter (m)	20
External ID	14000421	Length (m)	6
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	587108.4	Resemble Channel	-
Northing	6005346	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	11 Road	Fill Depth (m)	-
Road Tenure	Canfor R07593	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197987. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Hydrometric station 13m downstream assuming the modelling number is correct. There are 2 close by. 15:12			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-01	Crossing Sub Type	Bridge
PSCIS ID	197988	Diameter (m)	18
External ID	14000505	Length (m)	6
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	587095.2	Resemble Channel	-
Northing	6005362	Backwatered	-
Stream	Tributary to Gosnell Creek	Percent Backwatered	-
Road	6 Road	Fill Depth (m)	-
Road Tenure	Canfor R07593	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 197988. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 15:19			
			
Sep 1 2021 at 15:21:30 -54.185480, -127.666453			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	197989	Diameter (m)	1.35
External ID	14000801	Length (m)	19
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	640778	Resemble Channel	No
Northing	6020795	Backwatered	No
Stream	Tributary to Morice River	Percent Backwatered	–
Road	Morice FSR	Fill Depth (m)	2
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0
Channel Width (m)	2.2	Outlet Pool Depth (m)	0
Stream Slope (%)	1.5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 197989. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Concrete structure. Many 30-40mm fry. 2.5m open bottom structure end or pipe. 18:08			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197990		Diameter (m)	13
External ID	14000490		Length (m)	6
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	587080.7		Resemble Channel	-
Northing	6005468		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197990. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 15:29			
	Sep 1, 2021 at 15:30:55 +54.180045,-127.865305		Sep 1, 2021 at 15:31:02 +54.180032,-127.865405
	Sep 1, 2021 at 15:31:32 +54.180032,-127.865405		Sep 1, 2021 at 15:31:47 +54.180032,-127.865505

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197991	Diameter (m)	1.2
External ID	14000506	Length (m)	25
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	587368.2	Resemble Channel	No
Northing	6005869	Backwatered	No
Stream	Tributary to Gosnell Creek	Percent Backwatered	–
Road	6 Road	Fill Depth (m)	7
Road Tenure	Canfor R07593	Outlet Drop (m)	0
Channel Width (m)	0.8	Outlet Pool Depth (m)	0
Stream Slope (%)	6.5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	8
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197991. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Outlet drop 0.3m. Outlet buried with rip rap fallen from road and surrounding armour.			
	•		-

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197992	Diameter (m)	0.9
External ID	2021090161	Length (m)	30
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	587307.6	Resemble Channel	No
Northing	6005830	Backwatered	No
Stream	Tributary to Gosnell Creek	Percent Backwatered	–
Road	6 Road	Fill Depth (m)	2
Road Tenure	Canfor R07593	Outlet Drop (m)	0
Channel Width (m)	0.5	Outlet Pool Depth (m)	0
Stream Slope (%)	6	Inlet Drop	No
Beaver Activity	No	Slope (%)	10
Habitat Value	Low	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197992. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Very close to previous. Very small channelled stream, trickling. 15:51			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197993		Diameter (m)	28
External ID	14000494		Length (m)	7
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	588957.4		Resemble Channel	-
Northing	6007081		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197993. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 16:13			
	Sept 1, 2021 at 16:13:58 +54.203045,-127.635001		Sept 1, 2021 at 16:13:58 +54.204043,-127.635001
	Sept 1, 2021 at 16:13:58 +54.204043,-127.635001		Sept 1, 2021 at 16:13:58 +54.204043,-127.635001
	Sept 1, 2021 at 16:13:58 +54.204043,-127.635001		Sept 1, 2021 at 16:13:58 +54.204043,-127.635001

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197994	Diameter (m)	0.9
External ID	14000481	Length (m)	16
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	589783.6	Resemble Channel	No
Northing	6007798	Backwatered	Yes
Stream	Tributary to Gosnell Creek	Percent Backwatered	10
Road	6 Road	Fill Depth (m)	1
Road Tenure	Canfor R07593	Outlet Drop (m)	0
Channel Width (m)	1.1	Outlet Pool Depth (m)	0.15
Stream Slope (%)	6	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 197994. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: Very recently logged upstream and downstream. 16:23	
 Sep 1, 2021 at 16:23:24 -54.210432,-127.628106	 Sep 1, 2021 at 16:23:25 -54.210432,-127.628106
 Sep 1, 2021 at 16:23:26 -54.210432,-127.628106	 Sep 1, 2021 at 16:23:26 -54.210432,-127.628106
 Sep 1, 2021 at 16:23:27 -54.210432,-127.628106	 Sep 1, 2021 at 16:23:27 -54.210432,-127.628106

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Round Culvert
PSCIS ID	197995		Diameter (m)	2.2
External ID	14000486		Length (m)	25
Crew	KP		Embedded	Yes
UTM Zone	9		Depth Embedded (m)	0.75
Easting	590552.1		Resemble Channel	Yes
Northing	6008295		Backwatered	No
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	1.5
Road Tenure	Canfor R07593		Outlet Drop (m)	0
Channel Width (m)	0.8		Outlet Pool Depth (m)	0.2
Stream Slope (%)	6.5		Inlet Drop	No
Beaver Activity	No		Slope (%)	3
Habitat Value	Medium		Valley Fill	Deep Fill
Final score	13		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197995. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Estimated length, missed in field. All culverts on road were >20m due to size of road. 16:37			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197996		Diameter (m)	22
External ID	14000487		Length (m)	6
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	590985		Resemble Channel	-
Northing	6008508		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197996. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Check utm. 16:52			
	•		-
	•		-
	•		-

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197997		Diameter (m)	11
External ID	14000492		Length (m)	6
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	591945.7		Resemble Channel	-
Northing	6008758		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197997. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 17:00			
NO IMAGE AVAILABLE			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-01	Crossing Sub Type	Round Culvert
PSCIS ID	197998	Diameter (m)	1.5
External ID	14000507	Length (m)	24
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	593237.3	Resemble Channel	No
Northing	6009679	Backwatered	No
Stream	Tributary to Gosnell Creek	Percent Backwatered	—
Road	6 Road	Fill Depth (m)	1
Road Tenure	Canfor R07593	Outlet Drop (m)	0
Channel Width (m)	1.8	Outlet Pool Depth (m)	0.15
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

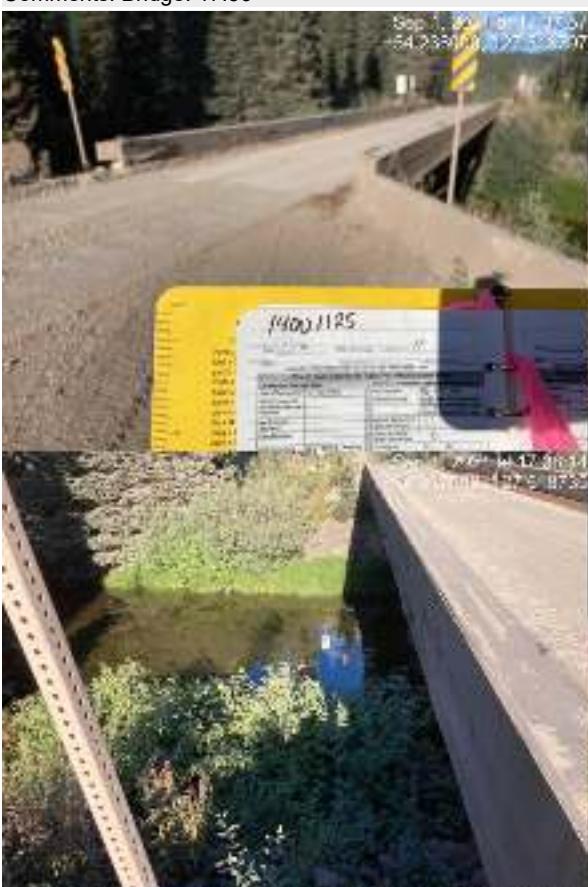
Photos: PSCIS ID 197998. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Channel dry upstream. 3 toads in outlet pool. 17:12			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-01		Crossing Sub Type	Bridge
PSCIS ID	197999		Diameter (m)	35
External ID	14001125		Length (m)	6
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	598080.8		Resemble Channel	-
Northing	6016791		Backwatered	-
Stream	Tributary to Gosnell Creek		Percent Backwatered	-
Road	6 Road		Fill Depth (m)	-
Road Tenure	Canfor R10645		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 197999. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 17:36			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Oval Culvert
PSCIS ID	198000	Diameter (m)	3.9
External ID	14001161	Length (m)	16
Crew	KP AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605511	Resemble Channel	No
Northing	5992667	Backwatered	No
Stream	McBride Creek	Percent Backwatered	—
Road	Nanika FSR	Fill Depth (m)	0.8
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0.05
Channel Width (m)	9	Outlet Pool Depth (m)	0.8
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	19	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	14

Photos: PSCIS ID 198000. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Laser level for slope. Channel width difficult to measure due to vegetation. 9:43			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	198001	Diameter (m)	11
External ID	14000576	Length (m)	5
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	602436.9	Resemble Channel	-
Northing	5984669	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Canfor R06951	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198001. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:08			
			

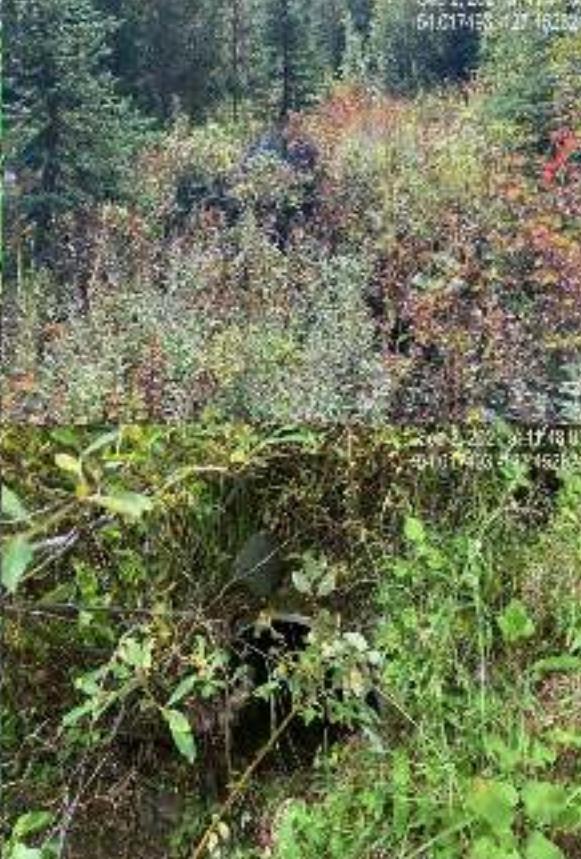
Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198002	Diameter (m)	1
External ID	14001009	Length (m)	16
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	602775.8	Resemble Channel	No
Northing	5984983	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	–
Road	9 Road	Fill Depth (m)	1
Road Tenure	Canfor R06951	Outlet Drop (m)	0
Channel Width (m)	0.5	Outlet Pool Depth (m)	0.22
Stream Slope (%)	8	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198002. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel, difficult to locate channel upstream. Inlet drop 0.3m. Appears it could be backwatered when there is flow. Outlet partially embedded on <3m in. 11:22			
	Sep 2, 2021 at 11:22:55 -54.032618, -127.431953		Sep 2, 2021 at 11:29:45 -54.03058, -127.431953
	Sep 2, 2021 at 11:37:41 -54.032935, -127.431953		Sep 2, 2021 at 11:39:15 -54.03058, -127.431953
	Sep 2, 2021 at 11:39:22 -54.032935, -127.431953		Sep 2, 2021 at 11:39:22 -54.03058, -127.431953

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198003	Diameter (m)	0.6
External ID	14000582	Length (m)	20
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	601366.6	Resemble Channel	No
Northing	5986580	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	–
Road	Nanika FSR	Fill Depth (m)	1
Road Tenure	Canfor R06951	Outlet Drop (m)	0.1
Channel Width (m)	0.5	Outlet Pool Depth (m)	0.2
Stream Slope (%)	5	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198003. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Poorly defined channel unlikely fish habitat. Dry. 11:45			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	198004	Diameter (m)	17
External ID	14001163	Length (m)	6
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	603640	Resemble Channel	-
Northing	5988349	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Nanika FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 4656	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198004. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 12:02			
	Sep 2, 2021 at 12:02:27 54.032725,-127.47513		Sep 2, 2021 at 12:02:31 54.032829,-127.47513
	Sep 2, 2021 at 12:02:39 54.032899,-127.47513		Sep 2, 2021 at 12:02:41 54.032911,-127.47513
NO IMAGE AVAILABLE			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198005	Diameter (m)	1.2
External ID	14001078	Length (m)	10
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	605308	Resemble Channel	No
Northing	5987254	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	–
Road	Spur	Fill Depth (m)	0.5
Road Tenure	Canfor R06951	Outlet Drop (m)	0
Channel Width (m)	0.8	Outlet Pool Depth (m)	0
Stream Slope (%)	4	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3
Habitat Value	Low	Valley Fill	Deep Fill
Final score	20	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

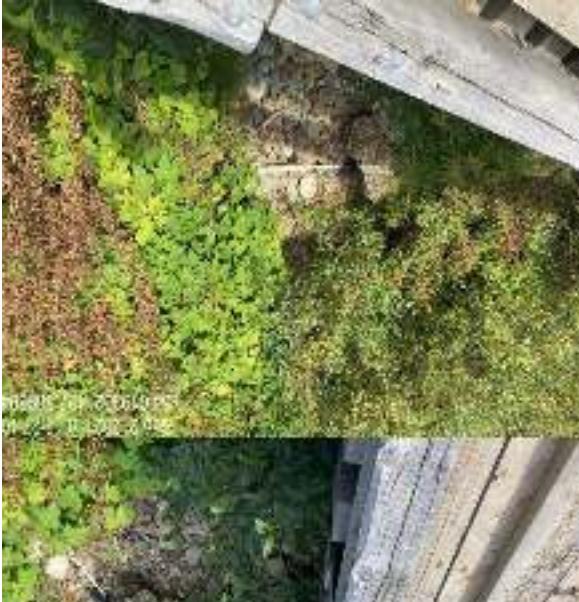
Photos: PSCIS ID 198005. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel, stream slope estimated. Outlet drop .15m. 12:12			
	Sep 2 2021 at 12:14:05 +54.023560,-127.592900		Sep 2 2021 at 12:16:19 +54.023761,-127.592518
	Sep 2 2021 at 12:16:20 +54.023761,-127.592517		Sep 2 2021 at 12:17:28 +54.023761,-127.592518
	Sep 2 2021 at 12:17:29 +54.023761,-127.592517		

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	198006	Diameter (m)	10
External ID	14001080	Length (m)	5
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	605496.7	Resemble Channel	-
Northing	5986870	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Unknown	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198006. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	.	Crossing Characteristics	-
Comments: Location much different than map. 12:25			
			 <p>Sep 8, 2021 at 15:26:00 -44.049240, -123.38373</p>

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198007	Diameter (m)	0.6
External ID	14001077	Length (m)	10
Crew	KP	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.2
Easting	605389	Resemble Channel	No
Northing	5986595	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	–
Road	Spur	Fill Depth (m)	0.5
Road Tenure	Canfor R06951	Outlet Drop (m)	0.1
Channel Width (m)	1	Outlet Pool Depth (m)	0.15
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198007. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry, hard to see channel. More of a maintenance culvert, completed due to fish data upstream. No real channel. Embedment is fines more erosional deposit. 12:30			
		NO IMAGE AVAILABLE	
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198008	Diameter (m)	0.9
External ID	14000865	Length (m)	11
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	606426.2	Resemble Channel	No
Northing	5986782	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	–
Road	Spur	Fill Depth (m)	0.2
Road Tenure	Canfor R10644	Outlet Drop (m)	0.18
Channel Width (m)	1.8	Outlet Pool Depth (m)	0.6
Stream Slope (%)	7	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	6
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198008. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Stream has good flow, well developed channel. 12:50			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198009	Diameter (m)	0.9
External ID	14000535	Length (m)	14
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	599263.7	Resemble Channel	No
Northing	5984699	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	—
Road	1 Road	Fill Depth (m)	0.75
Road Tenure	Canfor R08817	Outlet Drop (m)	0.8
Channel Width (m)	1	Outlet Pool Depth (m)	0.15
Stream Slope (%)	8	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	33	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198009. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	Crossing Characteristics
Comments: Channel dry , hard to find. Unlikely fish habitat. Culvert deformed. 14:35	
 Sep 2 2011 14:35 -64.030889-100.485667	 Sep 2 2011 14:35 -64.030889-100.485667
 Sep 2 2011 14:35 -64.030889-100.485667	 P100635

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Bridge
PSCIS ID	198010	Diameter (m)	26
External ID	14000450	Length (m)	5
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	599516.3	Resemble Channel	-
Northing	5985582	Backwatered	-
Stream	Tributary to Nanika River	Percent Backwatered	-
Road	4 Road	Fill Depth (m)	-
Road Tenure	FLNR DND 4656	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198010. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:47			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198011	Diameter (m)	1.6
External ID	14000443	Length (m)	22
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	599738.2	Resemble Channel	No
Northing	5986409	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	—
Road	4 Road	Fill Depth (m)	2.5
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0.4
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.7
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	6
Habitat Value	Low	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198011. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel. Another culvert ~5m away, higher and smaller for flood or overflow. Outlet pool big, stream experiences high seasonal variation. 15:03			
			
			

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198012	Diameter (m)	1.2
External ID	14001052	Length (m)	14
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	-
Easting	604443.1	Resemble Channel	No
Northing	5995222	Backwatered	No
Stream	Tributary to McBride River	Percent Backwatered	-
Road	Morice FSR	Fill Depth (m)	0.2
Road Tenure	Canfor R10640	Outlet Drop (m)	0
Channel Width (m)	1.2	Outlet Pool Depth (m)	0
Stream Slope (%)	0.5	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	0.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	13	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198012. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Beaver clogged inlet, with potentially a beaver lodge built on it. No water flowing through. Culvert broken in several places. Looks like old beaver fence on inlet, not effective. Large wetland upstream and downstream. 16:02			
			

Location and Stream Data		•	Crossing Characteristics	–
Date	2021-09-02		Crossing Sub Type	Round Culvert
PSCIS ID	198013		Diameter (m)	0.7
External ID	14000777		Length (m)	13
Crew	KP		Embedded	No
UTM Zone	9		Depth Embedded (m)	–
Easting	605157		Resemble Channel	Yes
Northing	5994783		Backwatered	Yes
Stream	Tributary to McBride River		Percent Backwatered	100
Road	Morice FSR		Fill Depth (m)	0.5
Road Tenure	FLNR DND 4656		Outlet Drop (m)	0
Channel Width (m)	0.7		Outlet Pool Depth (m)	0
Stream Slope (%)	0.5		Inlet Drop	No
Beaver Activity	No		Slope (%)	0.5
Habitat Value	Medium		Valley Fill	Deep Fill
Final score	13		Barrier Result	Passable
Fix type	–		Fix Span / Diameter	–

Photos: PSCIS ID 198013. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Wetland like habitat above and below, culvert is made of wood but intact. Damage on top of culvert on outlet (missing plank). 16:24			
	Sep 2, 2021 at 16:25:01 +54.000278,-127.392240		Sep 2, 2021 at 16:25:18 +54.000189,-127.392221
	Sep 2, 2021 at 16:26:01 +54.000430,-127.392200		Sep 2, 2021 at 16:26:01 +54.000430,-127.392200
	Sep 2, 2021 at 16:26:01 +54.000430,-127.392200		Sep 2, 2021 at 16:26:01 +54.000430,-127.392200

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-02		Crossing Sub Type	Round Culvert
PSCIS ID	198014		Diameter (m)	0.9
External ID	14000779		Length (m)	10
Crew	KP		Embedded	No
UTM Zone	9		Depth Embedded (m)	-
Easting	605675		Resemble Channel	Yes
Northing	5993744		Backwatered	No
Stream	Tributary to McBride River		Percent Backwatered	-
Road	Morice FSR		Fill Depth (m)	0.3
Road Tenure	FLNR DND 4656		Outlet Drop (m)	0
Channel Width (m)	0.9		Outlet Pool Depth (m)	0
Stream Slope (%)	0.5		Inlet Drop	No
Beaver Activity	No		Slope (%)	0.5
Habitat Value	Medium		Valley Fill	Deep Fill
Final score	13		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198014. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Wetland habitat on both sides of crossing. Inlet hard to find, has major vegetation growth coming out of it and is ~1m higher than upstream substrate. Channel dry, likely backwatered for spring flow. 16:38			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198015	Diameter (m)	13
External ID	14000565	Length (m)	4
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	608574.3	Resemble Channel	-
Northing	6022389	Backwatered	-
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	West Fraser R05232	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198015. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:20			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198016	Diameter (m)	1.2
External ID	14000562	Length (m)	25
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	608138.1	Resemble Channel	No
Northing	6020911	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	–
Road	Chisholm FSR	Fill Depth (m)	4.5
Road Tenure	West Fraser R05232	Outlet Drop (m)	0.19
Channel Width (m)	1.3	Outlet Pool Depth (m)	0
Stream Slope (%)	10	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198016. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Inlet drop 0.07m. Nice flowing stream. Lots of fill. Rocks at outlet increase challenge for upstream movement. 11:38			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198017	Diameter (m)	25
External ID	14000702	Length (m)	5
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	607585	Resemble Channel	-
Northing	6016381	Backwatered	-
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9946	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198017. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:22			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198018	Diameter (m)	11
External ID	14000685	Length (m)	4
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	607509	Resemble Channel	-
Northing	6013247	Backwatered	-
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9946	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198018. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:33			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198019	Diameter (m)	1
External ID	14000669	Length (m)	12
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	607690.2	Resemble Channel	No
Northing	6012189	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	–
Road	Chisholm FSR	Fill Depth (m)	2.5
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0.12
Channel Width (m)	1.6	Outlet Pool Depth (m)	0.5
Stream Slope (%)	5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	4.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198019. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Initially ~1.6m channel, then ~40m upstream goes underground and channel down to 1.1 or 0.9m. Inlet drop ~0.25m in front of inlet. Culvert slope challenging due to angle and deformed middle of culvert. 14:46			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198020	Diameter (m)	0.6
External ID	14000688	Length (m)	16
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	614148.2	Resemble Channel	No
Northing	6008425	Backwatered	No
Stream	Tributary to Thault River	Percent Backwatered	—
Road	Chisholm FSR	Fill Depth (m)	2.5
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0
Channel Width (m)	0	Outlet Pool Depth (m)	0
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198020. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: No channel found downstream. Not fish habitat. No channel upstream either. 15:28			
			
NO IMAGE AVAILABLE			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-03		Crossing Sub Type	Bridge
PSCIS ID	198021		Diameter (m)	17
External ID	14000546		Length (m)	4
Crew	KP		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	614944.7		Resemble Channel	-
Northing	6010129		Backwatered	-
Stream	Tagit Creek		Percent Backwatered	-
Road	Spur		Fill Depth (m)	-
Road Tenure	FLNR DND 9946		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198021. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 15:52			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198022	Diameter (m)	1
External ID	14001769	Length (m)	11
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	614711.5	Resemble Channel	No
Northing	6009971	Backwatered	Yes
Stream	Tributary to Tagit Creek	Percent Backwatered	10
Road	5 Road	Fill Depth (m)	2
Road Tenure	Resource	Outlet Drop (m)	0
Channel Width (m)	1.4	Outlet Pool Depth (m)	0.3
Stream Slope (%)	4.5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198022. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: No beaver activity observed but suspected beaver dam upstream due to slow/low flow, and reddish brown algae observed at other beaver site. Inlet drop 0.27. Backwatered a little with pool downstream. Slope tough due to big bend in middle of culvert. 16:04			
	2021-09-03, 16:04 SU 814711 600000E		2021-09-03, 16:10 SU 814711 600000E
	2021-09-03, 16:10 SU 814711 600000E		
	2021-09-03, 16:10 SU 814711 600000E		

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198023	Diameter (m)	12
External ID	14001103	Length (m)	4
Crew	KP	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	614567.8	Resemble Channel	–
Northing	6008396	Backwatered	–
Stream	Tributary to Tagit Creek	Percent Backwatered	–
Road	5 Road	Fill Depth (m)	–
Road Tenure	FLNR DND 9946	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 198023. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 16:25			
			
			
			

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198024	Diameter (m)	10
External ID	14001175	Length (m)	4
Crew	KP	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	620580.2	Resemble Channel	–
Northing	6010857	Backwatered	–
Stream	Tributary to Tagit Creek	Percent Backwatered	–
Road	False Tagit FSR	Fill Depth (m)	–
Road Tenure	FLNR DND 9946	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 198024. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 16:59			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198025	Diameter (m)	12
External ID	14000677	Length (m)	4
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	619787.9	Resemble Channel	-
Northing	6008369	Backwatered	-
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9946	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198025. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 17:13			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198026	Diameter (m)	0.5
External ID	14000697	Length (m)	13
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	620771.3	Resemble Channel	No
Northing	6007645	Backwatered	No
Stream	Tributary to Thault River	Percent Backwatered	—
Road	Chisholm FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0.05
Channel Width (m)	0.7	Outlet Pool Depth (m)	0.12
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Low	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198026. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics	-
Comments: Dry channel. Upstream channel not well defined. Slope of stream estimated. Unlikely fish bearing. 17:20		

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-03	Crossing Sub Type	Bridge
PSCIS ID	198027	Diameter (m)	10
External ID	14000692	Length (m)	4
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	625143.8	Resemble Channel	-
Northing	6007956	Backwatered	-
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Chisholm FSR	Fill Depth (m)	-
Road Tenure	FLNR DND 9946	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198027. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 17:38			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198028	Diameter (m)	1.2
External ID	14000683	Length (m)	17
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	627065	Resemble Channel	No
Northing	6008380	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	—
Road	Chisholm FSR	Fill Depth (m)	2
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0.12
Channel Width (m)	1.1	Outlet Pool Depth (m)	0.17
Stream Slope (%)	5	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198028. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: No water flowing however pools of stagnant water throughout. Culvert bent in the middle and appears to have some substrate and stagnant water in the middle. 17:49			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-03	Crossing Sub Type	Round Culvert
PSCIS ID	198029	Diameter (m)	1
External ID	14000694	Length (m)	21
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	628708	Resemble Channel	No
Northing	6009766	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	–
Road	Chisholm FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 9946	Outlet Drop (m)	0
Channel Width (m)	0.9	Outlet Pool Depth (m)	0
Stream Slope (%)	7	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198029. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel, upstream slope estimated. Inlet drop 0.2m. Culvert slope difficult to get due to misshapen structure. Outlet embedded a little bit. 18:09			
			

Location and Stream Data		Crossing Characteristics	
	•		-
Date	2021-08-11	Crossing Sub Type	Round Culvert
PSCIS ID	198030	Diameter (m)	0.7
External ID	14000823	Length (m)	12
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	-
Easting	623571	Resemble Channel	No
Northing	6001711	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	-
Road	Morice FSR	Fill Depth (m)	1.5
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0.05
Channel Width (m)	1	Outlet Pool Depth (m)	0.45
Stream Slope (%)	15	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198030. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Water flowing in channel up and down stream.			
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
			

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-05	Crossing Sub Type	Ford
PSCIS ID	198031	Diameter (m)	-
External ID	1801166	Length (m)	-
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	675438.9	Resemble Channel	-
Northing	6044630	Backwatered	-
Stream	Cesford Creek	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198031. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 13:01			
			
			

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-05	Crossing Sub Type	Ford
PSCIS ID	198032	Diameter (m)	–
External ID	1801165	Length (m)	–
Crew	KP	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	675402	Resemble Channel	–
Northing	6044909	Backwatered	–
Stream	McRea Creek	Percent Backwatered	–
Road	Spur	Fill Depth (m)	–
Road Tenure	Unclassified	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 198032. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 13:21			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198033	Diameter (m)	0.4
External ID	14000395	Length (m)	11
Crew	KP AI VJ TP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605863.8	Resemble Channel	No
Northing	6023574	Backwatered	Yes
Stream	Tributary to Gabriel Creek	Percent Backwatered	50
Road	Thautil FSR	Fill Depth (m)	1.5
Road Tenure	West Fraser R03753	Outlet Drop (m)	0
Channel Width (m)	0.67	Outlet Pool Depth (m)	0
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	1.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198033. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Small stream, trickling at current water level. 11:44			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198034	Diameter (m)	0.9
External ID	14000994	Length (m)	17
Crew	KP AI VJ TP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	603815	Resemble Channel	No
Northing	6009562	Backwatered	No
Stream	Tributary to Thaultil River	Percent Backwatered	—
Road	Thaultil FSR	Fill Depth (m)	4
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0.34
Channel Width (m)	0.6	Outlet Pool Depth (m)	0.31
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	28	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198034. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Upstream sedge wetland looking habitat with distinct narrow channel. Outlet drop, and small pool. Small vegetation embedment. Stream trickling. Similar sedge / wetland habitat downstream. 16:46			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198035	Diameter (m)	1
External ID	14000398	Length (m)	13
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605437	Resemble Channel	No
Northing	6021867	Backwatered	No
Stream	Tributary to Gabriel Creek	Percent Backwatered	—
Road	Thautil FSR	Fill Depth (m)	2
Road Tenure	West Fraser R03753	Outlet Drop (m)	0.18
Channel Width (m)	1.17	Outlet Pool Depth (m)	0.26
Stream Slope (%)	6	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	28	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198035. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel. 13:53			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198036	Diameter (m)	0.9
External ID	14000377	Length (m)	24
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	606924.1	Resemble Channel	No
Northing	6020704	Backwatered	No
Stream	Tributary to Thaultil River	Percent Backwatered	—
Road	Thaultil FSR	Fill Depth (m)	4.5
Road Tenure	West Fraser R03753	Outlet Drop (m)	1.1
Channel Width (m)	1.9	Outlet Pool Depth (m)	0.55
Stream Slope (%)	8	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	6
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198036. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Fish sighted in outlet pool. Nice little stream, some habitat value. Water flowing below culvert a little. 14:32  	•		-

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198037	Diameter (m)	0.6
External ID	14000375	Length (m)	12
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	605796.6	Resemble Channel	No
Northing	6016997	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	–
Road	Thautil FSR	Fill Depth (m)	0.3
Road Tenure	West Fraser R03753	Outlet Drop (m)	0
Channel Width (m)	0.65	Outlet Pool Depth (m)	0
Stream Slope (%)	4.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	18	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198037. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel. Upstream channel runs parallel to road, not well defined channel, appears very ephemeral. Downstream channel much more defined. Outlet partially embedded. 15:16			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198038	Diameter (m)	0.6
External ID	14000382	Length (m)	11
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	604924	Resemble Channel	No
Northing	6014325	Backwatered	No
Stream	Tributary to Thaultil River	Percent Backwatered	—
Road	Thaultil FSR	Fill Depth (m)	1
Road Tenure	West Fraser R03753	Outlet Drop (m)	0.17
Channel Width (m)	0.7	Outlet Pool Depth (m)	0.48
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Low	Valley Fill	Deep Fill
Final score	28	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198038. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel. Upstream channel heavily vegetated and goes below mossy structure 5m towards inlet. Outlet damaged and slightly misshapen. Large outlet pool but still minimal channel downstream that is partially vegetated, and goes under moss. Culvert slope estimated afterwards as not recorded in field. 15:45			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198039	Diameter (m)	0.9
External ID	14000379	Length (m)	28
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	604834.9	Resemble Channel	No
Northing	6012766	Backwatered	No
Stream	Tributary to Thaultil River	Percent Backwatered	—
Road	Thaultil FSR	Fill Depth (m)	5
Road Tenure	Canfor R07593	Outlet Drop (m)	1.6
Channel Width (m)	1.1	Outlet Pool Depth (m)	0.4
Stream Slope (%)	5	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198039. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Upstream channel is partially subsurface below mossy vegetation. Mostly dry with powder pools, huge OD. Downstream channel a bit bigger with larger pools. Creek not flowing. 16:11			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198040	Diameter (m)	0.9
External ID	14000882	Length (m)	14
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	607215.9	Resemble Channel	No
Northing	5997194	Backwatered	Yes
Stream	Tributary to Morice River	Percent Backwatered	100
Road	Spur	Fill Depth (m)	0.5
Road Tenure	Canfor R08826	Outlet Drop (m)	0
Channel Width (m)	0.9	Outlet Pool Depth (m)	0
Stream Slope (%)	0.5	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	1
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	18	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198040. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Culvert 100% covered by mud from beaver activity, otherwise would be flowing through backwatered. Outlet 100% backwatered almost covering culvert in water. Large wetland complex upstream. Infrastructure looks old and in poor shape, retaining wall / cement block tipping over on outlet. Slope estimated based on backwatered status. Additional culvert ~75m down the road to deal with flooding. 17:53			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-12	Crossing Sub Type	Bridge
PSCIS ID	198041	Diameter (m)	11
External ID	1802760	Length (m)	3
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	640551.2	Resemble Channel	-
Northing	6053250	Backwatered	-
Stream	Deep Creek	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198041. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: Old rail can deck, now bridge. Owner says nothing else downstream. 8:55	
	

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-12	Crossing Sub Type	Concrete Box
PSCIS ID	198042	Diameter (m)	2.8
External ID	1805553	Length (m)	14
Crew	KP	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.1
Easting	611695.8	Resemble Channel	Yes
Northing	6082109	Backwatered	No
Stream	Toboggan Creek	Percent Backwatered	–
Road	CN Railway	Fill Depth (m)	0.5
Road Tenure	Canadian National	Outlet Drop (m)	0
Channel Width (m)	11.5	Outlet Pool Depth (m)	0
Stream Slope (%)	0.25	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	0.2
Habitat Value	High	Valley Fill	Deep Fill
Final score	11	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 198042. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: 2 concrete box. Not backwatered but fully wetted due to slow flowing water. Stream slope estimated. Lake/wetland habitat upstream, flowing very slowly through, assuming the crossing is embedded or an open bottom. Appears to be fish friendly. Length was taken with rangefinder. 11:1			
			
			
			

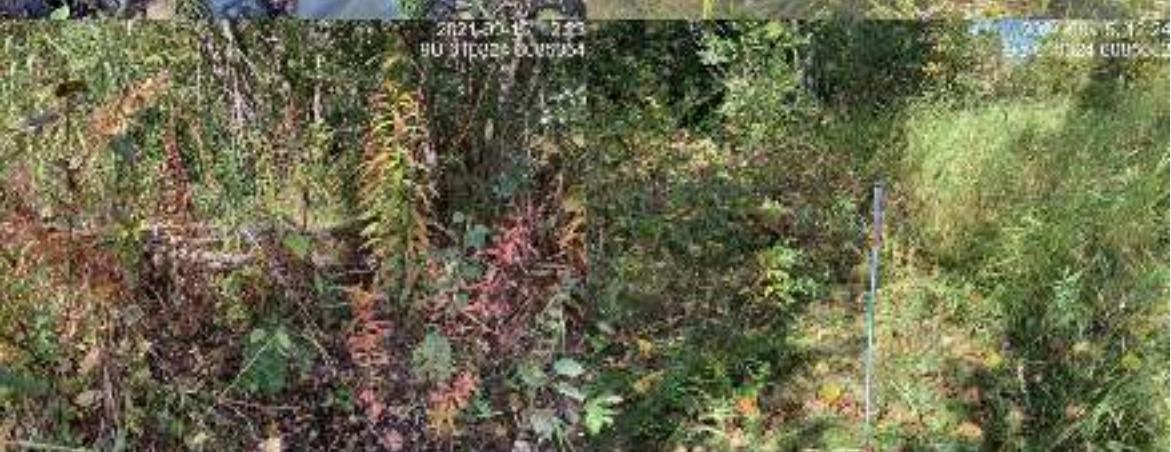
Location and Stream Data	.	Crossing Characteristics	-
Date	2021-09-14	Crossing Sub Type	Ford
PSCIS ID	198043	Diameter (m)	-
External ID	24704568	Length (m)	-
Crew	KP	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	605738.7	Resemble Channel	-
Northing	6096763	Backwatered	-
Stream	John Brown	Percent Backwatered	-
Road	Powerline	Fill Depth (m)	-
Road Tenure	Unknown	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198043. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Ford. 12:47			
2021-09-14, 12:47 011-605083-07487-10		2021-09-14, 12:47 011-605083-07487-10	
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-15	Crossing Sub Type	Round Culvert
PSCIS ID	198044	Diameter (m)	0.1
External ID	1805573	Length (m)	15
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	610392.9	Resemble Channel	No
Northing	6084973	Backwatered	No
Stream	Tributary to Toboggan Creek	Percent Backwatered	—
Road	Railway	Fill Depth (m)	2
Road Tenure	Canadian National	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Low	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198044. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Crossing does not exist on railway. Site entered as a placeholder because there should be connection. Surveyed above and below modelled crossing. There is ephemeral channel upstream of the railway that is directed to go along the railway in ditch and quickly dissipates into shrubs and grasses. 12:19			
			
			
			

Location and Stream Data	•	Crossing Characteristics	–
Date	2021-09-15	Crossing Sub Type	Bridge
PSCIS ID	198045	Diameter (m)	13
External ID	1805549	Length (m)	6
Crew	KP AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	611345.1	Resemble Channel	–
Northing	6083669	Backwatered	–
Stream	Elliot Creek	Percent Backwatered	–
Road	CN Railway	Fill Depth (m)	–
Road Tenure	Canadian National	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	–	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Photos: PSCIS ID 198045. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	.	Crossing Characteristics	-
Comments: Bridge. 13:40			
  		NO IMAGE AVAILABLE	

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-16		Crossing Sub Type	Bridge
PSCIS ID	198046		Diameter (m)	6
External ID	2021091650		Length (m)	4
Crew	KP AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	589659		Resemble Channel	-
Northing	6123249		Backwatered	-
Stream	Tributary to Waterfall Creek		Percent Backwatered	-
Road	-		Fill Depth (m)	-
Road Tenure	Unknown		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198046. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 14:27			
			
			

Location and Stream Data	•	Crossing Characteristics	-
Date	2021-09-16	Crossing Sub Type	Ford
PSCIS ID	198047	Diameter (m)	-
External ID	1801773	Length (m)	-
Crew	DN	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	603432.1	Resemble Channel	-
Northing	6107844	Backwatered	-
Stream	Boulder Creek	Percent Backwatered	-
Road	Unnamed	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198047. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: No structure present.			
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198048	Diameter (m)	2.5
External ID	1800048	Length (m)	25
Crew	KP AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	674397.1	Resemble Channel	No
Northing	6043433	Backwatered	Yes
Stream	Cesford Creek	Percent Backwatered	30
Road	Highway 16	Fill Depth (m)	1
Road Tenure	MoTi Arterial	Outlet Drop (m)	0
Channel Width (m)	5.48	Outlet Pool Depth (m)	0.09
Stream Slope (%)	3.5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	1.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	24	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198048. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Habitat confirmation conducted. Two pipes (2.5m x 2.5m). Culvert slope measured with lazel level. Fish observed. Could not locate downstream crossing on railway. Garmin backroads mapbook shows stream connecting with side channel of the Bulkley. 9:17			
NO IMAGE AVAILABLE			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198049	Diameter (m)	3.7
External ID	1800193	Length (m)	21
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	674875.4	Resemble Channel	No
Northing	6043782	Backwatered	No
Stream	Cesford Creek	Percent Backwatered	—
Road	Highway 118	Fill Depth (m)	1
Road Tenure	MoTi Arterial	Outlet Drop (m)	0.5
Channel Width (m)	4.9	Outlet Pool Depth (m)	0.25
Stream Slope (%)	2.83	Inlet Drop	No
Beaver Activity	No	Slope (%)	1.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	34	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

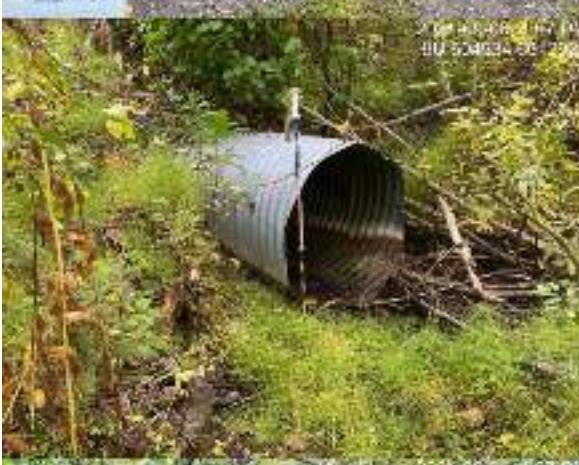
Photos: PSCIS ID 198049. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Habitat confirmation conducted. ~110mm fish observed in outlet pool. Culvert slope surveyed with lazer level. 8:37			
	•		-
	•		-
	•		-

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198050	Diameter (m)	0.9
External ID	14000394	Length (m)	20
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	604924.2	Resemble Channel	No
Northing	6012912	Backwatered	No
Stream	Tributary to Thaultil River	Percent Backwatered	–
Road	Thaultil FSR	Fill Depth (m)	2
Road Tenure	West Fraser R03753	Outlet Drop (m)	0.4
Channel Width (m)	0.9	Outlet Pool Depth (m)	0.3
Stream Slope (%)	6	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198050. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: ID is 2021090601 in the photos. 16:03			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198051	Diameter (m)	0.6
External ID	14001409	Length (m)	11
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	604621.6	Resemble Channel	No
Northing	6012796	Backwatered	No
Stream	Tributary to Thault River	Percent Backwatered	—
Road	Spur	Fill Depth (m)	1
Road Tenure	Canfor R04078	Outlet Drop (m)	0
Channel Width (m)	1.3	Outlet Pool Depth (m)	0
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198051. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry, difficult to find the channel upstream. 16:30			
			
			
			

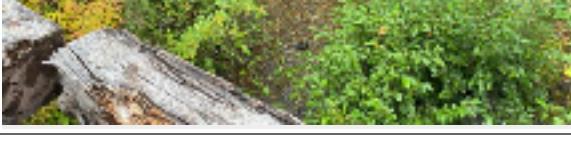
Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198052	Diameter (m)	0.4
External ID	14001468	Length (m)	12
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	604616.4	Resemble Channel	No
Northing	6010547	Backwatered	No
Stream	Tributary to Thault River	Percent Backwatered	—
Road	Spur	Fill Depth (m)	1
Road Tenure	Unclassified	Outlet Drop (m)	0
Channel Width (m)	0.5	Outlet Pool Depth (m)	0
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198052. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Cannot locate outlet. Not likely fish habitat. Seasonal wetland. 17:00			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-06		Crossing Sub Type	Bridge
PSCIS ID	198053		Diameter (m)	8
External ID	14000399		Length (m)	5
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	604826		Resemble Channel	-
Northing	6022653		Backwatered	-
Stream	Tributary to Gabriel Creek		Percent Backwatered	-
Road	Thautil FSR		Fill Depth (m)	-
Road Tenure	West Fraser R03753		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198053. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 13:22			
			
	2021-08-08, 1:24 PM 9U 604833 6022618		
	2021-08-08, 1:24 PM 9U 604833 6022618		
	2021-08-08, 1:24 PM 9U 604833 6022618		

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-06		Crossing Sub Type	Bridge
PSCIS ID	198054		Diameter (m)	7
External ID	14001432		Length (m)	2
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	604342.5		Resemble Channel	-
Northing	6022072		Backwatered	-
Stream	Gabriel Creek		Percent Backwatered	-
Road	Thautil FSR		Fill Depth (m)	-
Road Tenure	Canfor R07593		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198054. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 13:24			
NO IMAGE AVAILABLE		 A photograph showing a bridge crossing over a stream, surrounded by dense green vegetation. The bridge appears to be made of concrete or stone and is partially obscured by the surrounding trees and bushes. The water of the stream is visible at the base of the bridge.	
NO IMAGE AVAILABLE			
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
NO IMAGE AVAILABLE			
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
NO IMAGE AVAILABLE			

Location and Stream Data	*	Crossing Characteristics	-
Date	2021-09-06	Crossing Sub Type	Oval Culvert
PSCIS ID	198055	Diameter (m)	0.9
External ID	14000381	Length (m)	15
Crew	AI VJ TP	Embedded	No
UTM Zone	9	Depth Embedded (m)	-
Easting	606100.2	Resemble Channel	No
Northing	6017301	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Thautil FSR	Fill Depth (m)	1.5
Road Tenure	West Fraser R03753	Outlet Drop (m)	0.25
Channel Width (m)	1.1	Outlet Pool Depth (m)	0
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	1
Habitat Value	Low	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198055. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Unlikely fish habitat. Culvert pool does not drain into obvious channel most likely wetlands. 14:45			
	•		-

Location and Stream Data	*	Crossing Characteristics	-
Date	2021-09-06	Crossing Sub Type	Oval Culvert
PSCIS ID	198056	Diameter (m)	0.6
External ID	14000389	Length (m)	25
Crew	AI VJ TP	Embedded	No
UTM Zone	9	Depth Embedded (m)	-
Easting	604962.1	Resemble Channel	No
Northing	6015050	Backwatered	No
Stream	Tributary to Thautil River	Percent Backwatered	-
Road	Thautil FSR	Fill Depth (m)	4.5
Road Tenure	West Fraser R03753	Outlet Drop (m)	1.2
Channel Width (m)	1.8	Outlet Pool Depth (m)	0.45
Stream Slope (%)	9	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198056. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Small stream. Minimal flow - not dry. Steep downstream of culvert. 80cm steps, good gravels. 15:22			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198057	Diameter (m)	1.4
External ID	14000383	Length (m)	18
Crew	AI KP VJ TP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605307.1	Resemble Channel	No
Northing	6023040	Backwatered	No
Stream	Tributary to Gabriel Creek	Percent Backwatered	—
Road	Thautil FSR	Fill Depth (m)	3
Road Tenure	West Fraser R03753	Outlet Drop (m)	0
Channel Width (m)	3	Outlet Pool Depth (m)	0.75
Stream Slope (%)	3.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

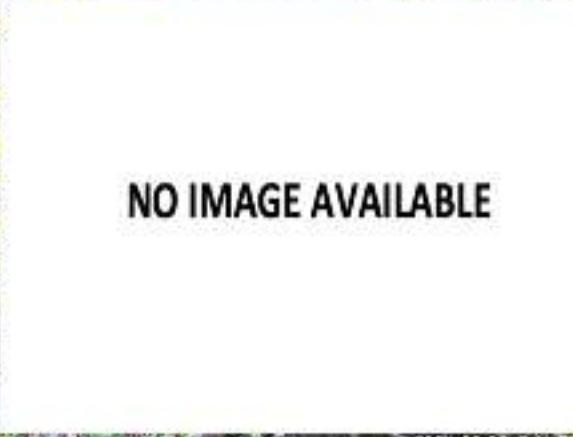
Photos: PSCIS ID 198057. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Waypoint WP381. 12:47			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198058	Diameter (m)	1
External ID	14000390	Length (m)	14
Crew	AI VJ TP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605778.6	Resemble Channel	No
Northing	6021673	Backwatered	No
Stream	Tributary to Gabriel Creek	Percent Backwatered	—
Road	Thautil FSR	Fill Depth (m)	1
Road Tenure	West Fraser R03753	Outlet Drop (m)	0.3
Channel Width (m)	1.5	Outlet Pool Depth (m)	0.2
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198058. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Very small amount of flow. Some good gravels. Multiple FISS sites downstream with velocity barrier noted. Non-fish? 13:54			
			
		 NO IMAGE AVAILABLE	
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198059	Diameter (m)	0.6
External ID	14000392	Length (m)	12
Crew	AI KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	605753.6	Resemble Channel	No
Northing	6023618	Backwatered	No
Stream	Tributary to Gabriel Creek	Percent Backwatered	—
Road	Thautil FSR	Fill Depth (m)	1.5
Road Tenure	West Fraser R03753	Outlet Drop (m)	0.62
Channel Width (m)	1.5	Outlet Pool Depth (m)	0.82
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198059. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Nice gravels. Some flow at this dry time of year. Small system with Dolly Varden noted downstream. 12:26			
 	NO IMAGE AVAILABLE		

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198060	Diameter (m)	0.6
External ID	14000718	Length (m)	16
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	643962	Resemble Channel	No
Northing	6001978	Backwatered	Yes
Stream	Tributary to Owen Creek	Percent Backwatered	100
Road	Morice-Owen FSR	Fill Depth (m)	0.7
Road Tenure	Unknown	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0.36
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	19	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198060. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Very nice gravels. Some flow. Passable currently but may by higher velocity at higher flows. 8:59			
	NO IMAGE AVAILABLE		
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-07		Crossing Sub Type	Pipe Arch
PSCIS ID	198061		Diameter (m)	50
External ID	14000796		Length (m)	5
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	637564.1		Resemble Channel	-
Northing	6007909		Backwatered	-
Stream	Fenton Creek		Percent Backwatered	-
Road	Morice-West FSR		Fill Depth (m)	-
Road Tenure	Resource		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198061. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: Pipe arch. Mis-labelled as 14000013 (upstream modelled crossing) which has been removed. 17:39	
	
	NO IMAGE AVAILABLE
	

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198062	Diameter (m)	0.95
External ID	14000991	Length (m)	19
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	623923	Resemble Channel	No
Northing	6005104	Backwatered	No
Stream	Tributary to Morice River	Percent Backwatered	–
Road	Morice-West FSR	Fill Depth (m)	2.3
Road Tenure	FLNR DND 9785	Outlet Drop (m)	0.3
Channel Width (m)	10	Outlet Pool Depth (m)	0.1
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	4
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	39	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	15

Photos: PSCIS ID 198062. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics	-
Comments: Upstream wetland appears shallow. Flown with drone. Could not locate inlet. Culvert damaged with 24cm tree lodged in it. Slope estimated as black barrel. 17:30		
		
		
		

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-09-08		Crossing Sub Type	Pipe Arch
PSCIS ID	198063		Diameter (m)	17
External ID	14000764		Length (m)	4
Crew	AI		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	609753		Resemble Channel	-
Northing	5992972		Backwatered	-
Stream	Tsiyuh Creek		Percent Backwatered	-
Road	Morice River FSR		Fill Depth (m)	-
Road Tenure	FLNR DND 4656		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198063. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Pipe arch. 12:33			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198064	Diameter (m)	1.6
External ID	14001094	Length (m)	14
Crew	KP AI TP VJ	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	623369	Resemble Channel	No
Northing	6000283	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	—
Road	Spur	Fill Depth (m)	1
Road Tenure	Canfor R05233	Outlet Drop (m)	0.54
Channel Width (m)	2.56	Outlet Pool Depth (m)	0.6
Stream Slope (%)	4.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198064. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics	-
Comments: Habitat confirmation conducted. Fish observed (150mm). Good flows when compared to many other streams. 9.25		
		

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-11	Crossing Sub Type	Round Culvert
PSCIS ID	198065	Diameter (m)	1.2
External ID	1800191	Length (m)	10
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	680197	Resemble Channel	No
Northing	6041647	Backwatered	No
Stream	Watson Creek	Percent Backwatered	—
Road	Montgomery Road	Fill Depth (m)	0.7
Road Tenure	MoTi Local	Outlet Drop (m)	0.13
Channel Width (m)	3	Outlet Pool Depth (m)	0.1
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198065. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Very low flow but channel is mostly watered. Abundant gravels and excellent vegetation cover. 15:58			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-12	Crossing Sub Type	Round Culvert
PSCIS ID	198066	Diameter (m)	1.3
External ID	1802488	Length (m)	6
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	640243.9	Resemble Channel	No
Northing	6048061	Backwatered	Yes
Stream	Thompson Creek	Percent Backwatered	95
Road	Private Road	Fill Depth (m)	0.2
Road Tenure	Unclassified	Outlet Drop (m)	0
Channel Width (m)	2.77	Outlet Pool Depth (m)	0.1
Stream Slope (%)	0.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.4
Habitat Value	High	Valley Fill	Deep Fill
Final score	16	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198066. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics
<p>Comments: Udder View Farm. Currently appears passable for all life stages and species but may present slight barrier at time of year when flow are high. Large outlet pool indicates that culvert is undersized. Landowners adjacent to the stream report that the channel was historically relocated through the fields near the river and they would like to work together to relocate. 16:48</p>	
	
	
	

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-09	Crossing Sub Type	Round Culvert
PSCIS ID	198067	Diameter (m)	0.95
External ID	14000804	Length (m)	13
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	620202	Resemble Channel	No
Northing	5998472	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	—
Road	Morce R FSR	Fill Depth (m)	0.5
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0.2
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.25
Stream Slope (%)	6	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198067. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Channel dry, Mainline - post code.			
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE

Location and Stream Data		Crossing Characteristics	
Date	2021-08-09	Crossing Sub Type	Round Culvert
PSCIS ID	198068	Diameter (m)	0.5
External ID	14000815	Length (m)	13
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	619989	Resemble Channel	No
Northing	5998259	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	–
Road	Morice R FSR	Fill Depth (m)	0.3
Road Tenure	FLNR DND 4656	Outlet Drop (m)	0.4
Channel Width (m)	0.8	Outlet Pool Depth (m)	0.5
Stream Slope (%)	2	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198068. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: down stream channel follows ditch line, dry channel.			
NO IMAGE AVAILABLE	•		-
NO IMAGE AVAILABLE	•		-
NO IMAGE AVAILABLE	•		-

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-09	Crossing Sub Type	Round Culvert
PSCIS ID	198069	Diameter (m)	0.8
External ID	14000256	Length (m)	9
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	616234.1	Resemble Channel	No
Northing	5998376	Backwatered	No
Stream	Tributary to Collins Lake	Percent Backwatered	—
Road	Morice Nado	Fill Depth (m)	0.3
Road Tenure	Unclassified	Outlet Drop (m)	0.05
Channel Width (m)	2.5	Outlet Pool Depth (m)	0.5
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198069. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: channel dry, old overgrown road, pooled after observed upslope of culvert			
NO IMAGE AVAILABLE			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-11		Crossing Sub Type	Bridge
PSCIS ID	198070		Diameter (m)	13
External ID	14001029		Length (m)	6
Crew	LRH DM		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	626238.6		Resemble Channel	-
Northing	6005131		Backwatered	-
Stream	Tributary to Lamprey Creek		Percent Backwatered	-
Road	7 Road		Fill Depth (m)	-
Road Tenure	Canfor R06460		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198070. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge, 2 layers of sediment/erosion control cloth on and adjacent to bridge - installation by pipeline company			
			
NO IMAGE AVAILABLE			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-09	Crossing Sub Type	Round Culvert
PSCIS ID	198071	Diameter (m)	0.8
External ID	14000022	Length (m)	6
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	616801	Resemble Channel	No
Northing	5998662	Backwatered	No
Stream	Tributary to Collins Lake	Percent Backwatered	—
Road	spur Morice Nado	Fill Depth (m)	1
Road Tenure	Unclassified	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198071. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics	-
Comments: stream diverted onto road for approximately 500m - between 'modelled crossing Ids' 1014000022 and 1014000256, remove structure and restore to original channel, old pre-code logging		
NO IMAGE AVAILABLE	 A black bear cub is seen from behind, walking away from the viewer into a large, light-colored culvert opening in a forest setting.	
 A view of a stream flowing through a dense forest. The water is clear and shallow, surrounded by green vegetation and fallen logs.	NO IMAGE AVAILABLE	
 A dense forest scene with various trees, shrubs, and undergrowth. A small stream or creek bed is visible in the lower part of the image.	NO IMAGE AVAILABLE	

Location and Stream Data		Crossing Characteristics	
Date	2021-08-10	Crossing Sub Type	Round Culvert
PSCIS ID	198072	Diameter (m)	0.9
External ID	14000892	Length (m)	16
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	620392.1	Resemble Channel	No
Northing	5991273	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	–
Road	Spur	Fill Depth (m)	2
Road Tenure	Canfor R10987	Outlet Drop (m)	0
Channel Width (m)	1	Outlet Pool Depth (m)	0
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	0
Habitat Value	Low	Valley Fill	Deep Fill
Final score	16	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198072. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel, Post Code			
			
			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-08-09	Crossing Sub Type	Ford
PSCIS ID	198073	Diameter (m)	-
External ID	14000322	Length (m)	-
Crew	LRH DM	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	616899.2	Resemble Channel	-
Northing	5998674	Backwatered	-
Stream	Tributary to Collins Lake	Percent Backwatered	-
Road	spur Morice Nado	Fill Depth (m)	-
Road Tenure	Resource	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Unknown
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198073. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	.	Crossing Characteristics	-
Comments: Deactivated road - no structure.			
			
		NO IMAGE AVAILABLE	
			
NO IMAGE AVAILABLE			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-10		Crossing Sub Type	Bridge
PSCIS ID	198074		Diameter (m)	9
External ID	14000967		Length (m)	5
Crew	LRH DM		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	624444.3		Resemble Channel	-
Northing	6002416		Backwatered	-
Stream	Tributary to Lamprey Creek		Percent Backwatered	-
Road	08 Road		Fill Depth (m)	-
Road Tenure	Unclassified		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198074. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: dry channel, post code. Width estimated.			
  	•		-

Location and Stream Data		Crossing Characteristics	
	•		-
Date	2021-08-09	Crossing Sub Type	Round Culvert
PSCIS ID	198075	Diameter (m)	0.6
External ID	14001624	Length (m)	9
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	0.05
Easting	618396.2	Resemble Channel	Yes
Northing	5996675	Backwatered	Yes
Stream	Tributary to Collins Lake	Percent Backwatered	50
Road	Spur	Fill Depth (m)	1
Road Tenure	Resource	Outlet Drop (m)	0
Channel Width (m)	0.65	Outlet Pool Depth (m)	0
Stream Slope (%)	10	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	18	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198075. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: dry channel, crossing takes the ditch line flow as well resulting in downstream channel being larger than upstream, post-code logging			
NO IMAGE AVAILABLE			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-10		Crossing Sub Type	Wood Box Culvert
PSCIS ID	198076		Diameter (m)	3
External ID	14000593		Length (m)	6
Crew	LRH DM		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	621807		Resemble Channel	-
Northing	5996215		Backwatered	-
Stream	Tributary to Lamprey Creek		Percent Backwatered	-
Road	Spur		Fill Depth (m)	-
Road Tenure	Canfor R05233		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198076. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Upstream channel contains some pooled water, up stream the stream is diverted down ditch line and over tops road 30m from old crossing. Pre Code logging. Span estimated.			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-10		Crossing Sub Type	Bridge
PSCIS ID	198077		Diameter (m)	13
External ID	24740003		Length (m)	5
Crew	LRH DM		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	622870.2		Resemble Channel	-
Northing	5988875		Backwatered	-
Stream	Tributary to Lamprey Creek		Percent Backwatered	-
Road	Bill Nye spur		Fill Depth (m)	-
Road Tenure	Unclassified		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198077. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: AI #03, post code recent build			
			
			
			

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-10		Crossing Sub Type	Bridge
PSCIS ID	198078		Diameter (m)	12
External ID	14000897		Length (m)	5
Crew	LRH DM		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	622108		Resemble Channel	-
Northing	5990680		Backwatered	-
Stream	Tributary to Lamprey Creek		Percent Backwatered	-
Road	Bill Nye spur		Fill Depth (m)	-
Road Tenure	Canfor R10987		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Passable
Fix type	-		Fix Span / Diameter	-

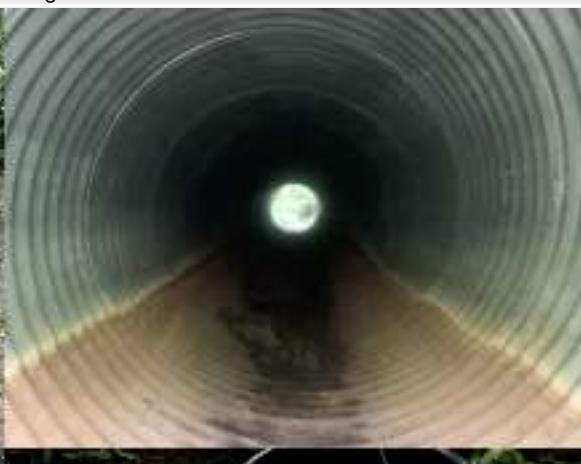
Photos: PSCIS ID 198078. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Post Code			
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE
NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE	NO IMAGE AVAILABLE

Location and Stream Data		Crossing Characteristics	
Date	2021-08-10	Crossing Sub Type	Round Culvert
PSCIS ID	198079	Diameter (m)	1
External ID	14000890	Length (m)	13
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	620641.4	Resemble Channel	No
Northing	5990771	Backwatered	Yes
Stream	Tributary to Lamprey Creek	Percent Backwatered	50
Road	Spur	Fill Depth (m)	1.5
Road Tenure	Canfor R10987	Outlet Drop (m)	0
Channel Width (m)	0.9	Outlet Pool Depth (m)	0
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	20	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198079. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Appendix - Phase 1 Fish Passage As...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Confirm fish value, small intermittent streams with high habitat values? Post Code			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-10	Crossing Sub Type	Round Culvert
PSCIS ID	198080	Diameter (m)	0.5
External ID	14000894	Length (m)	10
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	620681.5	Resemble Channel	No
Northing	5990583	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	–
Road	Spur	Fill Depth (m)	1
Road Tenure	Canfor R10987	Outlet Drop (m)	0
Channel Width (m)	0.6	Outlet Pool Depth (m)	0.2
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	23	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198080. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Channel has ponded water/wetland up and down stream - Post Code			
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
			

Location and Stream Data		Crossing Characteristics	
Date	2021-08-10	Crossing Sub Type	Round Culvert
PSCIS ID	198081	Diameter (m)	1
External ID	14000592	Length (m)	13
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	620084.6	Resemble Channel	No
Northing	5994112	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	–
Road	07 Road	Fill Depth (m)	1
Road Tenure	Resource	Outlet Drop (m)	0.3
Channel Width (m)	1.6	Outlet Pool Depth (m)	0.55
Stream Slope (%)	5	Inlet Drop	No
Beaver Activity	No	Slope (%)	2
Habitat Value	Low	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198081. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	Crossing Characteristics
Comments: Inlet 35cm above channel, inlet and outlet damaged by cows, Post Code	
	
	
	

Location and Stream Data		Crossing Characteristics	
Date	2021-08-10	Crossing Sub Type	Round Culvert
PSCIS ID	198082	Diameter (m)	0.6
External ID	14001062	Length (m)	15
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	622408	Resemble Channel	No
Northing	5997287	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	–
Road	Bill Nye	Fill Depth (m)	1.5
Road Tenure	Canfor R05233	Outlet Drop (m)	0.1
Channel Width (m)	0.6	Outlet Pool Depth (m)	0.15
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	26	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198082. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: pooled water above crossing, pre code road, post code culvert			
	•		-

NO IMAGE AVAILABLE

Location and Stream Data		•	Crossing Characteristics	-
Date	2021-08-11		Crossing Sub Type	Ford
PSCIS ID	198083		Diameter (m)	-
External ID	14001112		Length (m)	-
Crew	LRH DM		Embedded	-
UTM Zone	9		Depth Embedded (m)	-
Easting	627288.6		Resemble Channel	-
Northing	6003665		Backwatered	-
Stream	Tributary to Lamprey Creek		Percent Backwatered	-
Road	11 Road		Fill Depth (m)	-
Road Tenure	Resource		Outlet Drop (m)	-
Channel Width (m)	-		Outlet Pool Depth (m)	-
Stream Slope (%)	-		Inlet Drop	-
Beaver Activity	-		Slope (%)	-
Habitat Value	-		Valley Fill	-
Final score	0		Barrier Result	Unknown
Fix type	-		Fix Span / Diameter	-

Photos: PSCIS ID 198083. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Deactivated spur, dry channel			
<p>NO IMAGE AVAILABLE</p> 			

Location and Stream Data	*	Crossing Characteristics	-
Date	2021-08-10	Crossing Sub Type	Oval Culvert
PSCIS ID	198084	Diameter (m)	1.5
External ID	14000968	Length (m)	14
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	-
Easting	623986	Resemble Channel	No
Northing	6001191	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	-
Road	Spur	Fill Depth (m)	1
Road Tenure	Canfor R05233	Outlet Drop (m)	0.15
Channel Width (m)	0.9	Outlet Pool Depth (m)	0.18
Stream Slope (%)	9	Inlet Drop	No
Beaver Activity	No	Slope (%)	7
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	25	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198084. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Water in channel (pooled) above and below, Post Code			
NO IMAGE AVAILABLE			
NO IMAGE AVAILABLE			
		NO IMAGE AVAILABLE	

Location and Stream Data		Crossing Characteristics	
Date	2021-08-11	Crossing Sub Type	Round Culvert
PSCIS ID	198085	Diameter (m)	0.9
External ID	14000799	Length (m)	13
Crew	LRH DM	Embedded	No
UTM Zone	9	Depth Embedded (m)	—
Easting	623422	Resemble Channel	No
Northing	6001388	Backwatered	No
Stream	Tributary to Lamprey Creek	Percent Backwatered	—
Road	Morice FSR	Fill Depth (m)	1
Road Tenure	FLNR DND 4656	Outlet Drop (m)	1.6
Channel Width (m)	1.4	Outlet Pool Depth (m)	0.3
Stream Slope (%)	8	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198085. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Flowing water in channel up and down stream, Inlet 75% blocked by debris and sediment			
			
NO IMAGE AVAILABLE			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2021-08-11	Crossing Sub Type	Round Culvert
PSCIS ID	198086	Diameter (m)	1.2
External ID	14001170	Length (m)	9
Crew	LRH DM	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.1
Easting	627520.8	Resemble Channel	Yes
Northing	6004423	Backwatered	Yes
Stream	Tributary to Lamprey Creek	Percent Backwatered	100
Road	spur (overgrown)	Fill Depth (m)	0.5
Road Tenure	Canfor R06460	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0
Stream Slope (%)	7	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	Low	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198086. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry channel			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2021-09-02	Crossing Sub Type	Round Culvert
PSCIS ID	198087	Diameter (m)	2
External ID	14000453	Length (m)	25
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	649728	Resemble Channel	No
Northing	6029328	Backwatered	No
Stream	Tributary to Nanika River	Percent Backwatered	–
Road	Cutthroat 1	Fill Depth (m)	1.5
Road Tenure	Houston Highway	Outlet Drop (m)	0.41
Channel Width (m)	1.9	Outlet Pool Depth (m)	0.6
Stream Slope (%)	6	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	7
Habitat Value	Low	Valley Fill	Deep Fill
Final score	33	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Photos: PSCIS ID 198087. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: At modelled crossing location but no map label. Dry. 15:25			
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-08-09	Crossing Sub Type	Bridge
PSCIS ID	198088	Diameter (m)	10
External ID	14000196	Length (m)	5
Crew	LRH DM	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	617726	Resemble Channel	-
Northing	5998774	Backwatered	-
Stream	Tributary to Collins Lake	Percent Backwatered	-
Road	Spur	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198088. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
Comments: old wooden bridge, overgrown failed into stream channel, not a barrier but providing structure for aquatics/fish, dry channel, old pre-code logging			
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
		NO IMAGE AVAILABLE	
			

Location and Stream Data	.	Crossing Characteristics	-
Date	2021-08-09	Crossing Sub Type	Wood Box Culvert
PSCIS ID	198089	Diameter (m)	0.9
External ID	14000217	Length (m)	9
Crew	LRH DM	Embedded	-
UTM Zone	9	Depth Embedded (m)	-
Easting	617051	Resemble Channel	-
Northing	5997021	Backwatered	-
Stream	Tributary to Collins Lake	Percent Backwatered	-
Road	Morice R FSR	Fill Depth (m)	-
Road Tenure	Unclassified	Outlet Drop (m)	-
Channel Width (m)	-	Outlet Pool Depth (m)	-
Stream Slope (%)	-	Inlet Drop	-
Beaver Activity	-	Slope (%)	-
Habitat Value	-	Valley Fill	-
Final score	0	Barrier Result	Passable
Fix type	-	Fix Span / Diameter	-

Photos: PSCIS ID 198089. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	• Crossing Characteristics	-
Comments: Overgrown road, wood box culvert complete blockage, access required to deactivate/restore channel		
		
	NO IMAGE AVAILABLE	
		

Location and Stream Data		Crossing Characteristics –	
Date	2021-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198090	Diameter (m)	0.1
External ID	2021090551	Length (m)	15
Crew	KP	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	673235	Resemble Channel	No
Northing	6043218	Backwatered	No
Stream	Cesford Creek	Percent Backwatered	–
Road	Railway	Fill Depth (m)	2
Road Tenure	Canadian National	Outlet Drop (m)	0
Channel Width (m)	5	Outlet Pool Depth (m)	0
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	3
Habitat Value	High	Valley Fill	Deep Fill
Final score	29	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Photos: PSCIS ID 198090. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.

Location and Stream Data	•	Crossing Characteristics	-
<p>Comments: No crossing actually exists in the field however site entered as a placeholder because there should be connection between Bulkley and Cesford at this location. Survey found no culvert and landowner reported none present. 11:22</p>			
		NO IMAGE AVAILABLE	
NO IMAGE AVAILABLE		NO IMAGE AVAILABLE	
			

