

Appendix - Phase 1 Fish Passage Assessment Data and Photos

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Ford
PSCIS ID	198180	Diameter (m)	–
External ID	8301039	Length (m)	–
Crew	MW	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	567730	Resemble Channel	–
Northing	6152762	Backwatered	–
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Helen 900 FSR	Fill Depth (m)	–
Road Tenure	BCTS 8243	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Small stream, good habitat with fines and gravelly, and lots of cover and healthy riparian vegetation. 11:09			
Photos: PSCIS ID 198180. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-05 11:13:41 9U 567732 6152762		 2022-09-05 11:15:17 9U 567727 6152771	
 2022-09-05 11:14:10 9U 567729 6152765		 2022-09-05 11:14:20 9U 567727 6152767	
 2022-09-05 11:14:17 9U 567728 6152766		 2022-09-05 11:15:14 9U 567726 6152770	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Bridge
PSCIS ID	198181	Diameter (m)	4
External ID	8302422	Length (m)	10
Crew	MW	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	568047	Resemble Channel	–
Northing	6152961	Backwatered	–
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Helen 900 FSR	Fill Depth (m)	–
Road Tenure	BCTS 8243	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	Yes	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Wetland habitat on both sides, grassy and shrubs. Upstream has small cascade (0.5-1m high) draining into inlet pool. Bridge is in ok condition. 10:44			
Photos: PSCIS ID 198181. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-05 10:48:00 9U 568049 6152958	 2022-09-05 10:50:40 9U 568049 6152957	 2022-09-05 10:50:31 9U 568046 6152965	 2022-09-05 10:51:21 9U 568056 6152945
 2022-09-05 10:50:25 9U 568047 6152965	 2022-09-05 10:51:31 9U 568055 6152945		

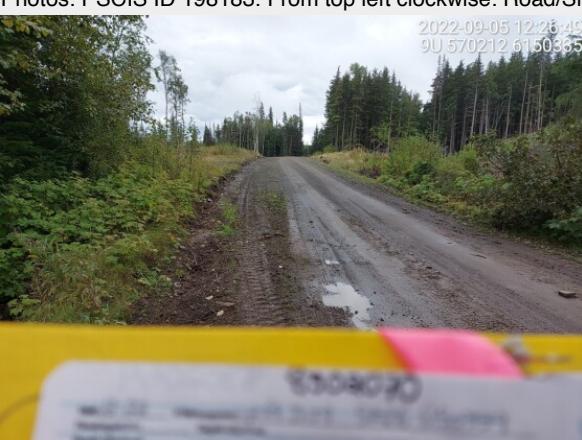
Location and Stream Data		Crossing Characteristics	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198182	Diameter (m)	0.9
External ID	8302064	Length (m)	12
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	567986	Resemble Channel	No
Northing	6151778	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Helen Lake Rd	Fill Depth (m)	1.5
Road Tenure	BCTS 8243	Outlet Drop (m)	0
Channel Width (m)	1.4	Outlet Pool Depth (m)	0.1
Stream Slope (%)	1.5	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

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Good habitat with large amounts of cover (LWD and overhanging veg). Culvert is rusted and a little warped but in good condition, no outlet drop. 11:44			
Photos: PSCIS ID 198182. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph of a dirt road curving through a forest. A white road sign is visible in the foreground. The date and time are 2022-09-05 11:46:03 and coordinates are 9U 567990 6151782.		 A close-up view of a dark-colored culvert pipe with some white tape or debris attached to it. The date and time are 2022-09-05 11:48:02 and coordinates are 9U 567986 6151791.	
 A photograph showing a small stream flowing into a larger body of water. A white pipe is visible on the left. The date and time are 2022-09-05 11:55:38 and coordinates are 9U 567989 6151767.		 A photograph of a stream flowing downstream. A white pipe is visible on the left. The date and time are 2022-09-05 11:47:08 and coordinates are 9U 567988 6151784.	
 A photograph of a stream flowing upstream. A white pipe is visible on the left. The date and time are 2022-09-05 11:55:48 and coordinates are 9U 567987 6151768.		 A photograph of a stream flowing into a larger body of water. A white pipe is visible on the left. The date and time are 2022-09-05 11:47:34 and coordinates are 9U 567988 6151791.	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198183	Diameter (m)	0.6
External ID	8302070	Length (m)	8
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	570210.4	Resemble Channel	No
Northing	6150340	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Helen Lake Rd	Fill Depth (m)	3
Road Tenure	BCTS 8243	Outlet Drop (m)	0.6
Channel Width (m)	2.3	Outlet Pool Depth (m)	0.7
Stream Slope (%)	1	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	2
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

Appendix - Phase 1 Fish Passage Ass...

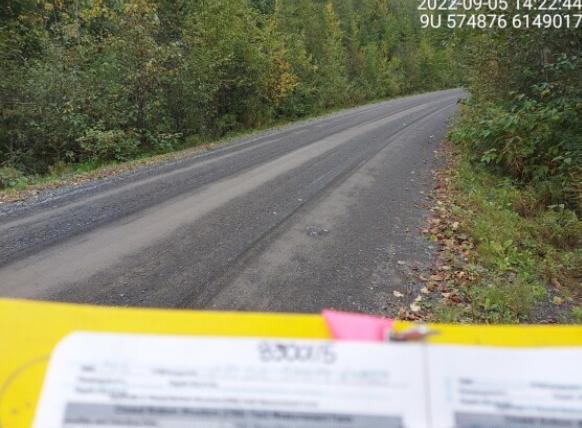
Location and Stream Data	•	Crossing Characteristics	-
Comments: Big outlet drop with deep outlet pool. Some rusting in culvert and it's bent slightly in the middle. 12:22			
Photos: PSCIS ID 198183. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198184	Diameter (m)	0.6
External ID	8302074	Length (m)	8
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	570565.8	Resemble Channel	No
Northing	6150060	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Helen Lake Rd	Fill Depth (m)	0.7
Road Tenure	BCTS 8243	Outlet Drop (m)	0.2
Channel Width (m)	1.1	Outlet Pool Depth (m)	0.1
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Very little flow, shallow stream around culvert. Large amounts of woody debris blocking stream near inlet. Lots of cover around stream. 13:23			
Photos: PSCIS ID 198184. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>2022-09-05 13:26:16 9U 570551 6150068</p>	 <p>2022-09-05 13:27:06 9U 570549 6150065</p>	 <p>2022-09-05 13:26:48 9U 570549 6150065</p>	 <p>2022-09-05 13:27:29 9U 570558 6150069</p>
 <p>2022-09-05 13:26:13 9U 570551 6150067</p>	 <p>2022-09-05 13:27:41 9U 570559 6150071</p>		

Location and Stream Data		Crossing Characteristics	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198185	Diameter (m)	0.7
External ID	8300115	Length (m)	11
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	574866.3	Resemble Channel	No
Northing	6149021	Backwatered	No
Stream	Trib to McCully Creek	Percent Backwatered	–
Road	Helen Lake Rd	Fill Depth (m)	0.3
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	1.3	Outlet Pool Depth (m)	0
Stream Slope (%)	1	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

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Culvert is black and plastic. 14:16			
Photos: PSCIS ID 198185. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph showing a yellow and white road site card lying on a gravel road. The card has a pink ribbon attached to it. The date and time are printed at the top right of the card.	2022-09-05 14:22:44 9U 574876 6149017	 A photograph looking down the interior of a large, dark, corrugated culvert. Light reflects off the curved metal walls, creating a bright spot at the far end.	2022-09-05 14:23:39 9U 574879 6149025
 A photograph of a small stream flowing through a grassy area. A black corrugated pipe is visible on the left bank. A date and time stamp is in the bottom right corner.	2022-09-05 14:24:13 9U 574880 6149028	 A photograph of a small stream flowing through a grassy area. A black corrugated pipe is visible on the right bank. A date and time stamp is in the bottom right corner.	2022-09-05 14:23:30 9U 574879 6149024
 A photograph of a black corrugated pipe lying on the ground in a grassy area. A date and time stamp is in the bottom right corner.	2022-09-05 14:23:18 9U 574876 6149038	 A photograph of a black corrugated pipe lying on the ground in a grassy area. A date and time stamp is in the bottom right corner.	2022-09-05 14:23:47 9U 574879 6149021

Location and Stream Data		Crossing Characteristics	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198186	Diameter (m)	0.7
External ID	8300162	Length (m)	8
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	573033.2	Resemble Channel	No
Northing	6151997	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Poplar Park Rd	Fill Depth (m)	0.5
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	1.2	Outlet Pool Depth (m)	0
Stream Slope (%)	1	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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Drains Pentz Lake, mostly dewatered. Dawson may have replaced this crossing in fall of 2022 (pers comm Greg Black - project manager Dawson Road Maintenance). 15:22			
Photos: PSCIS ID 198186. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-05 15:25:27 9U 573030 6151995	 2022-09-05 15:27:20 9U 573036 6151997	 2022-09-05 15:26:20 9U 573022 6152000	
 2022-09-05 15:25:55 9U 573028 6151999	 2022-09-05 15:25:55 9U 573028 6151999	 2022-09-05 15:27:39 9U 573042 6151996	
 2022-09-05 15:26:48 9U 573021 6152002	 2022-09-05 15:26:48 9U 573021 6152002		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198187	Diameter (m)	0.4
External ID	2798180	Length (m)	9
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	573036	Resemble Channel	No
Northing	6151831	Backwatered	Yes
Stream	Tributary to Kispiox River	Percent Backwatered	50
Road	Poplar Park Rd	Fill Depth (m)	0.3
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	2.1	Outlet Pool Depth (m)	0
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Drains Pentz Lake. Not a modelled crossing. Some backwater, not a lot of flow. Dawson may have replaced this crossing in fall of 2022 (pers comm Greg Black - project manager Dawson Road Maintenance). 15:39			
Photos: PSCIS ID 198187. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>2022-09-05 15:41:26 9U 573031 6151830</p>	 <p>2022-09-05 15:42:31 9U 573028 6151828</p>	 <p>2022-09-05 15:41:53 9U 573030 6151830</p>	 <p>2022-09-05 15:43:47 9U 573038 6151832</p>
 <p>2022-09-05 15:42:52 9U 573023 6151829</p>	 <p>2022-09-05 15:44:37 9U 573040 6151827</p>		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198188	Diameter (m)	1.1
External ID	8300161	Length (m)	11
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	575069.5	Resemble Channel	No
Northing	6150345	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Poplar Park Rd	Fill Depth (m)	2.5
Road Tenure	MoTi Local	Outlet Drop (m)	0.2
Channel Width (m)	2.3	Outlet Pool Depth (m)	0.2
Stream Slope (%)	1.5	Inlet Drop	Yes
Beaver Activity	Yes	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

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Big beaver dam right near inlet (about 2m in height). 16:12			
Photos: PSCIS ID 198188. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph of a yellow and pink road sign. The yellow part has a barcode and the number '50'. The pink part has the word 'STOCK' and a small arrow pointing right.	2022-09-05 16:16:24 9U 575053 6150340	 A close-up photograph of a dark, corrugated metal barrel lying on its side. Water is visible inside the barrel.	2022-09-05 16:34:48 9U 575049 6150354
 A photograph of a metal culvert pipe partially buried in the ground, with water flowing out of it. It is surrounded by green vegetation and a wire mesh fence.	2022-09-05 16:18:54 9U 575059 6150329	 A photograph showing a stream flowing through dense green foliage and brush. A metal culvert pipe is visible on the right side of the frame.	2022-09-05 16:32:09 9U 575050 6150350
 A photograph of a beaver dam in a stream. The dam is made of logs and branches across the waterway, with water flowing over it. The surrounding area is dense forest.	9U 575076 6150331 2022-09-05 16:33:59	 A photograph of a beaver dam in a stream. The dam is made of logs and branches across the waterway, with water flowing over it. The surrounding area is dense forest.	2022-09-05 16:32:21 9U 575050 6150348

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-06	Crossing Sub Type	Ford
PSCIS ID	198189	Diameter (m)	–
External ID	8300124	Length (m)	–
Crew	MW AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	533805.9	Resemble Channel	–
Northing	6176387	Backwatered	–
Stream	Tributary to Footsore Lake	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	–
Road Tenure	MoTi Local	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Road has been deactivated with crossing pulled. Lots of flow. 12:04			
Photos: PSCIS ID 198189. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics	
Date	2022-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198190	Diameter (m)	0.6
External ID	8302683	Length (m)	8
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	541972.9	Resemble Channel	No
Northing	6174712	Backwatered	No
Stream	Sweetie River	Percent Backwatered	–
Road	Nangeese FSR	Fill Depth (m)	1
Road Tenure	BCTS 8904	Outlet Drop (m)	0
Channel Width (m)	1.9	Outlet Pool Depth (m)	0
Stream Slope (%)	2	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

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Stream is dewatered. Some rain water in pools. 14:05			
Photos: PSCIS ID 198190. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
	2022-09-06 14:08:17 9U 541978 6174744		2022-09-06 14:13:40 9U 541975 6174704
	2022-09-06 14:13:29 9U 541975 6174706		2022-09-06 14:18:20 9U 541969 6174714
	2022-09-06 14:14:34 9U 541980 6174704		2022-09-06 14:18:28 9U 541968 6174719

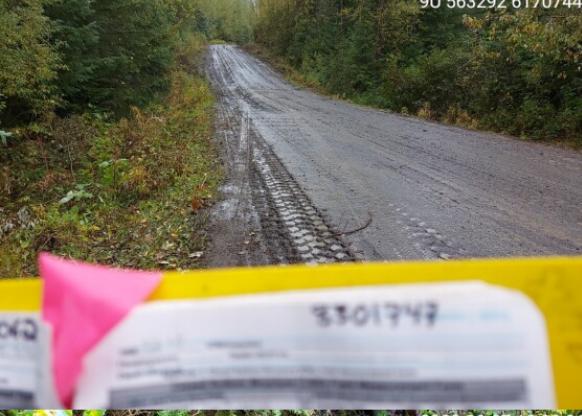
Location and Stream Data		Crossing Characteristics	
Date	2022-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198191	Diameter (m)	0.5
External ID	8302061	Length (m)	13
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	554147.8	Resemble Channel	No
Northing	6166257	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Corral Main	Fill Depth (m)	3
Road Tenure	Gitxsan Forest R02415	Outlet Drop (m)	0.2
Channel Width (m)	1.5	Outlet Pool Depth (m)	0.15
Stream Slope (%)	4	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Small cascade approx 50m upstream, could be barrier for smaller fish. 16:10			
Photos: PSCIS ID 198191. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-06 16:13:39 9U 554182 6166291		 2022-09-06 16:21:08 9U 554136 6166258	
 2022-09-06 16:32:05 9U 554158 6166276		 2022-09-06 16:20:49 9U 554136 6166266	
 2022-09-06 16:36:56 9U 554192 6166256		 2022-09-06 16:22:05 9U 554135 6166262	

Location and Stream Data		Crossing Characteristics	
Date	2022-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198192	Diameter (m)	0.6
External ID	8302062	Length (m)	12
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	554493.4	Resemble Channel	No
Northing	6166450	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Corral Main	Fill Depth (m)	1
Road Tenure	Gitxsan Forest R02415	Outlet Drop (m)	0.6
Channel Width (m)	1.9	Outlet Pool Depth (m)	0.3
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	3
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Big beaver dam upstream of culvert with big pond. Huge outlet drop. 16:49			
Photos: PSCIS ID 198192. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-06 16:50:37 9U 554498 6166442		 2022-09-06 16:52:42 9U 554492 6166440	
 2022-09-06 16:52:31 9U 554492 6166446		 2022-09-06 16:56:29 9U 554490 6166434	
 2022-09-06 16:54:13 9U 554487 6166458		 2022-09-06 17:00:55 9U 554486 6166427	

Location and Stream Data		Crossing Characteristics	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198193	Diameter (m)	1.2
External ID	8301747	Length (m)	13
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	563272.9	Resemble Channel	No
Northing	6170770	Backwatered	No
Stream	Tributary to Cullon Creek	Percent Backwatered	–
Road	Kuldo FSR	Fill Depth (m)	5
Road Tenure	MoF 7871	Outlet Drop (m)	0.7
Channel Width (m)	1.8	Outlet Pool Depth (m)	0.6
Stream Slope (%)	20	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	3
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Signs of beaver activity just upstream of inlet. Big pond above dam. Very steep downstream of outlet, long cascade. 12:14			
Photos: PSCIS ID 198193. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-07 12:16:57 9U 563292 6170744	 2022-09-07 12:21:58 9U 563260 6170762	 2022-09-07 12:20:40 9U 563266 6170756	-
 2022-09-07 12:38:31 9U 563283 6170766	 2022-09-07 12:39:02 9U 563289 6170776	 2022-09-07 12:31:24 9U 563245 6170771	-
 2022-09-07 12:39:02 9U 563289 6170776	 2022-09-07 12:31:24 9U 563245 6170771	 2022-09-07 12:31:24 9U 563245 6170771	-

Location and Stream Data		Crossing Characteristics	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198194	Diameter (m)	1.2
External ID	8301750	Length (m)	14
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	563429.4	Resemble Channel	No
Northing	6170437	Backwatered	No
Stream	Tributary to Cullon Creek	Percent Backwatered	–
Road	Kuldo FSR	Fill Depth (m)	2.5
Road Tenure	MoF 7871	Outlet Drop (m)	0
Channel Width (m)	1.9	Outlet Pool Depth (m)	0.6
Stream Slope (%)	2.5	Inlet Drop	Yes
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

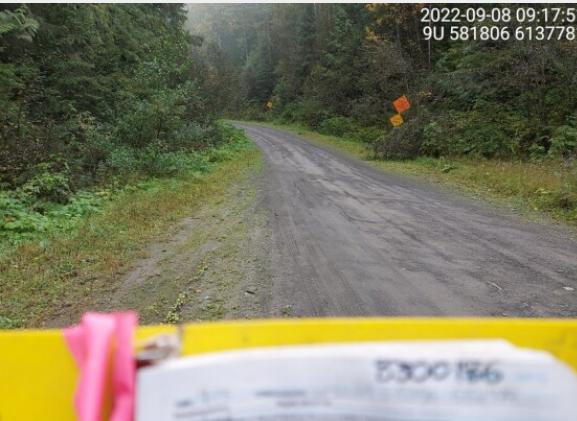
Location and Stream Data	•	Crossing Characteristics	-
Comments: Big beaver guard on inlet. Blocking some of stream access from upstream. 13:02			
Photos: PSCIS ID 198194. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
	2022-09-07 13:35:56 9U 563438 6170435		2022-09-07 13:11:44 9U 563412 6170438
	2022-09-07 13:29:43 9U 563448 6170436		2022-09-07 13:11:16 9U 563414 6170437
	2022-09-07 13:31:30 9U 563446 6170427		2022-09-07 13:23:38 9U 563408 6170451

Location and Stream Data		Crossing Characteristics	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198195	Diameter (m)	0.65
External ID	8301761	Length (m)	10
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	563960.5	Resemble Channel	No
Northing	6165291	Backwatered	No
Stream	Tributary to Cullon Creek	Percent Backwatered	–
Road	Kuldo FSR	Fill Depth (m)	0.5
Road Tenure	MoF 7871	Outlet Drop (m)	0.6
Channel Width (m)	1.5	Outlet Pool Depth (m)	0.2
Stream Slope (%)	10	Inlet Drop	Yes
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Waterfall directly downstream of outlet (2m in height). And short cascade upstream of inlet (approx 1m in height). 14:36			
Photos: PSCIS ID 198195. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-07 14:40:09 9U 563952 6165272	 2022-09-07 14:41:53 9U 563958 6165284	 2022-09-07 14:41:53 9U 563977 6165286	 2022-09-07 14:44:35 9U 563959 6165284
 2022-09-07 14:41:53 9U 563961 6165282	 2022-09-07 14:49:32 9U 563952 6165279		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198196	Diameter (m)	0.9
External ID	8300186	Length (m)	21
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	581810.5	Resemble Channel	No
Northing	6137778	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Kispiox Westside Rd	Fill Depth (m)	1.5
Road Tenure	MoTi Local	Outlet Drop (m)	1.6
Channel Width (m)	2.4	Outlet Pool Depth (m)	0.1
Stream Slope (%)	12	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3.5
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

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Very high outlet drop and steep stream downstream. But good habitat upstream with some fines and gravels and lots of cover. 9:13			
Photos: PSCIS ID 198196. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-08 09:17:51 9U 581806 6137781	 2022-09-08 09:20:51 9U 581813 6137792	 2022-09-08 09:35:28 9U 581791 6137802	 2022-09-08 09:20:22 9U 581816 6137793
 2022-09-08 09:36:02 9U 581780 6137809	 2022-09-08 09:28:34 9U 581804 6137757		

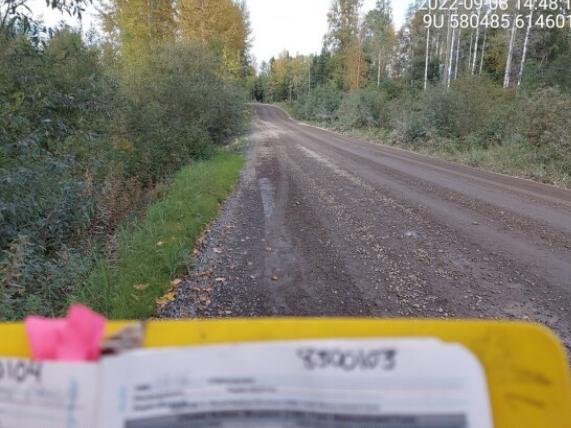
Location and Stream Data		Crossing Characteristics	
Date	2022-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198197	Diameter (m)	0.9
External ID	8300105	Length (m)	8
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	578249.7	Resemble Channel	No
Northing	6150754	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	0.3
Road Tenure	MoTi Local	Outlet Drop (m)	0.6
Channel Width (m)	1.8	Outlet Pool Depth (m)	0.4
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Two plastic culverts, very low flow in both. Open wetland and shrub habitat u/s and d/s. Big floodplain u/s. 13:16			
Photos: PSCIS ID 198197. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-08 13:19:25 9U 578247 6150755	 2022-09-08 13:48:10 9U 578247 6150755	 2022-09-08 13:21:02 9U 578249 6150766	 2022-09-08 13:22:21 9U 578233 6150761
 2022-09-08 13:21:30 9U 578243 6150770	 2022-09-08 13:34:29 9U 578234 6150729		

Location and Stream Data		Crossing Characteristics	
Date	2022-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198198	Diameter (m)	0.8
External ID	8300104	Length (m)	15
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	579148.5	Resemble Channel	No
Northing	6149784	Backwatered	Yes
Stream	Tributary to Kispiox River	Percent Backwatered	100
Road	Kispiox Valley Rd	Fill Depth (m)	2
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	1.2	Outlet Pool Depth (m)	0.2
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	19	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Location and Stream Data	•	Crossing Characteristics	-
Comments: Plastic culvert. Backwatered with some water near the inlet and outlet but none in culvert. Large tributary to the Kispiox with major connectivity issue. No fisheries information but should be fish bearing and if not it would be due to the culvert. Dam points located 600 m upstream of crossing. 13:59			
Photos: PSCIS ID 198198. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-08 14:02:12 9U 579153 6149783	 2022-09-08 14:03:21 9U 579157 6149783		
 2022-09-08 14:03:19 9U 579155 6149784	 2022-09-08 14:03:19 9U 579142 6149776		
 2022-09-08 14:04:29 9U 579164 6149785	 2022-09-08 14:08:17 9U 579143 6149774		
 2022-09-08 14:03:19 9U 579155 6149784			

Location and Stream Data		Crossing Characteristics	
Date	2022-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198199	Diameter (m)	0.6
External ID	8300103	Length (m)	13
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	580494.9	Resemble Channel	No
Northing	6146061	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	2
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	1.4	Outlet Pool Depth (m)	0
Stream Slope (%)	2	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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dewatered stream. 14:46			
Photos: PSCIS ID 198199. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198200	Diameter (m)	2.8
External ID	8300012	Length (m)	10
Crew	MW	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.22
Easting	563541.6	Resemble Channel	Yes
Northing	6109765	Backwatered	No
Stream	Tributary to Kitwanga River	Percent Backwatered	–
Road	Moore Rd	Fill Depth (m)	1
Road Tenure	MoTi Local	Outlet Drop (m)	0.1
Channel Width (m)	4.3	Outlet Pool Depth (m)	0.1
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	0
Habitat Value	High	Valley Fill	Deep Fill
Final score	11	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

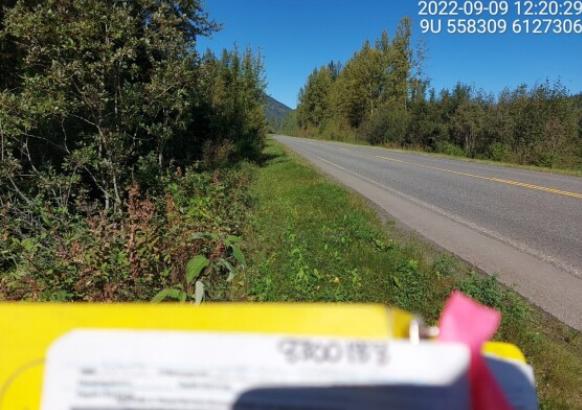
Location and Stream Data	•	Crossing Characteristics	-
Comments: Embedded with no outlet drop. Very wide channel with gravels and cobbles. 10:18			
Photos: PSCIS ID 198200. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>2022-09-09 10:22:00 9U 563550 6109778</p>		 <p>2022-09-09 10:24:34 9U 563543 6109778</p>	
 <p>2022-09-09 10:24:53 9U 563543 6109780</p>		 <p>2022-09-09 10:26:15 9U 563526 6109775</p>	
 <p>2022-09-09 10:23:46 9U 563543 6109782</p>		 <p>2022-09-09 10:26:21 9U 563534 6109764</p>	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198201	Diameter (m)	1.6
External ID	8300917	Length (m)	8
Crew	MW	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.38
Easting	563869.2	Resemble Channel	Yes
Northing	6109781	Backwatered	No
Stream	Tributary to Kitwanga River	Percent Backwatered	–
Road	Moore Rd	Fill Depth (m)	0.7
Road Tenure	MoTi Unclassified	Outlet Drop (m)	0
Channel Width (m)	2.1	Outlet Pool Depth (m)	0.2
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	1.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	11	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Two culverts, both embedded with no drop. Fish spotted in culvert(up to 20 cm in length) and downstream. Erosion near culvert. 10:50			
Photos: PSCIS ID 198201. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-09 10:52:18 9U 563873 6109780	 2022-09-09 11:02:27 9U 563871 6109789	 2022-09-09 11:02:46 9U 563864 6109781	-
 2022-09-09 11:02:18 9U 563873 6109787	 2022-09-09 11:02:48 9U 563867 6109780	 2022-09-09 10:54:28 9U 563873 6109780	-

Location and Stream Data		Crossing Characteristics	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198202	Diameter (m)	1.2
External ID	8300188	Length (m)	14
Crew	MW	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.25
Easting	558317	Resemble Channel	Yes
Northing	6127316	Backwatered	Yes
Stream	Tributary to Kitwanga River	Percent Backwatered	100
Road	Hwy 37	Fill Depth (m)	1.5
Road Tenure	MoTi Highway	Outlet Drop (m)	0.1
Channel Width (m)	1.8	Outlet Pool Depth (m)	0.15
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
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

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dewatered downstream, but there's water in the culvert. Water upstream, opens up to big wetland and floodplain. 12:03			
Photos: PSCIS ID 198202. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>2022-09-09 12:20:29 9U 558309 6127306</p>	 <p>2022-09-09 12:12:45 9U 558303 6127307</p>	 <p>2022-09-09 12:12:27 9U 558308 6127307</p>	
 <p>2022-09-09 12:28:50 9U 558315 6127306</p>	 <p>2022-09-09 12:18:17 9U 558298 6127305</p>	 <p>2022-09-09 12:30:26 9U 558319 6127343</p>	

Location and Stream Data		Crossing Characteristics	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198203	Diameter (m)	0.8
External ID	2022090901	Length (m)	11
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	549761.1	Resemble Channel	No
Northing	6140313	Backwatered	No
Stream	Tributary to Kitwanga River	Percent Backwatered	–
Road	Kitwancool Branch 2 FSR	Fill Depth (m)	1.2
Road Tenure	MoF 8687	Outlet Drop (m)	0
Channel Width (m)	1.7	Outlet Pool Depth (m)	0.2
Stream Slope (%)	3.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	0.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	16	Barrier Result	Potential
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Location and Stream Data	•	Crossing Characteristics	-
Comments: Cascade downstream of culvert that may block smaller fish. Approx 1m in height. No outlet drop. Good habitat upstream with lots of veg cover and LWD, no gravels or cobbles. Mostly fines and instream vegetation. 14:21			
Photos: PSCIS ID 198203. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>2022-09-09 14:24:81 9U 549741 6140294</p>	 <p>2022-09-09 14:26:37 9U 549755 6140302</p>	 <p>2022-09-09 14:25:06 9U 549764 6140295</p>	 <p>2022-09-09 14:26:16 9U 549749 6140290</p>
 <p>2022-09-09 14:38:29 9U 549769 6140273</p>	 <p>2022-09-09 14:30:33 9U 549763 6140337</p>		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198204	Diameter (m)	1
External ID	8302421	Length (m)	10
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	567222.2	Resemble Channel	No
Northing	6154120	Backwatered	Yes
Stream	Tributary to Kispiox River	Percent Backwatered	100
Road	Helen 9000	Fill Depth (m)	0.5
Road Tenure	BCTS 8243	Outlet Drop (m)	0
Channel Width (m)	15	Outlet Pool Depth (m)	1
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	0
Habitat Value	Low	Valley Fill	Deep Fill
Final score	16	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	20

Location and Stream Data	•	Crossing Characteristics	-
Comments: No structure visible. Beaver ponds on both sides of the road. Diameter estimated. Large mature beaver dam located approximately 10 m downstream of road. 10:56			
Photos: PSCIS ID 198204. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198205	Diameter (m)	0.8
External ID	8302065	Length (m)	10
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	566030.3	Resemble Channel	No
Northing	6153077	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Helen Lake Rd	Fill Depth (m)	1.5
Road Tenure	BCTS 8243	Outlet Drop (m)	0
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.1
Stream Slope (%)	15	Inlet Drop	No
Beaver Activity	Yes	Slope (%)	3
Habitat Value	Low	Valley Fill	Bedrock
Final score	26	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Natural bed rock cascade of greater than 20% immediately downstream of culvert outlet for a distance of approximately 20 m. 11:35			
Photos: PSCIS ID 198205. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 9U 566025 6153077 2022-09-05 11:37:05	 9U 566023 6153075 2022-09-05 11:40:17	 9U 566023 6153075 2022-09-05 11:40:05	 9U 566046 6153073 2022-09-05 11:51:42
 9U 566021 6153073 2022-09-05 11:59:46	 9U 566060 6153042 2022-09-05 11:53:59		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198206	Diameter (m)	0.65
External ID	8300118	Length (m)	12
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	572865	Resemble Channel	No
Northing	6149158	Backwatered	No
Stream	Tributary to McCully Creek	Percent Backwatered	–
Road	Helen Lake Rd	Fill Depth (m)	1.5
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0
Stream Slope (%)	9	Inlet Drop	No
Beaver Activity	No	Slope (%)	6
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry draw with all organic substrate and moss throughout channel. Culvert outlet is severely rusted with the bottom completely corroded for the last approximately 1 m. Unlikely a fish bearing stream. 13:39			
Photos: PSCIS ID 198206. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 9U 572861 6149159 2022-09-05 13:43:27		 9U 572860 6149158 2022-09-05 14:06:58	
 9U 572860 6149158 2022-09-05 14:06:47	 9U 572860 6149158 2022-09-05 14:07:07	 9U 572860 6149159 2022-09-05 13:47:23	 9U 572860 6149159 2022-09-05 14:09:39
 9U 572860 6149159 2022-09-05 14:09:39			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Round Culvert
PSCIS ID	198207	Diameter (m)	0.9
External ID	2022090501	Length (m)	14
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	573065.7	Resemble Channel	No
Northing	6152232	Backwatered	Yes
Stream	Tributary to Kispiox River	Percent Backwatered	50
Road	Poplar Park Rd	Fill Depth (m)	1.5
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	2.2	Outlet Pool Depth (m)	0.3
Stream Slope (%)	1	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	1
Habitat Value	High	Valley Fill	Deep Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Location and Stream Data	•	Crossing Characteristics	-
Comments: Pentz Lake is located approximately 50 m upstream. Inlet of culvert is significantly damaged with metal that in words. Culvert is separating approximately halfway through the pipe. Pipe is quite corroded. Pentz Lake rec site is located approximately 2 to 300 m up the road. 15:30			
Photos: PSCIS ID 198207. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph of a dirt road curving through a forest. A yellow rectangular card with black text is placed on the ground in the foreground. The text on the card reads: 9U 573066 6152229 2022-09-05 15:51:40.		 A close-up view of the inlet end of a large, corrugated metal culvert. The metal is heavily rusted and shows significant damage, with a piece of wood or metal protruding from a hole. The date and time stamp in the top right corner is 9U 573070 6152237 2022-09-05 15:53:07.	
 A photograph showing the interior of a large, partially collapsed corrugated metal culvert. The water inside is brownish. A wooden barrel lies across the opening. The date and time stamp in the top right corner is 9U 573070 6152237 2022-09-05 15:53:13.		 A photograph of a small stream flowing through a grassy area. A metal pipe or culvert outlet is visible in the background. The date and time stamp in the top right corner is 9U 573070 6152237 2022-09-05 15:53:34.	
 A photograph looking downstream at a small stream flowing through a lush green forest. The date and time stamp in the top right corner is 9U 573061 6152234 2022-09-05 15:52:00.		 A photograph looking upstream at a small stream flowing through dense green vegetation. The date and time stamp in the top right corner is 9U 573011 6152232 2022-09-05 16:09:12.	

Location and Stream Data		Crossing Characteristics	
Date	2022-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198208	Diameter (m)	0.9
External ID	8300030	Length (m)	18
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	545529.3	Resemble Channel	No
Northing	6170759	Backwatered	No
Stream	Tributary to Sweetin River	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	2.5
Road Tenure	MoTi Local	Outlet Drop (m)	0.4
Channel Width (m)	0.8	Outlet Pool Depth (m)	0.1
Stream Slope (%)	10	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	2
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Mossy draw. Channel is very small and poorly defined. Very unlikely that this is fish habitat. Inlet covered with significant amounts of debris. 14:54			
Photos: PSCIS ID 198208. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>9U 545526 6170760 2022-09-06 14:59:07</p>	 <p>9U 545514 6170761 2022-09-06 15:23:37</p>	 <p>9U 545524 6170766 2022-09-06 15:25:06</p>	 <p>9U 545515 6170756 2022-09-06 15:11:31</p>
 <p>9U 545535 6170774 2022-09-06 14:59:35</p>	 <p>9U 545515 6170756 2022-09-06 15:12:47</p>		

Location and Stream Data		Crossing Characteristics	
Date	2022-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198209	Diameter (m)	0.9
External ID	8300111	Length (m)	15
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	553817.5	Resemble Channel	No
Northing	6166233	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	2
Road Tenure	MoTi Local	Outlet Drop (m)	3
Channel Width (m)	1.9	Outlet Pool Depth (m)	0
Stream Slope (%)	9	Inlet Drop	No
Beaver Activity	No	Slope (%)	10
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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Dry at time of survey. Significant moss on rocks throughout channel indicates dry for a good portion of the year. Culvert is perched 3 m from stream channel with outlet emptying onto riprap. Culvert is bent severely in middle. 16:03			
Photos: PSCIS ID 198209. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-06	Crossing Sub Type	Round Culvert
PSCIS ID	198210	Diameter (m)	1.3
External ID	8302403	Length (m)	19
Crew	AI	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.3
Easting	542451.6	Resemble Channel	Yes
Northing	6168062	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Mitten Mainline	Fill Depth (m)	1
Road Tenure	MoF 9657	Outlet Drop (m)	0
Channel Width (m)	4.3	Outlet Pool Depth (m)	0
Stream Slope (%)	9	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	19	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Location and Stream Data	•	Crossing Characteristics	-
Comments: Stream dry at time of assessment. Significant accumulation of debris just upstream of the inlet. 17:30			
Photos: PSCIS ID 198210. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-06	Crossing Sub Type	Pipe Arch
PSCIS ID	198211	Diameter (m)	6
External ID	8302407	Length (m)	20
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	548521.6	Resemble Channel	–
Northing	6165905	Backwatered	–
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Mitten Mainline	Fill Depth (m)	–
Road Tenure	MoF 9657	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	3	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Extremely steep rock steps immediately downstream of outlet. Downstream is 20% gradient with >1m steps. FISS point from Triton indicates there is a 2 m barrier downstream that is a barrier to anadromous species. Additionally, there is a 5 m rock documented near the confluence with the Kispiox. 18:09			
Photos: PSCIS ID 198211. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph of a yellow rectangular site card with the number "8302407" handwritten on it. The card is placed on a gravel road in a forested area. The timestamp on the photo is 2022-09-06 18:10:43.		 A photograph looking down a metal culvert or barrel crossing a stream bed filled with large rocks. The timestamp on the photo is 2022-09-06 18:14:05.	
 A photograph of a metal culvert at the outlet of a stream, surrounded by rocks and vegetation. A car is visible in the background. The timestamp on the photo is 2022-09-06 18:17:29.		 A photograph of a rocky stream bed downstream of the outlet, with water flowing over the stones. The timestamp on the photo is 2022-09-06 18:11:10.	
 A photograph of a rocky stream bed upstream of the outlet, with water flowing over the stones. The timestamp on the photo is 2022-09-06 18:14:53.		 A photograph of a rocky stream bed leading into a dense forest, with water flowing over the stones. The timestamp on the photo is 2022-09-06 18:12:33.	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198212	Diameter (m)	3.9
External ID	8301754	Length (m)	26
Crew	AI	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.13
Easting	564129.6	Resemble Channel	Yes
Northing	6166824	Backwatered	No
Stream	Trib to Cullon Creek	Percent Backwatered	–
Road	Kuldo FSR	Fill Depth (m)	2.5
Road Tenure	MoF 7871	Outlet Drop (m)	0
Channel Width (m)	3.8	Outlet Pool Depth (m)	0
Stream Slope (%)	3	Inlet Drop	No
Beaver Activity	No	Slope (%)	1.5
Habitat Value	High	Valley Fill	Shallow Fill
Final score	13	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics
Comments: Baffles installed. 13:32		
Photos: PSCIS ID 198212. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.		
 9U 564127 6166825 2022-09-07 13:40:07		 2022-09-07 1:44 PM 9U 564139 6166805
 2022-09-07 1:43 PM 9U 564145 6166794		 9U 564118 6166821 2022-09-07 14:11:57
 2022-09-07 1:48 PM 9U 564141 6166800		 9U 564118 6166821 2022-09-07 14:12:20

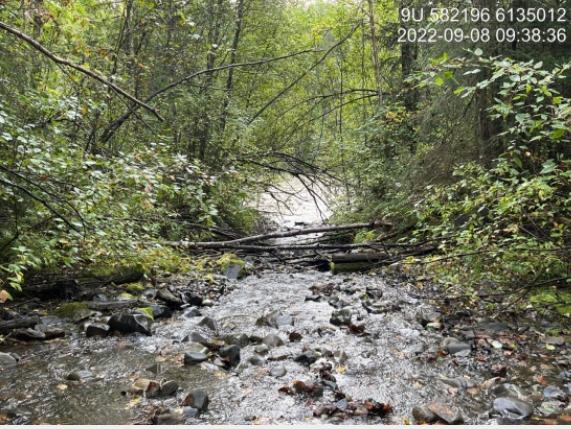
Location and Stream Data		Crossing Characteristics	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198213	Diameter (m)	0.5
External ID	8301749	Length (m)	14
Crew	AI JO	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	564726.3	Resemble Channel	No
Northing	6164301	Backwatered	No
Stream	Tributary to Cullon Creek	Percent Backwatered	–
Road	Kuldo FSR	Fill Depth (m)	1
Road Tenure	MoF 7871	Outlet Drop (m)	0
Channel Width (m)	1	Outlet Pool Depth (m)	0
Stream Slope (%)	1	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

Location and Stream Data	•	Crossing Characteristics
Comments: This is a small non-classified drainage. Culvert is completely plugged and inlet could not be located. Outlet of culvert is severely corroded. Very unlikely that this is a fish bearing system. Culvert slope, channel with, ingredient estimated. 14:39		
Photos: PSCIS ID 198213. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.		
		
		
		

Location and Stream Data		Crossing Characteristics	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198214	Diameter (m)	0.95
External ID	8301748	Length (m)	20
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	565280.8	Resemble Channel	No
Northing	6163976	Backwatered	No
Stream	Tributary to Cullon Creek	Percent Backwatered	–
Road	Kuldo FSR	Fill Depth (m)	2
Road Tenure	MoF 7871	Outlet Drop (m)	0.49
Channel Width (m)	1.6	Outlet Pool Depth (m)	0.28
Stream Slope (%)	2	Inlet Drop	No
Beaver Activity	No	Slope (%)	2.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	34	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

Location and Stream Data	•	Crossing Characteristics	-
<p>Comments: Approximately 15 m down stream of culvert outlet is a natural rock drop of 0.65 cm on bedrock. Downstream of the culvert the gradient was measured at 17% over a distance of approximately 25 m. Seems very unlikely that a stream this small and steep would have fish presence upstream even if the culvert was fixed. This is unconfirmed. 15:06</p>			
<p>Photos: PSCIS ID 198214. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.</p>			
			
			
			

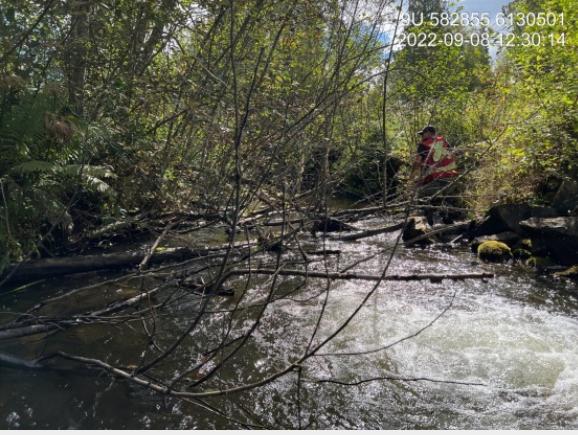
Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198215	Diameter (m)	3.7
External ID	8300042	Length (m)	32
Crew	AI JO	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	582153.7	Resemble Channel	No
Northing	6135026	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Kispiox Westside Rd	Fill Depth (m)	5.5
Road Tenure	MoTi Local	Outlet Drop (m)	1.1
Channel Width (m)	5.3	Outlet Pool Depth (m)	0.85
Stream Slope (%)	5.5	Inlet Drop	No
Beaver Activity	No	Slope (%)	4
Habitat Value	High	Valley Fill	Deep Fill
Final score	42	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	17.5

Location and Stream Data	•	Crossing Characteristics	-
Comments: .75-.90 m lock block step approximately 30 m down stream of culvert. Double pipe however river right pipe is not functioning and has 50% blocked outlet. 9:32			
Photos: PSCIS ID 198215. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
		 <p>9U 582180 6134985 2022-09-08 09:35:58</p>	
 <p>9U 582125 6135109 2022-09-08 10:21:22</p>		 <p>9U 582201 6135021 2022-09-08 09:38:16</p>	
 <p>9U 582147 6135015 2022-09-08 09:52:44</p>		 <p>9U 582196 6135012 2022-09-08 09:38:36</p>	

Location and Stream Data		.	Crossing Characteristics –
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198216	Diameter (m)	2
External ID	8300054	Length (m)	24
Crew	AI	Embedded	Yes
UTM Zone	9	Depth Embedded (m)	0.2
Easting	583025.5	Resemble Channel	Yes
Northing	6130402	Backwatered	Yes
Stream	Tributary to Skeena River	Percent Backwatered	95
Road	Kispiox Valley Rd	Fill Depth (m)	3
Road Tenure	MoTi Arterial	Outlet Drop (m)	0
Channel Width (m)	5.6	Outlet Pool Depth (m)	0.8
Stream Slope (%)	1.5	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	0.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	14	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Culvert appears very old and near end of life. Nice gravels upstream. Flow is moving between the two 1 m pipes. Trash rack on inlet would be barrier to coho moving up to spawn. 10:57			
Photos: PSCIS ID 198216. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 9U 583025 6130401 2022-09-08 11:03:35		 9U 583010 6130381 2022-09-08 11:07:24	
 9U 583021 6130392 2022-09-08 11:04:25		 9U 583038 6130358 2022-09-08 11:05:54	
 9U 583024 6130392 2022-09-08 11:04:11		 9U 583038 6130358 2022-09-08 11:05:50	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198217	Diameter (m)	2.5
External ID	8301485	Length (m)	10
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	582851.3	Resemble Channel	No
Northing	6130491	Backwatered	No
Stream	Tributary to Skeena River	Percent Backwatered	–
Road	Sik e Dakh Water Tower Rd	Fill Depth (m)	1
Road Tenure	Sik e Dakh	Outlet Drop (m)	0.6
Channel Width (m)	5.6	Outlet Pool Depth (m)	0.7
Stream Slope (%)	1.5	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	3.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	36	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Location and Stream Data	•	Crossing Characteristics	-
Comments: Francis(chief) indicated this is historic coho harvest and spawning stream. 2 active culverts side by side. Trash rack has been removed from inlet. Inlet has significant amount of debris. Extensive gravels present suitable for coho spawning. Good flow and large stream. On road to water treatment plant within reserve boundaries. 12:20			
Photos: PSCIS ID 198217. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 8301485		 9U 582847 6130493 2022-09-08 12:22:27	
 9U 582841 6130500 2022-09-08 12:34 PM		 9U 582868 6130475 2022-09-08 12:23:36	
 9U 582844 6130528 2022-09-08 12:34:44		 9U 582855 6130501 2022-09-08 12:30:14	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198218	Diameter (m)	0.6
External ID	2787053	Length (m)	19
Crew	AI JO	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	571274.2	Resemble Channel	No
Northing	6156519	Backwatered	No
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	3
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	2	Outlet Pool Depth (m)	0.67
Stream Slope (%)	3.5	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

Location and Stream Data	•	Crossing Characteristics
<p>Comments: Culvert has had recent roadwork with significant amounts of fill added. Stream is running clear upstream of the culvert and is extremely turbid downstream due to erosion and runoff related to the construction to fix the road. Inlet of culvert is bent and damaged with a lot of debris at the top end of the pipe blocking significant portions of the flow. Not a modelled crossing location in bcfishpass but is a documented Moti culvert. 16:33</p>		
<p>Photos: PSCIS ID 198218. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.</p>		
 <p>9U 571267 6156527 2022-09-07 16:31:51</p>	 <p>9U 571278 6156520 2022-09-07 16:36:27</p>	 <p>9U 571278 6156520 2022-09-07 16:36:11</p>
 <p>9U 571301 6156535 2022-09-07 16:42:08</p>	 <p>9U 571266 6156503 2022-09-07 16:52:42</p>	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198219	Diameter (m)	0.8
External ID	8300033	Length (m)	13
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	579936.8	Resemble Channel	No
Northing	6144037	Backwatered	Yes
Stream	Tributary to Kispiox River	Percent Backwatered	100
Road	Seventeen Mile Rd	Fill Depth (m)	0.3
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	2.5	Outlet Pool Depth (m)	1
Stream Slope (%)	0	Inlet Drop	Yes
Beaver Activity	Yes	Slope (%)	0.5
Habitat Value	Medium	Valley Fill	Deep Fill
Final score	16	Barrier Result	Potential
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Location and Stream Data	•	Crossing Characteristics	-
Comments: Wetland upstream. Debris cone on inlet has separated from the culvert. Large inlet drop due to the debris caught in the inlet. 17:14			
Photos: PSCIS ID 198219. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-10	Crossing Sub Type	Round Culvert
PSCIS ID	198220	Diameter (m)	4.8
External ID	8300095	Length (m)	75
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	563431	Resemble Channel	No
Northing	6109637	Backwatered	No
Stream	Tributary to Kitwanga River	Percent Backwatered	–
Road	Hwy 37	Fill Depth (m)	9.9
Road Tenure	MoTi Highway	Outlet Drop (m)	0.72
Channel Width (m)	5	Outlet Pool Depth (m)	0.75
Stream Slope (%)	2	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	30.5

Location and Stream Data	•	Crossing Characteristics	-
Comments: Historic backwatering with 6 downstream lock block weirs. Skeena Fisheries Commission has assessed site in past. Very large system, pipe embedded until last 10m. Large outlet drop. Lots of algae. 10:46			
Photos: PSCIS ID 198220. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 9U 563415 6109648 2022-09-09 10:47:37		 9U 563442 6109647 2022-09-09 10:49:38	
 9U 563442 6109647 2022-09-09 10:49:27		 9U 563390 6109556 2022-09-09 11:09:40	
 9U 563439 6109658 2022-09-09 10:49:18		 9U 563390 6109556 2022-09-09 11:09:59	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-10	Crossing Sub Type	Round Culvert
PSCIS ID	198221	Diameter (m)	1.3
External ID	8300178	Length (m)	9
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	558773.2	Resemble Channel	No
Northing	6126523	Backwatered	No
Stream	Tributary to Kitwanga River	Percent Backwatered	–
Road	11A Ave	Fill Depth (m)	1
Road Tenure	MoTi Local	Outlet Drop (m)	0
Channel Width (m)	4	Outlet Pool Depth (m)	0.2
Stream Slope (%)	0	Inlet Drop	No
Beaver Activity	Yes	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

Location and Stream Data	•	Crossing Characteristics	-
Comments: There are actually two pipes that are 0.65 cm. One pipe has an extension into the beaver dam located immediately upstream of the inlet. This stream is not at the map location as it is located upstream via the Kitwanga River approximately 250 m. 12:14			
Photos: PSCIS ID 198221. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 9U 558780 6126518 2022-09-09 12:27:44	 9U 558773 6126531 2022-09-09 12:29:26	 9U 558778 6126531 2022-09-09 12:29:19	 9U 558775 6126515 2022-09-09 12:30:56
 9U 558782 6126531 2022-09-09 12:28:54	 9U 558792 6126508 2022-09-09 12:30:45		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-08	Crossing Sub Type	Round Culvert
PSCIS ID	198222	Diameter (m)	3.8
External ID	8302257	Length (m)	30
Crew	AI	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	587054	Resemble Channel	No
Northing	6138716	Backwatered	No
Stream	Pinenut Creek	Percent Backwatered	–
Road	Babine Slide FSR	Fill Depth (m)	4
Road Tenure	MoF 4841	Outlet Drop (m)	0.45
Channel Width (m)	8.2	Outlet Pool Depth (m)	0.4
Stream Slope (%)	4	Inlet Drop	No
Beaver Activity	No	Slope (%)	2.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	37	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	13

Appendix - Phase 1 Fish Passage Ass...

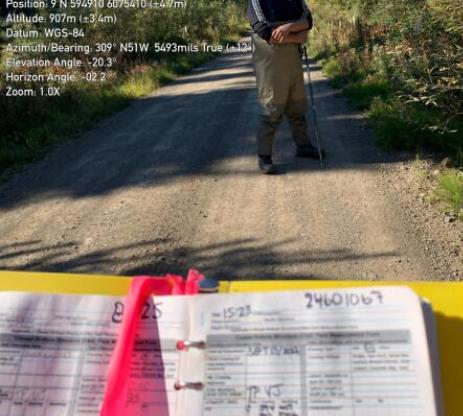
Location and Stream Data	•	Crossing Characteristics	-
Comments: Structure was replaced in 1985. Concrete wing walls on inlet. Structure in decent shape. 13:39			
Photos: PSCIS ID 198222. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph of a dirt road leading through a forest. The road is surrounded by tall evergreen trees and some undergrowth. The lighting suggests it's late afternoon or early evening. 2022-09-11 11:57:00 9U 587034 6138678		 A view looking down a concrete culvert. The water inside is flowing rapidly, creating white foam at the bottom. The concrete walls are rough and textured. The opening of the culvert is visible at the bottom, showing more water and rocks. 2022-09-08, 1:47 PM 9U 587055 6138697	
 A view looking upstream through a concrete culvert. The water is flowing rapidly and turbulent. Some branches and debris are visible in the water near the inlet. 2022-09-08, 1:17 PM 9U 587061 6138705		 A view looking downstream from the outlet of a culvert. The water is flowing rapidly and turbulent. Some branches and debris are visible in the water near the outlet. 2022-09-08, 1:54 PM 9U 587027 6138714	
 A view looking upstream through a concrete culvert. The water is flowing rapidly and turbulent. Some branches and debris are visible in the water near the inlet. 9U 587207 6138656 2022-09-08 14:06:45		 A view looking downstream from the outlet of a culvert. The water is flowing rapidly and turbulent. Some branches and debris are visible in the water near the outlet. 2022-09-08, 1:54 PM 9U 587027 6138714	

Location and Stream Data		.	Crossing Characteristics –
Date	2022-09-08	Crossing Sub Type	Ford
PSCIS ID	198223	Diameter (m)	–
External ID	8300238	Length (m)	–
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	587207.4	Resemble Channel	–
Northing	6138659	Backwatered	–
Stream	Pinenut 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	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Collapsed bridge. Some erosion along side but not fish passage issue. 14:04			
Photos: PSCIS ID 198223. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 9U 587207 6138656 2022-09-08 14:06:42	 9U 587207 6138656 2022-09-08 14:06:42	 9U 587207 6138656 2022-09-08 14:06:34	 9U 587207 6138656 2022-09-08 14:06:58
 9U 587207 6138656 2022-09-08 14:07:06	 9U 587207 6138656 2022-09-08 14:06:34		

Location and Stream Data		Crossing Characteristics	
Date	2022-09-13	Crossing Sub Type	Round Culvert
PSCIS ID	198224	Diameter (m)	0.8
External ID	4601067	Length (m)	11
Crew	TP VJ	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	594902	Resemble Channel	No
Northing	6075406	Backwatered	No
Stream	Tributary to Zymoetz River	Percent Backwatered	–
Road	Hankin FSR	Fill Depth (m)	1
Road Tenure	MoF 7552	Outlet Drop (m)	0
Channel Width (m)	1.45	Outlet Pool Depth (m)	0.45
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	1
Habitat Value	Medium	Valley Fill	Shallow Fill
Final score	21	Barrier Result	Barrier
Fix type	Replace Structure with Streambed Simulation CBS	Fix Span / Diameter	3

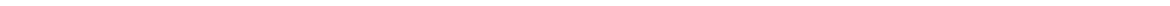
Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Round culvert. 15:23:00			
Photos: PSCIS ID 198224. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
Date & Time: Tue, Sep 13, 2022, 15:23:00 PDT Position: 9°N 59'49.10" W 60°50'41.0" (+4.7m) Altitude: 907m (+3.4m) Datum: WGS-84 Azimuth/Bearing: 309° N51W 5493mils True (+12°) Elevation Angle: -20.3° Horizon Angle: -02.2° Zoom: 1.0X		Date & Time: Tue, Sep 13, 2022, 15:23:00 PDT Position: 9°N 59'49.10" W 60°50'41.0" (+4.7m) Altitude: 907m (+3.4m) Datum: WGS-84 Azimuth/Bearing: 221° S52W 3947mils True (-12°) Elevation Angle: +01.1° Horizon Angle: +00.0° Zoom: 1.0X	
			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-23	Crossing Sub Type	Round Culvert
PSCIS ID	198225	Diameter (m)	2.4
External ID	8300128	Length (m)	30
Crew	JO	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	584898.7	Resemble Channel	No
Northing	6152502	Backwatered	No
Stream	Sterritt creek	Percent Backwatered	–
Road	Babine Slide FSR	Fill Depth (m)	4
Road Tenure	MoF 4841	Outlet Drop (m)	2
Channel Width (m)	3.7	Outlet Pool Depth (m)	2
Stream Slope (%)	4.5	Inlet Drop	Yes
Beaver Activity	No	Slope (%)	3.5
Habitat Value	Low	Valley Fill	Deep Fill
Final score	42	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	13

Location and Stream Data	•	Crossing Characteristics	-
Comments: Culvert is separating 10 meters in from upstream, top of culvert slumping in. 10:06			
Photos: PSCIS ID 198225. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-23 10:02:51 9U 584836 6152516		 2022-09-23 10:16:46 9U 584896 6152497	
 2022-09-23 10:17:08 9U 584902 6152507		 2022-09-23 10:58:24 9U 584867 6152480	
 2022-09-23 10:16:55 9U 584896 6152497		 2022-09-23 10:59:53 9U 584859 6152480	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-26	Crossing Sub Type	Bridge
PSCIS ID	198226	Diameter (m)	4.8
External ID	4709789	Length (m)	10
Crew	JO	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	581806	Resemble Channel	–
Northing	6156404	Backwatered	–
Stream	Mtcutcheon creek	Percent Backwatered	–
Road	Babine Slide FSR	Fill Depth (m)	–
Road Tenure	MoF 4841	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: New structure and old structure was on the side of the road near bridge. 10:35			
Photos: PSCIS ID 198226. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
	2022-09-26 10:36:23 9U 5818120 6156409		2022-09-26 10:37:54 9U 581810 6156413
	2022-09-26 10:40:17 9U 581797 6156402		2022-09-26 10:37:54 9U 581810 6156413
	2022-09-26 10:37:42 9U 581810 6156413		2022-09-26 10:38:25 9U 581794 6156305

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-26	Crossing Sub Type	Bridge
PSCIS ID	198227	Diameter (m)	4.8
External ID	24709790	Length (m)	18
Crew	JO	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	583782.1	Resemble Channel	–
Northing	6153479	Backwatered	–
Stream	Tributary to Skeena River	Percent Backwatered	–
Road	Babine Slide FSR	Fill Depth (m)	–
Road Tenure	MoF 4841	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	3	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. 11:14:00	•		-
Photos: PSCIS ID 198227. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-26 11:10:52 9U 583791 6153464	 2022-09-26 11:12:02 9U 583785 6153474	 2022-09-26 11:13:44 9U 583768 6153465	 2022-09-26 11:12:02 9U 583785 6153474
 2022-09-26 11:11:31 9U 583785 6153474	 2022-09-26 11:12:26 9U 583781 6153483		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-26	Crossing Sub Type	Bridge
PSCIS ID	198228	Diameter (m)	4.8
External ID	8302244	Length (m)	11
Crew	JO	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	583847.9	Resemble Channel	–
Northing	6153432	Backwatered	–
Stream	Tributary to Skeena River	Percent Backwatered	–
Road	Babine Slide FSR	Fill Depth (m)	–
Road Tenure	MoF 4841	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Retaining fencing installed on both side of streams. Black sediment fencing also installed. 11:28			
Photos: PSCIS ID 198228. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-26 11:24:54 9U 583830 6153441	 2022-09-26 11:26:48 9U 583850 6153430	 2022-09-26 11:27:36 9U 583841 6153423	 2022-09-26 11:27:56 9U 583841 6153423
 2022-09-26 11:26:15 9U 583850 6153430	 2022-09-26 11:27:17 9U 583841 6153423		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-05	Crossing Sub Type	Ford
PSCIS ID	198229	Diameter (m)	–
External ID	8300390	Length (m)	–
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	570745.1	Resemble Channel	–
Northing	6149438	Backwatered	–
Stream	Tributary to McCully 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	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Unknown
Fix type	–	Fix Span / Diameter	–

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics	-
Comments: Deactivated spur road. Ford is not in the same position as shown on the map. 13:08			
Photos: PSCIS ID 198229. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
	9U 570746 6149440 2022-09-05 13:08:30		9U 570742 6149439 2022-09-05 13:24:39
	9U 570742 6149413 2022-09-05 13:21:24		9U 570744 6149441 2022-09-05 13:22:36
	9U 570727 6149406 2022-09-05 13:22:21		9U 570744 6149441 2022-09-05 13:22:56

Location and Stream Data		Crossing Characteristics	
Date	2022-09-07	Crossing Sub Type	Round Culvert
PSCIS ID	198230	Diameter (m)	0.5
External ID	8300108	Length (m)	14
Crew	MW	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	575356.8	Resemble Channel	No
Northing	6152462	Backwatered	No
Stream	Trib to Sammon Lake	Percent Backwatered	–
Road	Kispiox Valley Rd	Fill Depth (m)	1
Road Tenure	MoTi Local	Outlet Drop (m)	0.1
Channel Width (m)	1.9	Outlet Pool Depth (m)	0.3
Stream Slope (%)	2.5	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

Location and Stream Data	•	Crossing Characteristics	-
Comments: Fish spotted downstream of culvert. 16:38			
Photos: PSCIS ID 198230. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
	2022-09-07 16:36:15 9U 575355 6152458		2022-09-07 16:39:05 9U 575354 6152453
	2022-09-07 16:36:50 9U 575358 6152458		2022-09-07 16:44:22 9U 575346 6152465
	2022-09-07 16:37:11 9U 575357 6152456		2022-09-07 16:44:44 9U 575343 6152473

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-06	Crossing Sub Type	Bridge
PSCIS ID	198231	Diameter (m)	9
External ID	8302755	Length (m)	6
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	534422.2	Resemble Channel	–
Northing	6178965	Backwatered	–
Stream	Tributary to Nangeese River	Percent Backwatered	–
Road	Hodder	Fill Depth (m)	–
Road Tenure	BCTS 10121	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. Road fairly brushed in. 13:03			
Photos: PSCIS ID 198231. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 <p>9U 534429 6178969 2022-09-06 13:06:27</p>		 <p>9U 534429 6178969 2022-09-06 13:06:58</p>	
 <p>9U 534429 6178969 2022-09-06 13:07:12</p>		 <p>9U 534429 6178969 2022-09-06 13:06:48</p>	
 <p>9U 534429 6178969 2022-09-06 13:06:34</p>		 <p>9U 534429 6178969 2022-09-06 13:06:38</p>	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-06	Crossing Sub Type	Bridge
PSCIS ID	198232	Diameter (m)	15.5
External ID	8302410	Length (m)	4
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	553740	Resemble Channel	–
Northing	6161966	Backwatered	–
Stream	Tributary to Kispiox River	Percent Backwatered	–
Road	Mitten Mainline	Fill Depth (m)	–
Road Tenure	MoF 9657	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge. Stream bed is dry at time of assessment. 18:33			
Photos: PSCIS ID 198232. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
			
			
			

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-07	Crossing Sub Type	Bridge
PSCIS ID	198233	Diameter (m)	4
External ID	8302779	Length (m)	3
Crew	MW	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	564361.9	Resemble Channel	–
Northing	6167113	Backwatered	–
Stream	Trib to Cullon Creek	Percent Backwatered	–
Road	Cullon Main	Fill Depth (m)	–
Road Tenure	MoF 7871	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

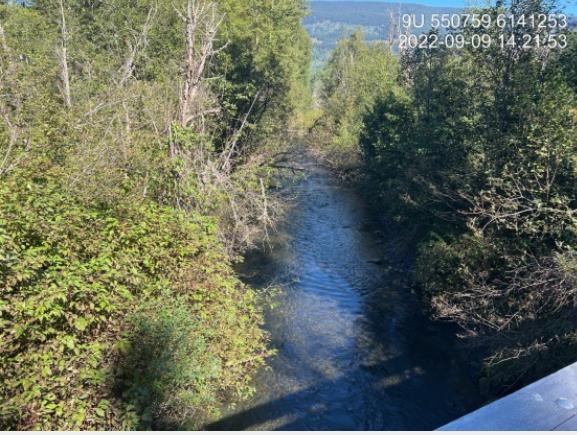
Location and Stream Data	•	Crossing Characteristics	-
Comments: Bridge is a little rotten but in ok shape. 14:11			
Photos: PSCIS ID 198233. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 2022-09-07 14:08:47 9U 564347 6167113	 2022-09-07 14:08:53 9U 564363 6167101	 2022-09-07 14:09:51 9U 564363 6167109	 2022-09-07 14:08:57 9U 564353 6167112
 2022-09-07 14:10:02 9U 564365 6167114	 2022-09-07 14:09:22 9U 564352 6167099		

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-07	Crossing Sub Type	Bridge
PSCIS ID	198234	Diameter (m)	3.5
External ID	8301892	Length (m)	6
Crew	MW	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	569230.1	Resemble Channel	–
Northing	6166554	Backwatered	–
Stream	Trib to Carrigan Creek	Percent Backwatered	–
Road	Skeena Carrigan FSR	Fill Depth (m)	–
Road Tenure	MoF 7871	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Location and Stream Data	•	Crossing Characteristics
Comments: Bridge with very deep fill. Approx. 10cm between water and bottom of bridge. 15:38		
Photos: PSCIS ID 198234. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.		
 2022-09-07 15:40:52 9U 569236 6166572	 2022-09-07 15:40:22 9U 569231 6166575	 2022-09-07 15:40:22 9U 569231 6166575
 2022-09-07 15:40:38 9U 569237 6166575	 2022-09-07 15:41:40 9U 569215 6166585	 2022-09-07 15:41:40 9U 569215 6166585
 2022-09-07 15:40:32 9U 569233 6166572	 2022-09-07 15:41:47 9U 569222 6166584	 2022-09-07 15:41:47 9U 569222 6166584

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Bridge
PSCIS ID	198235	Diameter (m)	14
External ID	8302212	Length (m)	5
Crew	AI	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	550746.8	Resemble Channel	–
Northing	6141256	Backwatered	–
Stream	Kitwanga River	Percent Backwatered	–
Road	Spur	Fill Depth (m)	–
Road Tenure	Kispiox River Timber R11351	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–

Appendix - Phase 1 Fish Passage Ass...

Location and Stream Data	•	Crossing Characteristics
Comments: Bridge, beautiful river. 14:18		
Photos: PSCIS ID 198235. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.		
 A photograph showing a wooden bridge deck with a white identification card placed on it. The card has handwritten text: "B3D2212". The background shows a lush green forest and a clear blue sky. <p>9U 550748 6141256 2022-09-09 14:21:34</p>	 A close-up photograph looking down at the water flowing under a bridge. The bridge's wooden railing is visible on the right. The water is clear and reflects the surrounding environment. <p>9U 550759 6141253 2022-09-09 14:22:23</p>	
 A photograph looking upstream from under a bridge. The bridge's wooden railing is on the right. The water is clear and reflects the surrounding environment. <p>9U 550759 6141253 2022-09-09 14:22:06</p>	 A photograph looking downstream from under a bridge. The bridge's wooden railing is on the right. The water is clear and reflects the surrounding environment. <p>9U 550759 6141253 2022-09-09 14:22:17</p>	
 A photograph looking upstream from under a bridge. The bridge's wooden railing is on the right. The water is clear and reflects the surrounding environment. <p>9U 550759 6141253 2022-09-09 14:21:53</p>	 A photograph looking downstream from under a bridge. The bridge's wooden railing is on the right. The water is clear and reflects the surrounding environment. <p>9U 550759 6141253 2022-09-09 14:21:46</p>	

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-09	Crossing Sub Type	Round Culvert
PSCIS ID	198236	Diameter (m)	0.85
External ID	8301994	Length (m)	10
Crew	AI JO	Embedded	No
UTM Zone	9	Depth Embedded (m)	–
Easting	550300	Resemble Channel	No
Northing	6140708	Backwatered	No
Stream	Tributary to Kitwanga River	Percent Backwatered	–
Road	Kitwancool Branch 2 FSR	Fill Depth (m)	0.45
Road Tenure	MoF 8687	Outlet Drop (m)	0.24
Channel Width (m)	2.3	Outlet Pool Depth (m)	0.22
Stream Slope (%)	1	Inlet Drop	No
Beaver Activity	No	Slope (%)	3.5
Habitat Value	High	Valley Fill	Deep Fill
Final score	31	Barrier Result	Barrier
Fix type	Replace with New Open Bottom Structure	Fix Span / Diameter	10

Location and Stream Data	•	Crossing Characteristics	-
Comments: 2 culverts side by side, lots of beaver activity in the area. 14:23:18			
Photos: PSCIS ID 198236. From top left clockwise: Road/Site Card, Barrel, Outlet, Downstream, Upstream, Inlet.			
 A photograph of a yellow and white site card lying on a dirt road. The card has handwritten text: "2022-09-09 14:26:31", "9U 550304 6140702", and "8301994".	•	 A photograph looking down the inside of a large, dark culvert. Light is coming from the far end, illuminating the water and the walls of the pipe.	-
 A photograph showing a black barrel partially submerged in a stream, surrounded by fallen branches and debris.	•	 A photograph showing water flowing out of a culvert into a stream. The water is turbulent and white, creating a small waterfall effect.	-
 A photograph of a rocky stream bed with clear water flowing over stones. Fallen branches are visible in the water.	•	 A photograph of a stream flowing through dense green vegetation, including ferns and bushes, with sunlight filtering through the leaves.	-

Location and Stream Data		Crossing Characteristics –	
Date	2022-09-13	Crossing Sub Type	Bridge
PSCIS ID	198237	Diameter (m)	9.8
External ID	4600909	Length (m)	5
Crew	TP	Embedded	–
UTM Zone	9	Depth Embedded (m)	–
Easting	598446.8	Resemble Channel	–
Northing	6071181	Backwatered	–
Stream	Tributary to Zymoetz River	Percent Backwatered	–
Road	McDonnell Lake FSR	Fill Depth (m)	–
Road Tenure	MoF 7552	Outlet Drop (m)	–
Channel Width (m)	–	Outlet Pool Depth (m)	–
Stream Slope (%)	–	Inlet Drop	–
Beaver Activity	No	Slope (%)	–
Habitat Value	–	Valley Fill	–
Final score	0	Barrier Result	Passable
Fix type	–	Fix Span / Diameter	–