CONTRACT # EN13TAB010

FISH PASSAGE CULVERT INVESTIGATIONS 2013

Babine TSA

Prepared By:
MarLim Ecological Consulting Ltd.

January 2014

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THE CONTENTS OF THIS REPORT ARE MEANT TO PROVIDE A SUMMARY OF THE FISH PASSAGE CULVERT INVESTIGATIONS COMPLETED BY MARLIM ECOLOGICAL CONSULTING LTD. BETWEEN MAY AND NOVEMBER 2013, FOR BURNS LAKE CONTRACT # EN13TAB010. ANY CHANGES SINCE THE DOCUMENTED DATE OF THE LAST SITE VISIT ON ***NOVEMBER 20, 2013*** *ARE NOT ACCOUNTED FOR IN THIS REPORT. THE CONTENTS OF THIS REPORT SHOULD NOT BE SUBSTANTIALLY MODIFIED WITHOUT PRIOR CONSENT FROM MARLIM ECOLOGICAL CONSULTING LTD. THIS IS TO ENSURE THAT THE INTEGRITY OF THE DATA AND ANY OBSERVATIONS MADE IN THIS REPORT ARE MAINTAINED. A COMPLETE COPY OF THIS REPORT HAS BEEN RETAINED IN THE OFFICES OF MARLIM ECOLOGICAL CONSULTING LTD. FOR FUTURE REFERENCE.*

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EXECUTIVE SUMMARY

Marlim Ecological Consulting Ltd. completed a Fish Passage Culvert Investigation (FPCI) contract in the Babine Timber Sales Area, Bulkley Watershed Group, for BC Timber Sales. This project involved the assessment of all designated fish-streams crossings in the priority watersheds within the study area to determine which stream crossing structures were barriers and preventing fish passage. Recommendations were made for each stream crossing structure and ten sites were selected and recommended for restoration projects. The site assessments involved obtaining standardized information at each location and keeping photographic documentation for each site. The field data collected for all structures assessed on fish streams was entered and submitted into the Provincial Stream Crossing Inventory System (PSCIS). The PSCIS has a scoring system which automatically produces results when the data collected in the field is entered into the program. This scoring system determines whether a stream crossing structure is classified as unknown, passable, potential or barrier and aided in determining which sites were selected and recommended for restoration.

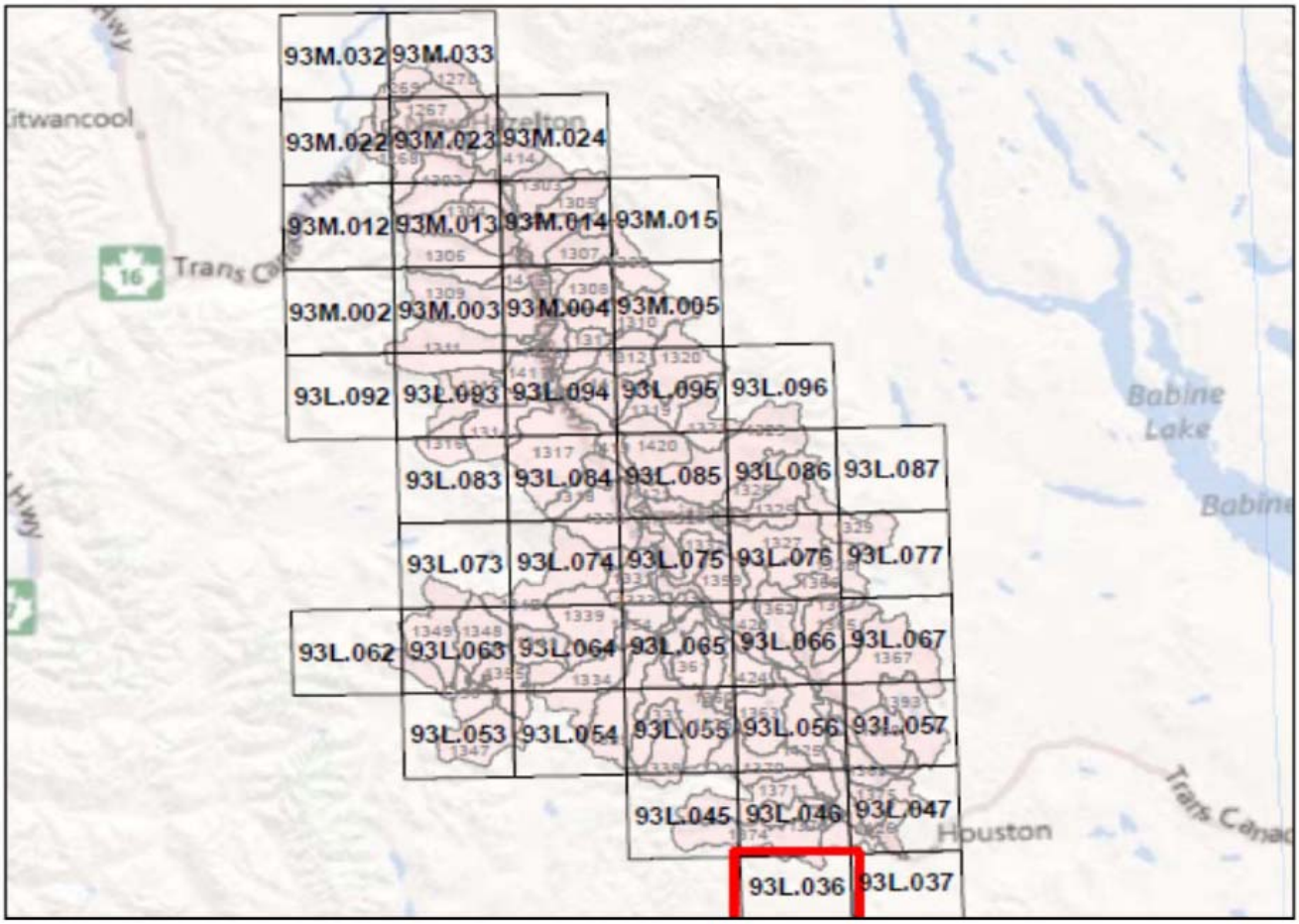
A total of 747 sites were visited and assessed throughout the duration of this study. Out of those, 154 sites did not exist. Photographs were taken at these sites to verify that while they were identified on the mapping provided, they were in fact non-existent.

A total of 79 stream crossings had open bottom structures in place, 59 bridges, 9 pipe arches and 11 wood box culverts. A total of 423 stream crossings had closed bottom structures installed, 409 round culverts, 13 oval culverts, and 1 concrete box culvert. A total of 91 sites were classified as “other” and had fords in place at the stream crossing locations. Out of the 593 existing sites assessed, 92 were deemed passable. A total of 50 were classified as potential barriers to fish passage, 360 sites were classified as barriers to fish passage and 91 sites were classified as unknown.

Following analysis of the crossing barrier results, ten stream crossing structures were selected and are being recommended to BC Timber Sales for restoration in this report.

STUDY AREA

The study area of this contract was the Babine Timber Sales Area, Bulkley Watersheds. The sites assessed were located on BC map sheets 93L and 93M. Sites assessed were in the area of Houston, Smithers, Moricetown, and Hazelton BC. Watersheds to be assessed were selected from the general study area by the contract manager at BCTS. For the works completed in 2013, the priority watersheds were those remaining in the original schedule of works (started in 2012). These watersheds were: 1258, 1306, 1307, 1308, 1309, 1310, 1311, 1321, 1323, 1327, 1329, 1330, 1331, 1332, 1333, 1340, 1341, 1355, 1359, 1361, 1362, 1364, 1365, 1368, 1415, 1418, 1419, 1420, 1421, 1422, 1423 and 1425. Following completion of these watersheds, the Skeena business area watersheds were assessed: 1267, 1268, 1269, 1270, 1302, 1303, 1304, 1305, 1413 and 1415. Finally, additional sites assessed were selected from watersheds in the 'FRBC or Current Operations' list. Watersheds assessed in this list included: 1334, 1335, 1341, 1348, 1349, 1354, 1360, 1363, 1366, 1367, 1416 and 1424. Watersheds assessed are outlined below on the study area map.



SCOPE OF WORKS COMPLETED

The scope of works completed is outlined in the table below:

Table 1: Overall Summary of Sites for Burns Lake FPCI - 2013 Work

****NOTE: As the mapsheets overlap significantly along the edges, overlapping numbers have been counted on the mapsheet with the largest area of the subject watershed, and not on adjacent mapsheets.****

Watershed #	Mapsheet #	# of Sites Mapped**	# of Mapped Sites Assessed (2013)	# of Unmapped Sites Assessed (2013)	# of Sites Unassessed *See Individual in Appendix VI	# of Sites Remaining
1267	93M.022	9	4	0	4	1
	93M.023	11	10	0	0	1
1268	93M.022	3	2	0	1	0
	93M.023	5	4	5	1	0
1269	93M.022	10	10	4	0	0
	93M.033	6	3	1	1	2
1270	93M.023	1	1	0	0	0
1285	93M.005	14	11	4	3	0
	93M.015	9	7	1	2	0
1302	93M.023	8	6	0	0	2
1303	93M.014	10	6	2	1	3
1304	93M.014	1	1	0	0	0
1305	93M.014	2	1	0	0	1
1306	93M.013	10	10	0	0	0
	93M.014	5	3	0	2	0
1307	93M.004	2	2	1	0	0
	93M.014	8	7	3	1	0
1309	93M.004	35	25	4	10	0
1310	93M.004	6	6	0	0	0
1311	93M.004	7	7	1	0	0
1321	93L.095	14	10	1	4	0
1323**	93L.085	23	16	2	7	0
	93L.086	18	9	2	9	0
1327**	93L.086	4	0	0	0	4
1329	93L.076	15	12	3	3	0
	93L.077	4	4	0	0	0
	93L.086	4	3	0	1	0
1330	93L.085	3	1	0	2	0
1331**	93L.075	34	22	5	12	0
1332	93L.075	2	2	0	0	0
1333	93L.065	3	3	2	0	0
	93L.075	19	13	1	6	0
1334	93L.054	12	0	0	0	12
	93L.064	67	0	0	0	66
	93L.065	16	6	0	0	10
1340	93L.074	27	22	14	5	0
1341	93L.064	23	21	0	2	0
1348	93L.063	13	1	0	0	12
	93L.073	1	0	0	0	1
1349	93L.063	14	1	0	0	13
1354	93L.064	49	10	2	0	39
	93L.065	25	0	0	0	25
1355	93L.053	4	2	1	2	0
	93L.054	9	6	4	1	2
	93L.063	25	16	2	5	4
	93L.064	16	10	0	4	2
1359	93L.065	3	3	0	0	0
	93L.075	16	11	3	3	1
	93L.076	5	4	3	1	0
1360	93L.065	10	1	0	0	9
1361	93L.065	32	28	4	4	0
1362**	93L.066	36	19	2	12	5
	93L.076	3	2	2	1	0
1363	93L.055	1	0	0	0	1
	93L.056	25	0	0	0	25
	93L.066	1	1	0	0	0
1364	93L.066	50	23	4	12	15
	93L.067	6	5	0	1	0
	93L.077	1	1	1	0	0
1365	93L.066	28	14	1	1	13
	93L.067	22	15	9	5	2
1366	93L.066	5	3	0	0	2
	93L.076	24	2	1	0	22
1367	93L.056	37	0	0	0	37
	93L.066	3	0	0	0	3
	93L.067	11	1	0	0	10
1368	93L.056	2	1	0	1	0
	93L.057	24	14	5	10	0
1393**	93L.057	19	1	0	0	18
1413	93M.014	4	3	0	1	0
	93M.023	15	13	0	2	0
1414	93M.014	2	0	0	0	2
	93M.023	4	0	0	0	4
	93M.024	5	5	1	0	0
1415	93M.004	9	1	0	7	1
	93M.014	5	3	0	2	0
1416	93L.094	1	1	0	0	0
	93M.004	11	10	2	1	0
	93M.014	11	5	1	0	6
1418	93L.094	35	25	2	10	0
	93L.095	12	7	1	4	1
1419	93L.084	2	0	0	1	1
	93L.085	2	2	0	0	0
	93L.094	9	2	0	4	3
1420	93L.085	12	7	1	5	0
	93L.095	13	3	1	10	0
1421	93L.075	2	2	0	0	0
	93L.085	1	1	0	0	0
1422	93L.065	3	1	0	2	0
	93L.075	12	9	1	3	0
1423**	93L.056	2	2	0	0	0
	93L.065	1	1	0	0	0
	93L.066	14	6	1	5	3
	93L.076	5	3	0	1	1
1424	93L.055	2	0	0	0	2
	93L.056	2	0	0	0	2
	93L.066	21	7	0	0	14
1425	93L.046	22	16	0	6	0
	93L.056	34	27	7	7	0
	93L.066	1	1	1	0	0
TOTAL:		**1244**	**628**	**119**	**211**	**403**

**Watersheds that have been previously started, sites mapped are the sites remaining at the beginning of the contract

= watersheds in Original Schedule
= watersheds in Skeena Business Area
= watersheds in FRBC or Current Operations

METHODS

Full size hardcopy maps and PDF copies of the map sheets for the study area were obtained from BC Timber Sales Burns Lake office. Road and stream layers for ArcGIS were obtained through the Land and Resource Data Warehouse (LRDW).

The methodology followed for this survey follows the methods described in the Field Assessment for Determining Fish Passage Status of Closed Bottom Structures, which is the standardised methodology for FPCI surveys. The scoring and data collection sheets from the document have been included in Appendix IV.

A photographic log was kept throughout the duration of the survey, to provide an accurate and standardized record of the physical characteristics of each stream crossing and crossing structure. A minimum of five photos were taken at each crossing structure site which included photos of the stream in the upstream and downstream direction from the crossing structure taken outside the influence of the road, a photo of the barrel of the structure and a photo of the inlet and outlet. Additional photos were taken if necessary to document additional or unusual features at the site such as beaver activity or concerns about road stability.

Stream widths were determined by recording and averaging the width of three locations on the downstream end of the crossing structure, the locations being the most representative of the channel configuration. The measurements were taken from the high water mark on both banks.

Stream gradient was determined using a clinometer. This measurement was taken on the downstream end of the crossing structure and on the longest sighting within the stream reach as possible. Culvert gradient was also measured using a clinometer, the sighting taken through the barrel of the culvert on the downstream end.

Other information recorded during each crossing assessment included UTM coordinates, stream and road name, crossing type, culvert diameter and length, inlet and outlet drop, habitat value and recommendations for the crossing structure. Each crossing structure assessed was marked using flagging tape which had assessment date, crew, and site number written on it for identification purposes.

Following completion of field assessments, all data was entered into the PSCIS excel data template, and submitted to the PSCIS database along with the photographs from each site. As per the standardised methodology for crossings which have two culverts with the same outlet elevation, the measurements used for barrier determination were the combined diameter, longest culvert, and highest gradient slope. The fill depth was recorded for the smaller culvert as it was the deeper measurement.

The barrier classifications produced by the scoring matrix were used in conjunction with site notes and photographs to select the ten sites which would provide the most benefit from remediation. The ten sites recommended in this report were selected based on fisheries habitat value (limited to the immediate vicinity upstream and downstream from the crossing), barrier severity, upstream habitat gained if fish passage is restored, and cost of crossing structure replacement.

RESULTS

In all, 747 mapped sites were assessed through this contract in 2013. Tables 2 and 3 below outline the total number of sites assessed by each structure type and subtype, as well as the scoring matrix barrier classifications. Of the 747 sites assessed, 79 were Open Bottom Structures (OBS) 59 bridges, 9 pipe arches, and 11 wood box culverts, 423 were Closed Bottom Structures (CBS) 409 round culverts, 13 oval culverts, and 1 concrete box culvert, 91 were Other-Fords, and 154 did not exist (DNE).

Table 2: Structures Assessed

Structure Type	Structure Subtype	# Assessed	Total	%
Open Bottom Structure	Bridge	59		
	Pipe Arch	9		
	Wood Box Culvert	11	79	11
Closed Bottom Structure	Round Culvert	409		
	Oval Culvert	13		
	Concrete Box Culvert	1	423	57
Other	Ford	91	91	12
Do Not Exist	No Crossing at or Near Mapped Location	154	154	21
		Total	747	100

Of the 79 OBS assessed, all structures were classed as Passable by the scoring matrix; however, 1 of the bridges, and 1 of the pipe arches had debris jams. This debris was considered to be

causing the structures to be barriers. In addition, 6 of the wood box culverts were in fact log and earth crossing structures which were complete barriers to fish passage. These crossings were classified as wood box culverts as there is no suitable option to enter for log and earth structures in the data template.

Of the 423 CBS assessed, 10 of the round culverts were classed as Passable by the matrix, while 3 of the oval culverts were classed as Passable. 49 round culverts and 1 oval culvert were classed as Potential barriers, while 350 round culverts, 9 oval culverts, and the concrete box culvert were classed as Barriers.

All 91 ford structures assessed were classified as Unknown by the scoring matrix; however, 7 of the ford crossings had significant debris jams which were creating barriers to fish passage.

Table 3: Assessment Statistics

Structure Type	Structure Subtype	# Existing Assessed	Passable	Potential	Barrier	Unknown
Open Bottom Structure	Bridge	59	59*	-	-	-
	Pipe Arch	9	9**	-	-	-
	Wood Box Culvert	11	11***	-	-	-
Closed Bottom Structure	Round Culvert	409	10	49	350	-
	Oval Culvert	13	3	1	9	-
	Concrete Box Culvert	1	-	-	1	-
Other	Ford	91	-	-	-	91****
	Total	593	92	50	360	91
		%	16	8	61	15

*All 59 bridges were classed as Passable by the PSCIS spreadsheet; however, 1 bridge was creating a debris jam that may be a barrier to fish passage.

**All 9 Pipe Arches were classed as Passable by the PSCIS spreadsheet; however, 1 had a debris jam that was creating a barrier to fish passage.

***All 11 wood box culverts were classed as Passable by the FPCI spreadsheet; however, 6 of these were log and earth structures that were complete barriers.

****All 91 fords were classed as Unknown by the FPCI spreadsheet; however, 7 of these had significant debris built up, creating barriers to fish passage.

Out of all the sites assessed in 2013, 32 were located on highways (31 on Highway 16, 1 on Highway 62). Of these 32 sites, 23 had medium (4) or high (19) habitat value, of which 19 sites were classified as barriers by the scoring matrix (15 were noted as high concern during the field assessments, while the other 4 appear to be potentially seasonally passable). While highway sites were not the focus of this contract, the high percentage of highway sites which are barriers to fish passage is concerning, particularly in this study area where the highway stays quite close to the Bulkley River. Where these sites are located close to the river, they effectively prevent fish access to the entire upstream area of the watersheds where they are located. None of these sites

have been included in this report, as they do not fall under the jurisdiction of MoFLNRO; however, the summary list of highway sites has been included in Appendix VII for reference.

The following paragraphs contain detailed summaries of the ten sites selected for removal or replacement from the results of the site assessments conducted in 2013. Tables 3 and 4 below summarize the assessment results of the ten structures. The order in which the crossing structures are presented and described is numerical, and does not indicate any priority for replacement.

Table 4: Assessment Perameters

Row	My Crossing Reference	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embeddedment? Yes/No	Resemble Channel? Yes / No	Backwatered? Yes / No	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)	Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope (%)	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value
1	M13-79	Closed Bottom Structure	Round Culvert	0.44	15.25	No	No	No	1.63	0.89	0.10	No	5.50	1.02	8	No	No	Deep Fill	High
2	M13-112	Closed Bottom Structure	Round Culvert	1.90	12.20	No	No	No	0.57	0.35	0.34	Yes	3.50	1.96	2	No	No	Deep Fill	High
3	M13-191	Closed Bottom Structure	Round Culvert	0.50	8.25	No	No	No	0.49	0.76	0.34	Yes	4.50	0.79	6.5	No	No	Deep Fill	High
4	M13-258	Closed Bottom Structure	Oval Culvert	1.35	20.20	No	No	No	1.29	0.66	0.25	No	4.00	1.91	11	No	No	Deep Fill	High
5	M13-260	Closed Bottom Structure	Round Culvert	2.10	14.00	No	No	No	0.62	0.5	0.22	No	4.00	4.28	4	No	No	Deep Fill	High
6	M13-383	Closed Bottom Structure	Round Culvert	1.00	10.00	No	No	No	0.37	0.86	0.40	Yes	6.00	1.93	10	No	No	Shallow Fill	High
7	M13-412	Closed Bottom Structure	Round Culvert	1.30	30.00	No	No	No	9.00	0.91	1.49	No	7.00	3.08	6	No	No	Deep Fill	High
8	M13-436	Closed Bottom Structure	Oval Culvert	2.00	16.00	No	No	No	1.65	1.15	1.35	No	3.00	5.30	3	No	No	Deep Fill	High
9	M13-478	Closed Bottom Structure	Round Culvert	1.00	12.00	No	No	No	1.70	0.18	0.34	No	12.50	2.77	7.5	No	No	Deep Fill	High
10	M13-675	Closed Bottom Structure	Round Culvert	0.90	9.00	No	No	No	0.65	0.58	0.42	Yes	3.00	2.61	4	No	No	Deep Fill	High

Table 5: Scoring Matrix

Row	My Crossing Reference	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result
1	M13-79	2.32	3	10	10	10	6	39	Barrier
2	M13-112	1.03	0	10	10	10	3	33	Barrier
3	M13-191	1.58	0	10	10	10	6	36	Barrier
4	M13-258	1.41	3	10	10	10	6	39	Barrier
5	M13-260	2.04	0	10	10	10	6	36	Barrier
6	M13-383	1.93	0	10	10	10	6	36	Barrier
7	M13-412	2.37	6	10	10	10	6	42	Barrier
8	M13-436	2.65	3	10	10	10	6	39	Barrier
9	M13-478	2.77	0	10	5	10	6	31	Barrier
10	M13-675	2.90	0	10	10	10	6	36	Barrier

TRIBUTARY TO LEMIEUX CREEK

MAP NO.: 287093A **MARLIM NO.:** M13-79

STREAM NAME: TRIBUTARY TO LEMIEUX CREEK **ROAD NAME:** H. KERR ROAD

UTM COORDINATES: ZONE 9N 642166E 6057779N

Marlim Site No.: M13-79 was assessed on May 6th, 2013. The site was located at 2.65km on H. Kerr Road in the Babine Timber Sales Area, Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 0.44m, a length of 15.25m and a gradient of 5.5%. This culvert was not embedded and had a fill depth of 1.63m. There was no substrate inside the culvert, and the culvert was not backwatered. There was no inlet drop however there was an outlet drop of 0.89m.

The stream had an average channel width of 1.02m and a gradient of 8.0%. The outlet pool depth was 0.10m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 2: M13-79

Description: Outlet

Direction: Upstream

TRIBUTARY TO ROBIN CREEK

MAP NO.: 287000 **MARLIM NO.:** M13-112

STREAM NAME: TRIBUTARY TO ROBIN CREEK **ROAD NAME:** ROUND LAKE ROAD

UTM COORDINATES: ZONE 9N 637529E 6059363N

Marlim Site No.: M13-112 was assessed on May 7th, 2013. The site was located at 3.00km on Round Lake Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (2 round culverts) with a combined diameter of 1.90m (1.1m left, 0.8m right), a length of 12.20m and a gradient of 3.5%. Neither culvert was embedded and the fill depth was 0.57m. There was no substrate inside either culvert, and the culverts were not backwatered. There was an inlet drop of 0.13m (right culvert) and an outlet drop of 0.35m.

The stream had an average channel width of 1.96m and a gradient of 2.0%. The outlet pool depth was 0.34m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 8: M13-112

Description: Outlet

Direction: Upstream

TRIBUTARY TO SEYMOUR CREEK

MAP NO.: 284485 **MARLIM NO.:** M13-191

STREAM NAME: TRIBUTARY TO SEYMOUR CREEK **ROAD NAME:** WOOD CREEK FSR

UTM COORDINATES: ZONE 9N 617995E 6065452N

Marlim Site No.: M13-191 was assessed on May 23rd, 2013. The site was located at 0.35km on the Wood Creek Forest Service Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 0.50m, a length of 8.25m and a gradient of 4.5%. This culvert was not embedded and had a fill depth of 0.49m. There was no substrate present inside the culvert, and the culvert was not backwatered. There was an inlet drop of 0.27m, and an outlet drop of 0.76m.

The stream had an average channel width of 0.79m and a gradient of 6.5%. The outlet pool depth was 0.34m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 13: M13-191

Description: Outlet

Direction: Upstream

TRIBUTARY TO PINE CREEK

MAP NO.: 286812 **MARLIM NO.:** M13-258

STREAM NAME: TRIBUTARY TO PINE CREEK **ROAD NAME:** HUDSON BAY MTN. RD.

UTM COORDINATES: ZONE 9N 611156E 6068270N

Marlim Site No.: M13-258 was assessed on May 26th, 2013. The site was located at 15.9km on the Hudson Bay Mountain Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (oval culvert) with a diameter of 1.35m, a length of 20.20m and a gradient of 4.0%. This culvert was not embedded and had a fill depth of 1.29m. The substrate in the culvert did not resemble the channel substrate, and the culvert was not backwatered. There was no inlet drop; however, there was an outlet drop of 0.66m.

The stream had an average channel width of 1.91m and a gradient of 11.0%. The outlet pool depth was 0.25m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 18: M13-258

Description: Outlet

Direction: Upstream

TRIBUTARY TO PINE CREEK

MAP NO.: 284459 **MARLIM NO.:** M13-260

STREAM NAME: TRIBUTARY TO PINE CREEK **ROAD NAME:** MCDONNELL FSR

UTM COORDINATES: ZONE 9N 610617E 6067548N

Marlim Site No.: M13-258 was assessed on May 26th, 2013. The site was located at 0.20km on the McDonnell Forest Service Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 2.10m, a length of 14.00m and a gradient of 4.0%. This culvert was not embedded and had a fill depth of 0.62m. There was no substrate present in the culvert, and the culvert was not backwatered. There was no inlet drop; however, there was an outlet drop of 0.50m.

The stream had an average channel width of 4.28m and a gradient of 4.0%. The outlet pool depth was 0.22m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 23: M13-260

Description: Outlet

Direction: Upstream

TRIBUTARY TO DRIFTWOOD CREEK

MAP NO.: 286518 **MARLIM NO.:** M13-383

STREAM NAME: TRIBUTARY TO DRIFTWOOD CREEK **ROAD NAME:** DRIFTWOOD ROAD

UTM COORDINATES: ZONE 9N 628021E 6079554N

Marlim Site No.: M13-383 was assessed on June 14th, 2013. The site was located at 6.30km on Driftwood Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 1.00m, a length of 10.00m and a gradient of 6.0%. This culvert was not embedded and had a fill depth of 0.37m. There was no substrate present in the culvert, and the culvert was not backwatered. There was an inlet drop of 0.24m and there was an outlet drop of 0.86m.

The stream had an average channel width of 1.93m and a gradient of 10.0%. The outlet pool depth was 0.40m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was shallow and it was determined that this stream had high habitat value.

Photo 28: M13-383

Description: Outlet

Direction: Upstream

TWIN CREEK

MAP NO.: 286425 **MARLIM NO.:** M13-412

STREAM NAME: TWIN CREEK **ROAD NAME:** TELKWA HIGH ROAD

UTM COORDINATES: ZONE 9N 616675E 6084970N

Marlim Site No.: M13-412 was assessed on June 15th, 2013. The site was located on the Telkwa High Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 1.30m, a length of 30.00m and a gradient of 7.0%. This culvert was not embedded and had a fill depth of 9.00m. There was no substrate present in the culvert, and the culvert was not backwatered. There was no inlet drop; however, there was an outlet drop of 0.91m.

The stream had an average channel width of 3.08m and a gradient of 6.0%. The outlet pool depth was 1.49m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 33: M13-412

Description: Outlet

Direction: Upstream

MEED CREEK

MAP NO.: 286258 **MARLIM NO.:** M13-436

STREAM NAME: MEED CREEK **ROAD NAME:** TELKWA HIGH ROAD

UTM COORDINATES: ZONE 9N 612101E 6090132N

Marlim Site No.: M13-436 was assessed on June 16th, 2013. The site was located on the Telkwa High Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (oval culvert) with a diameter of 2.00m, a length of 16.00m and a gradient of 3.0%. This culvert was not embedded and had a fill depth of 1.65m. There was no substrate present in the culvert, and the culvert was not backwatered. There was no inlet drop; however, there was an outlet drop of 1.15m.

The stream had an average channel width of 5.30m and a gradient of 3.0%. The outlet pool depth was 1.35m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 38: M13-436

Description: Outlet

Direction: Upstream

TRIBUTARY TO BLUNT CREEK

MAP NO.: 284231 **MARLIM NO.:** M13-478

STREAM NAME: TRIBUTARY TO BLUNT CREEK **ROAD NAME:** R09533 222-1

UTM COORDINATES: ZONE 9N 620156E 6105758N

Marlim Site No.: M13-478 was assessed on June 26th, 2013. The site was located at 2.30km on the R09533 222-1 Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 1.00m, a length of 12.00m and a gradient of 12.5%. This culvert was not embedded and had a fill depth of 1.70m. There was no substrate present in the culvert, and the culvert was not backwatered. There was no inlet drop; however, there was an outlet drop of 0.18m.

The stream had an average channel width of 2.77m and a gradient of 7.5%. The outlet pool depth was 0.34m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 44: M13-478

Description: Outlet

Direction: Upstream

TRIBUTARY TO CORDUROY CREEK

MAP NO.: 285808 **MARLIM NO.:** M13-675

STREAM NAME: TRIBUTARY TO CORDUROY CREEK **ROAD NAME:** R10108-2

UTM COORDINATES: ZONE 9N 604530E 6117693N

Marlim Site No.: M13-675 was assessed on November 2nd, 2013. The site was located at 1.55km on the R10108-2 Road in the Babine Timber Sales Area Bulkley Watershed Group**.**

The crossing structure at this site was a closed-bottom structure (round culvert) with a diameter of 0.90m, a length of 9.00m and a gradient of 3.0%. This culvert was not embedded and had a fill depth of 0.65m. There was no substrate present in the culvert, and the culvert was not backwatered. There was an inlet drop of 0.30m, and an outlet drop of 0.58m.

The stream had an average channel width of 2.61m and a gradient of 4.0%. The outlet pool depth was 0.42m. There was no presence of beaver activity at this site and no fish were observed. The valley fill at the site was deep and it was determined that this stream had high habitat value.

Photo 50: M13-675

Description: Outlet

Direction: Upstream

ANALYSIS AND RECOMMENDATIONS

The following paragraphs contain recommendations for the stream crossing structures assessed during the course of this study. It is important to note that site assessments were completed at different times throughout the spring, summer, and fall and stream characteristics may vary seasonally. Seasonal differences in channel flow will be important to determine prior to confirming that a recommended site is in fact a high priority for replacement. In addition, fish sampling has not been carried out to confirm fish presence at any of the recommended crossing sites, and no field assessments have been carried out to determine the value of mapped upstream habitat. Recommendations and upstream habitat to be gained has been determined from the mapping data obtained through the Land and Resource Data Warehouse. Prior to restoration, each stream crossing should be assessed by a hydrologist and/or an engineer to determine if the recommended crossing structure will be adequately sized to convey the stream flow and to determine if any design/construction constraints exist. The species potentially present at each site have been determined from the provincial Fisheries Inventory Summary System (FISS) known species locations layer on the maps provided by BCTS. Species listed in the table below are either found in the subject channel, or in the water body the subject channel flows into.

Table 6 on the following page outlines the recommendations provided by Marlim for each selected site.

Table 6: Recommendations

Row	My Crossing Reference	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment	Species Potentially Present
1	M13-79	39	Barrier	Streambed Simulation	1.02	Embed larger CV if fish present	CT, LNC, NSC, SU
2	M13-112	33	Barrier	Streambed Simulation	1.96	Embed larger CV or install OBS if fish present - 2 culverts present	CT, LNC, NSC
3	M13-191	36	Barrier	Streambed Simulation	0.79	Install a properly embedded culvert if fish present	CH, CO, LSU, NSC, PCC, RB, SU
4	M13-258	39	Barrier	Streambed Simulation	1.91	Install a properly embedded culvert or OBS if fish present	CO, CT, DV, MW, PK
5	M13-260	36	Barrier	Open Bottom Structure	4.28	Install an OBS if fish present	CO, CT, DV, MW, PK
6	M13-383	36	Barrier	Streambed Simulation	2.00	Replace with properly embedded CV, or OBS if fish present	CH, CO, DV, RB
7	M13-412	42	Barrier	Open Bottom Structure	3.10	Replace with OBS	CC, CO, DV
8	M13-436	39	Barrier	Open Bottom Structure	5.30	Replace with OBS	CH, CO, DV, LNC, MW, PK, RB, ST
9	M13-478	31	Barrier	Removal		Remove culvert and deactivate road	BB, CT, DV, LNC, MW, RB, ST
10	M13-675	36	Barrier	Open Bottom Structure	2.70	Replace with OBS	RB

BB - Burbot (*Lota lota*)
CC - Sculpin (general) (*Cottus spp.*)
CH - Chinook salmon (*Oncorhynchus tshawytscha*)
CO - Coho salmon (*Oncorhynchus kisutch*)
CT - Cutthroat trout (*Oncorhynchus clarkii*)
DV - Dolly varden (*Salvelinus malma malma*)
LNC - Longnose dace (*Rhinichthys cataractae*)
LSU - Longnose sucker (*Catostomus catostomus*)
MW - Mountain whitefish (*Prosopium williamsoni*)
NSC - Northern pikeminnow (*Ptychocheilus oregonensis*)
PCC - Peamouth chub (*Mylocheilus caurinus*)
PK - Pink salmon (*Oncorhynchus gorbuscha*)
RB - Rainbow trout (*Oncorhynchus mykiss*)
RSC - Redside shiner (*Richardsonius balteatus*)
SP - Unidentified species
ST - Steelhead (*Oncorhynchus mykiss*)
SU - Sucker (general) (*Catostomus spp.*)

TRIBUTARY TO LEMIEUX CREEK

MAP NO.: 287093A **MARLIM NO.:** M13-79

STREAM NAME: TRIBUTARY TO LEMIEUX CREEK **ROAD NAME:** H. KERR ROAD

UTM COORDINATES: ZONE 9N 642166E 6057779N

Marlim Site No.: M13-79 had a stream width ratio of 2.32 and a stream width ratio score of 6. The culvert length score was 3, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 39 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 3.791km. The fish species potentially present at this site include Cutthroat trout, Longnose dace, Northern pikeminnow and suckers (general).

It is recommended that the current culvert be replaced with a properly embedded culvert of a minimum 1.10m diameter.

TRIBUTARY TO ROBIN CREEK

MAP NO.: 287000 **MARLIM NO.:** M13-112

STREAM NAME: TRIBUTARY TO ROBIN CREEK **ROAD NAME:** ROUND LAKE ROAD

UTM COORDINATES: ZONE 9N 637529E 6059363N

Marlim Site No.: M13-112 had a stream width ratio of 1.03 and a stream width ratio score of 3. The culvert length score was 0, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 33 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 4.851km. The fish species potentially present at this site include Cutthroat trout, Longnose dace and Northern pikeminnow.

It is recommended that the current culvert be replaced with a properly embedded culvert or open bottom structure with a minimum 2.00m diameter.

TRIBUTARY TO SEYMOUR CREEK

MAP NO.: 284485 **MARLIM NO.:** M13-191

STREAM NAME: TRIBUTARY TO SEYMOUR CREEK **ROAD NAME:** WOOD CREEK FSR

UTM COORDINATES: ZONE 9N 617995E 6065452N

Marlim Site No.: M13-191 had a stream width ratio of 1.58 and a stream width ratio score of 6. The culvert length score was 0, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 36 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 3.637km. The fish species potentially present at this site include Chinook salmon, Coho salmon, Longnose sucker, Longnose dace, Peamouth chub, Rainbow trout and suckers (general).

It is recommended that the current culvert be replaced with a properly embedded culvert with a minimum 0.80m diameter.

TRIBUTARY TO PINE CREEK

MAP NO.: 286812 **MARLIM NO.:** M13-258

STREAM NAME: TRIBUTARY TO PINE CREEK **ROAD NAME:** HUDSON BAY MTN. RD.

UTM COORDINATES: ZONE 9N 611156E 6068270N

Marlim Site No.: M13-258 had a stream width ratio of 1.41 and a stream width ratio score of 6. The culvert length score was 3, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 39 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 2.017km. The fish species potentially present at this site include Coho salmon, Cutthroat trout, Dolly varden, Mountain whitefish and Pink salmon.

It is recommended that the current culvert be replaced with a properly embedded culvert or open bottom structure with a minimum 2.00m diameter.

TRIBUTARY TO PINE CREEK

MAP NO.: 284459 **MARLIM NO.:** M13-260

STREAM NAME: TRIBUTARY TO PINE CREEK **ROAD NAME:** MCDONNELL FSR

UTM COORDINATES: ZONE 9N 610617E 6067548N

Marlim Site No.: M13-260 had a stream width ratio of 2.04 and a stream width ratio score of 6. The culvert length score was 0, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 36 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 4.579km. The fish species potentially present at this site include Coho salmon, Cutthroat trout, Dolly varden, Mountain whitefish and Pink salmon.

It is recommended that the current culvert be replaced with an open bottom structure with a minimum diameter of 4.30m.

TRIBUTARY TO DRIFTWOOD CREEK

MAP NO.: 286518 **MARLIM NO.:** M13-383

STREAM NAME: TRIBUTARY TO DRIFTWOOD CREEK **ROAD NAME:** DRIFTWOOD ROAD

UTM COORDINATES: ZONE 9N 628021E 6079554N

Marlim Site No.: M13-383 had a stream width ratio of 1.93 and a stream width ratio score of 6. The culvert length score was 0, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 36 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 4.271km. The fish species potentially present at this site include Chinook salmon, Coho salmon, Dolly varden and Rainbow trout.

It is recommended that the current culvert be replaced with a properly embedded culvert or open bottom structure with a minimum 2.00m diameter.

TWIN CREEK

MAP NO.: 286425 **MARLIM NO.:** M13-412

STREAM NAME: TWIN CREEK **ROAD NAME:** TELKWA HIGH ROAD

UTM COORDINATES: ZONE 9N 616675E 6084970N

Marlim Site No.: M13-412 had a stream width ratio of 2.37 and a stream width ratio score of 6. The culvert length score was 6, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 42 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 14.955km. The fish species potentially present at this site include Sculpins (general), Coho salmon and Dolly varden.

It is recommended that the current culvert be replaced with an open bottom structure with a minimum diameter of 3.10m.

MEED CREEK

MAP NO.: 286258 **MARLIM NO.:** M13-436

STREAM NAME: MEED CREEK **ROAD NAME:** TELKWA HIGH ROAD

UTM COORDINATES: ZONE 9N 612101E 6090132N

Marlim Site No.: M13-436 had a stream width ratio of 2.65 and a stream width ratio score of 6. The culvert length score was 3, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 39 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 2.646km. The fish species potentially present at this site include Chinook salmon, Coho salmon, Dolly varden, Longnose dace, Mountain whitefish, Pink salmon, Rainbow trout and Steelhead.

It is recommended that the current culvert be replaced with an open bottom structure with a minimum diameter of 5.30m.

TRIBUTARY TO BLUNT CREEK

MAP NO.: 284231 **MARLIM NO.:** M13-478

STREAM NAME: TRIBUTARY TO BLUNT CREEK **ROAD NAME:** R09533 222-1

UTM COORDINATES: ZONE 9N 620156E 6105758N

Marlim Site No.: M13-478 had a stream width ratio of 2.77 and a stream width ratio score of 6. The culvert length score was 0, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 5.

This site received a final score of 31 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 3.777km. The fish species potentially present at this site include Burbot, Cutthroat trout, Dolly varden, Longnose dace, Mountain whitefish, Rainbow trout and Steelhead.

It is recommended that the current culvert be removed and the natural channel restored, as the road below the crossing site has already been partially deactivated.

TRIBUTARY TO CORDUROY CREEK

MAP NO.: 285808 **MARLIM NO.:** M13-675

STREAM NAME: TRIBUTARY TO CORDUROY CREEK **ROAD NAME:** R10108-2

UTM COORDINATES: ZONE 9N 604530E 6117693N

Marlim Site No.: M13-675 had a stream width ratio of 2.90 and a stream width ratio score of 6. The culvert length score was 0, the culvert slope score was 10, the embed score was 10 and the outlet drop score was 10.

This site received a final score of 36 and was classed as a Barrier by the scoring matrix. The potential upstream habitat length to be gained is 2.288km. The fish species potentially present at this site include Rainbow trout.

It is recommended that the current culvert be replaced with an open bottom structure with a minimum diameter of 2.70m.

CONCLUSIONS

A total of 747 crossing sites were assessed during this contract. Of the 593 sites that existed, 360 (61%) were classed as barriers by the scoring matrix. The 10 sites recommended in this report for removal or replacement are considered to be the top 10 most beneficial for restoring fish access if removed or replaced. Stream crossing structures, especially closed bottom structures and old log and earth structures appear to be a significant issue for fish passage in the Babine Timber Sales Area.

APPENDIX I

PHOTOGRAPH LOG

M13-79, Row 1 - All Tables

Photo 1: M13-79

Description: Barrel

Direction: Upstream

Photo 2: M13-79

Description: Outlet

Direction: Upstream

M13-79, Row 1 - All Tables

Photo 3: M13-79

Description: Downstream Channel

Direction: Downstream

Photo 4: M13-79

Description: Inlet

Direction: Downstream

M13-79, Row 1 - All Tables

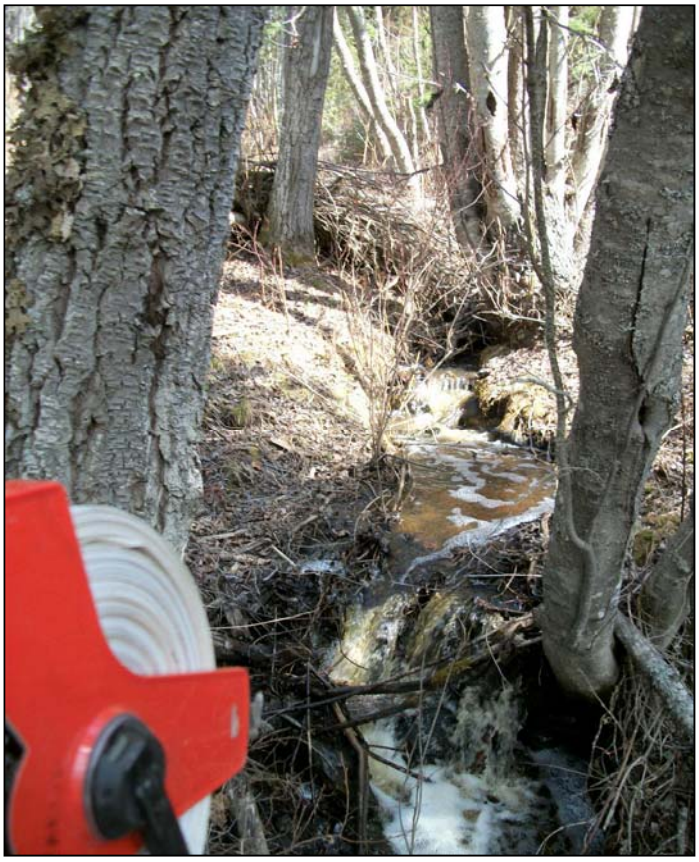


Photo 5: M13-79

Description: Upstream Channel

Direction: Upstream

M13-112, Row 2 - All Tables

Photo 6: M13-112

Description: Barrel - left

Direction: Upstream

Photo 7: M13-112

Description: Barrel - right

Direction: Upstream

M13-112, Row 2 - All Tables

Photo 8: M13-112

Description: Outlet

Direction: Upstream

Photo 9: M13-112

Description: Downstream Channel

Direction: Downstream

M13-112, Row 2 - All Tables

Photo 10: M13-112

Description: Inlet

Direction: Downstream

Photo 11: M13-112

Description: Upstream Channel

Direction: Upstream

M13-191, Row 3 - All Tables

Photo 12: M13-191

Description: Barrel

Direction: Upstream

Photo 13: M13-191

Description: Outlet

Direction: Upstream

M13-191, Row 3 - All Tables

Photo 14: M13-191

Description: Downstream Channel

Direction: Downstream

Photo 15: M13-191

Description: Inlet

Direction: Downstream

M13-191, Row 3 - All Tables

Photo 16: M13-191

Description: Upstream Channel

Direction: Upstream

M13-258, Row 4 - All Tables

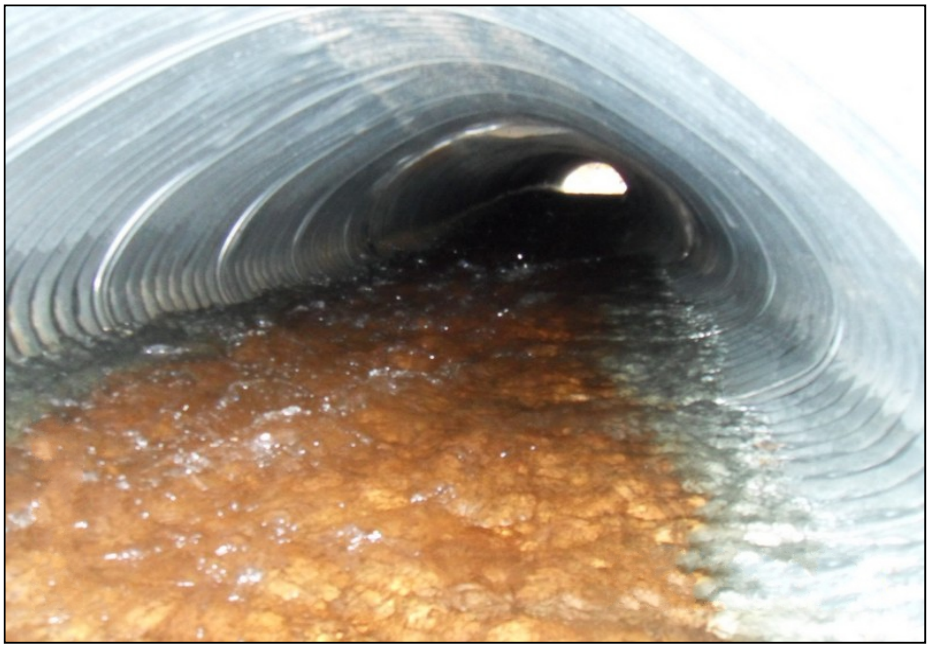


Photo 17: M13-258

Description: Barrel

Direction: Upstream

Photo 18: M13-258

Description: Outlet

Direction: Upstream

M13-258, Row 4 - All Tables

Photo 19: M13-258

Description: Downstream Channel

Direction: Downstream

Photo 20: M13-258

Description: Inlet

Direction: Downstream

M13-258, Row 4 - All Tables

Photo 21: M13-258

Description: Upstream Channel

Direction: Upstream

M13-260, Row 5 - All Tables

Photo 22: M13-260

Description: Barrel

Direction: Upstream

Photo 23: M13-260

Description: Outlet

Direction: Upstream

M13-260, Row 5 - All Tables

Photo 24: M13-260

Description: Downstream Channel

Direction: Downstream

Photo 25: M13-260

Description: Inlet

Direction: Downstream

M13-260, Row 5 - All Tables

Photo 26: M13-260

Description: Upstream Channel

Direction: Upstream

M13-383, Row 6 - All Tables

Photo 27: M13-383

Description: Barrel

Direction: Upstream

Photo 28: M13-383

Description: Outlet

Direction: Upstream

M13-383, Row 6 - All Tables

Photo 29: M13-383

Description: Downstream Channel

Direction: Downstream

Photo 30: M13-383

Description: Inlet

Direction: Downstream

M13-383, Row 6 - All Tables

Photo 31: M13-383

Description: Upstream Channel

Direction: Upstream

M13-412, Row 7 - All Tables

Photo 32: M13-412

Description: Barrel

Direction: Upstream

Photo 33: M13-412

Description: Outlet

Direction: Upstream

M13-412, Row 7 - All Tables

Photo 34: M13-412

Description: Downstream Channel

Direction: Downstream

Photo 35: M13-412

Description: Inlet

Direction: Downstream

M13-412, Row 7 - All Tables

Photo 36: M13-412

Description: Upstream Channel

Direction: Upstream

M13-436, Row 8 - All Tables

Photo 37: M13-436

Description: Barrel

Direction: Upstream

Photo 38: M13-436

Description: Outlet

Direction: Upstream

M13-436, Row 8 - All Tables

Photo 39: M13-436

Description: Downstream Channel

Direction: Downstream

Photo 40: M13-436

Description: Inlet

Direction: Downstream

M13-436, Row 8 - All Tables

Photo 41: M13-436

Description: Upstream Channel, Left Branch

Direction: Upstream

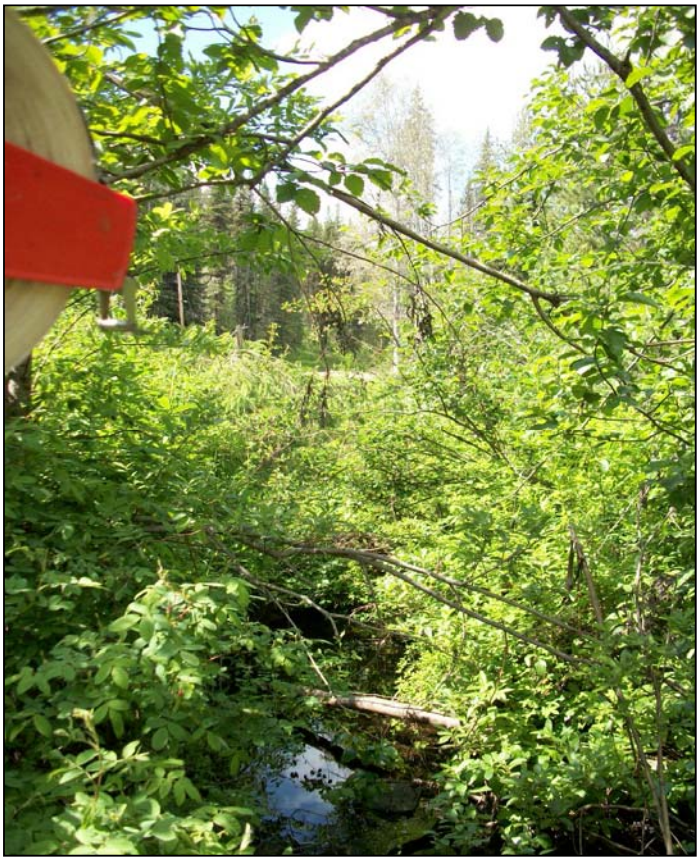


Photo 42: M13-436

Description: Upstream Channel, Right Branch

Direction: Downstream

M13-478, Row 9 - All Tables

Photo 43: M13-478

Description: Barrel

Direction: Upstream

Photo 44: M13-478

Description: Outlet

Direction: Upstream

M13-478, Row 9 - All Tables

Photo 45: M13-478

Description: Downstream Channel

Direction: Downstream

Photo 46: M13-478

Description: Inlet

Direction: Downstream

M13-478, Row 9 - All Tables

Photo 47: M13-478

Description: Upstream Channel

Direction: Upstream

Photo 48: M13-478

Description: Road collapsing over top of culvert.

Direction: Along road

M13-675, Row 10 - All Tables

Photo 49: M13-675

Description: Barrel

Direction: Upstream

Photo 50: M13-675

Description: Outlet

Direction: Upstream

M13-675, Row 10 - All Tables

Photo 51: M13-675

Description: Downstream Channel

Direction: Downstream

Photo 52: M13-675

Description: Inlet

Direction: Downstream

M13-675, Row 10 - All Tables

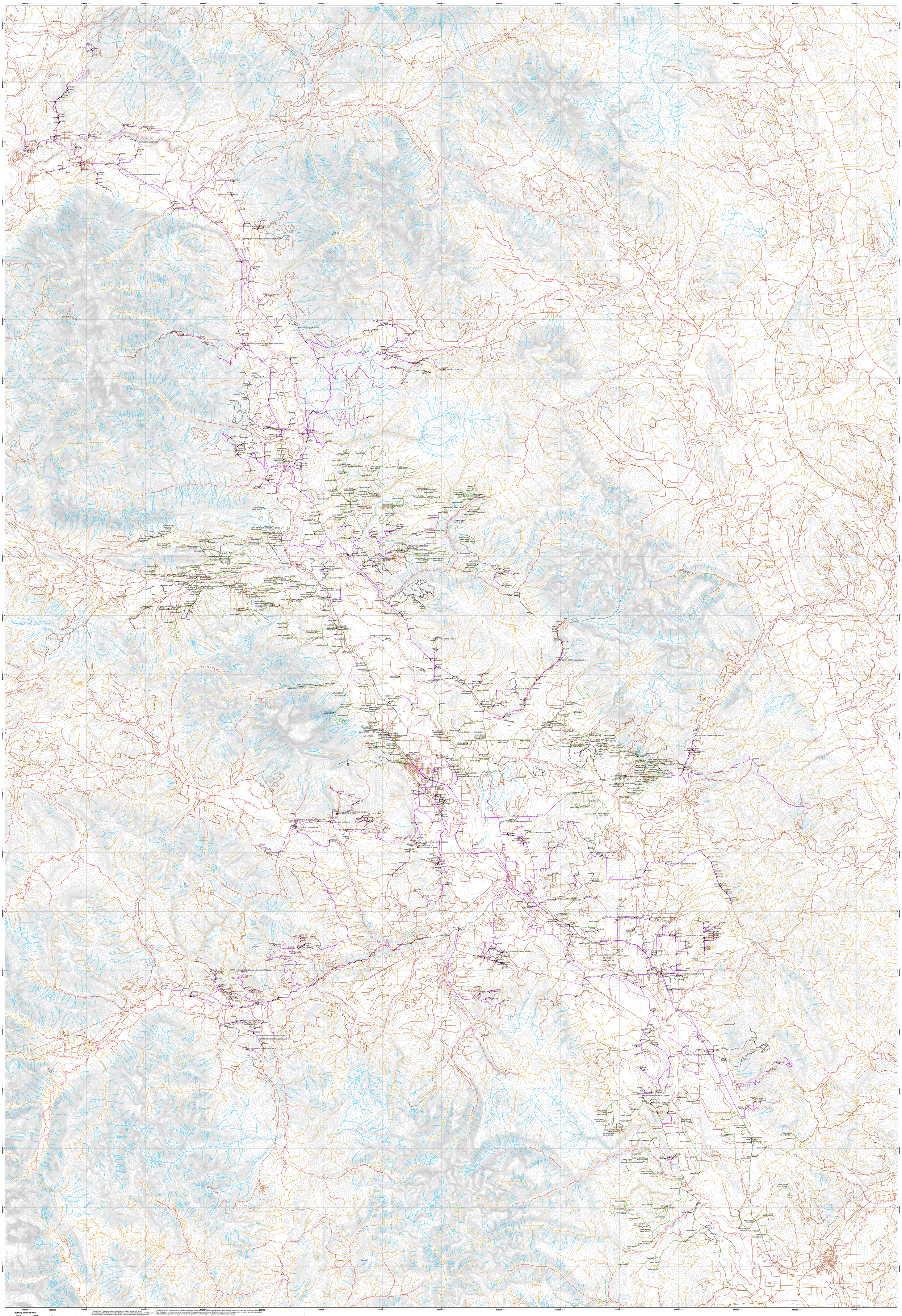
Photo 53: M13-675

Description: Upstream Channel

Direction: Upstream

APPENDIX II

OVERVIEW MAP
DIGITAL VERSION ONLY



Legend

Crossing Status by Year

2012	2013
Barrier	Barrier
Priority	Priority
Passable	Passable
Potential	Potential
Unknown	Unknown
DNE	DNE
	Not Assessed
	Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

* Please Note** Assessed sites are identified by Marlim number (ie. M13-1) for sites assessed in 2013, and Marlim-5 digit map number for sites assessed in 2012; while inaccessible sites are identified by their 5 digit numbers taken from the maps provided.

N

0 600 1,200 2,400 3,600 4,800 Meters

1:50,000

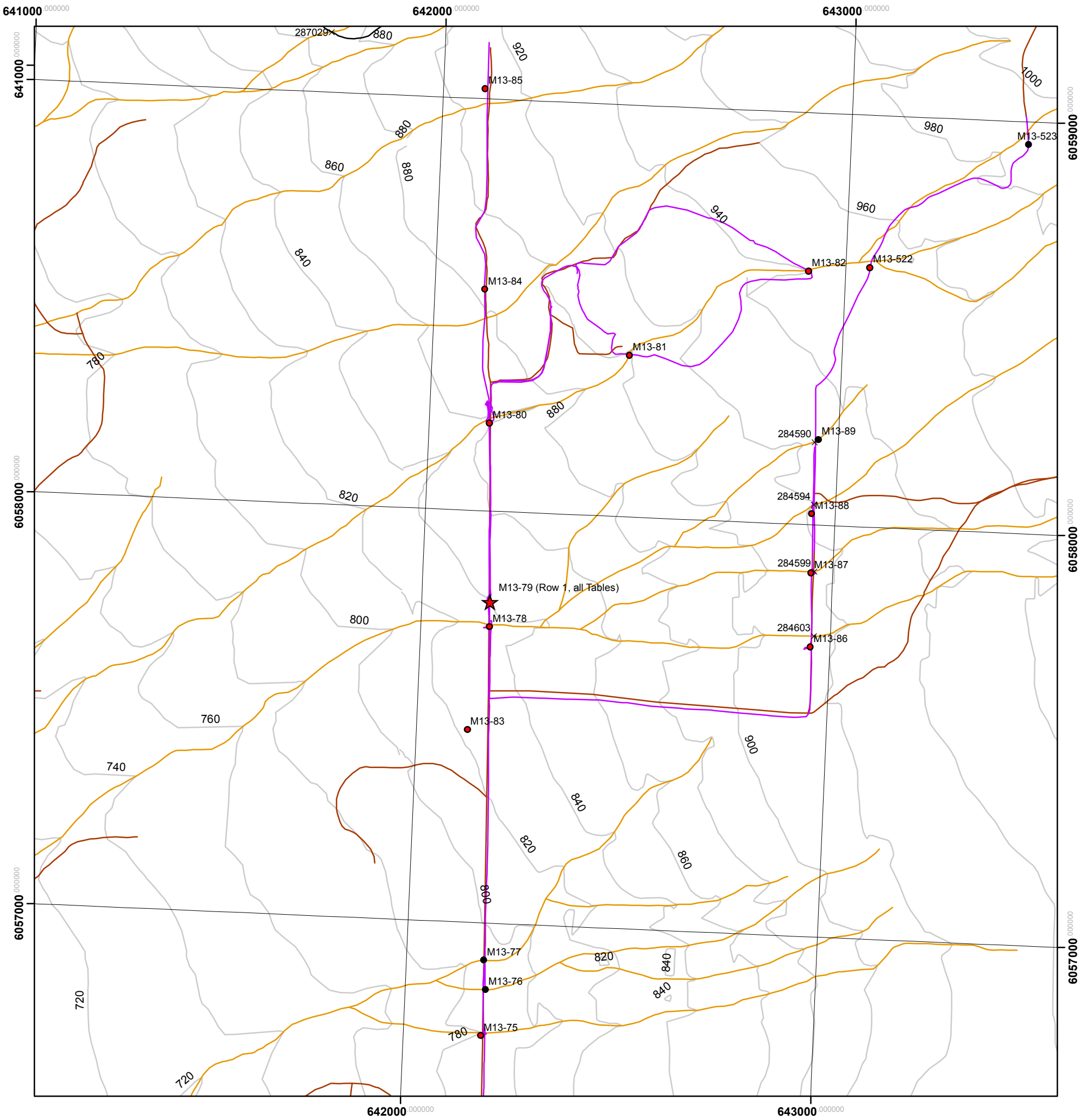
PLEASE NOTE Data points as mapped correspond to field data collected. Road and stream layers were obtained through the Land and Resource Data Warehouse. Field data points do not always match up exactly with mapped streams and roads. Duplicate road layers in the maps created by Marlim are due to using both FTEN and ORA road layers, in order to map the complete road network. Some overlap is present between the layers.

MARLIM ECOLOGICAL CONSULTING LTD.

Fish Passage Culvert Investigations - Babine TSA Contract: EN13TLA010	Date: January 2014	Map Title: Overview
MarLim Ecological Consulting Ltd. Phone/Fax: 604-531-4108 Web: www.marlimecological.com Email: mail@marlimecological.com	Project: 327.13.01	Page: 1

APPENDIX III

SITE MAPS



PLEASE NOTE Data points as mapped correspond to field data while road and stream layers were obtained through the Land and Resource Data Warehouse. Field data points do not always match up exactly with mapped streams and roads. Duplicate road layers in the maps created by Marlim are due to using both FTEN and DRA road layers, in order to map the complete road network. Some overlap is present between the layers.

Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

MARLIM ECOLOGICAL CONSULTING LTD

Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

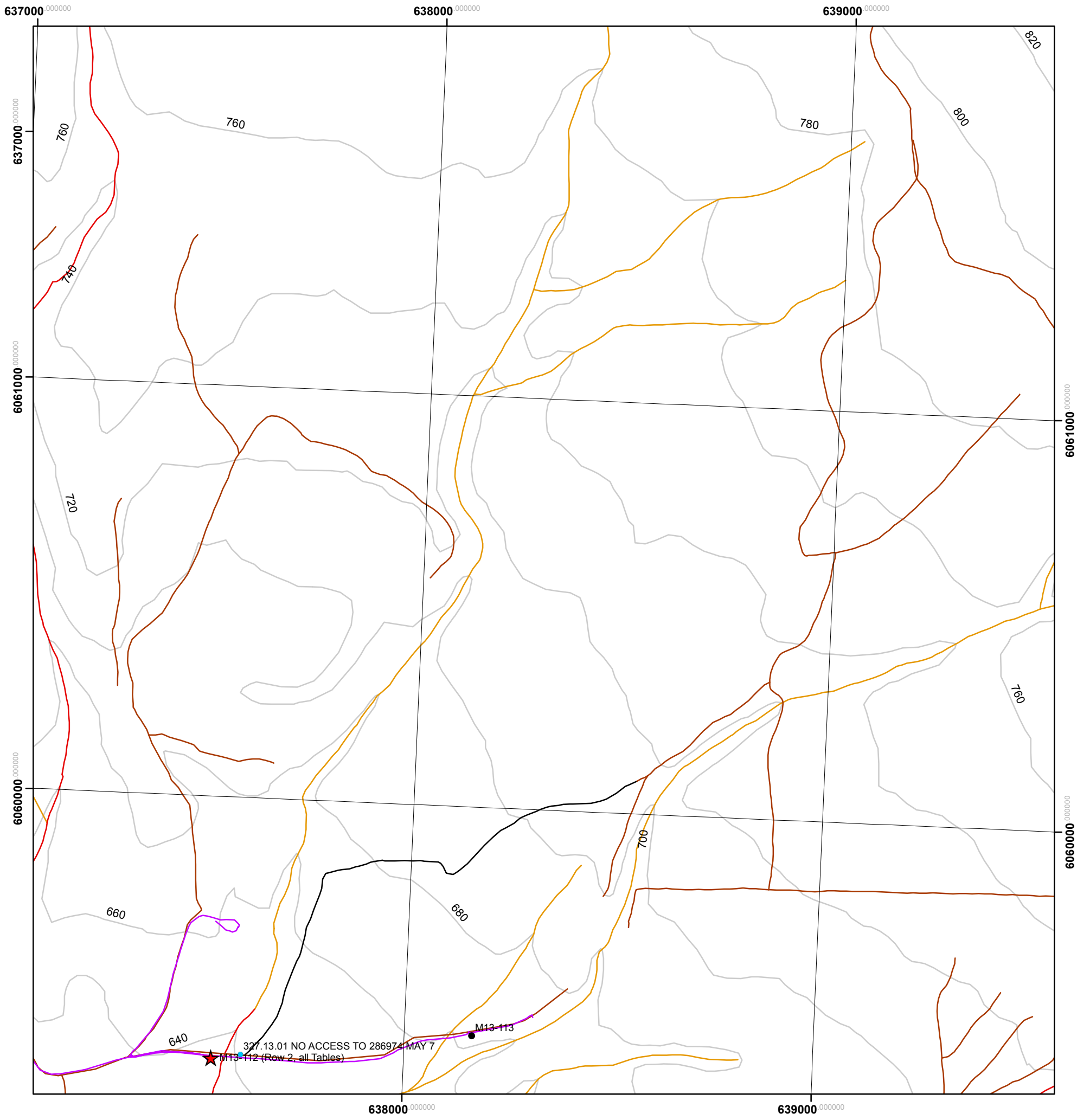
Map Title: M13-79

MarLim Ecological Consulting Ltd.

Phone/Fax: 604-531-4338 Web: www.marlimecological.com Email: mail@marlimecological.com

Project: 327.13.01

Page: 1



PLEASE NOTE Data points as mapped correspond to field data while road and stream layers were obtained through the Land and Resource Data Warehouse. Field data points do not always match up exactly with mapped streams and roads. Duplicate road layers in the maps created by Marlim are due to using both FTEN and DRA road layers, in order to map the complete road network. Some overlap is present between the layers.

Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA Contract: EN13TLA010	Date: January 2014	Map Title: M13-112
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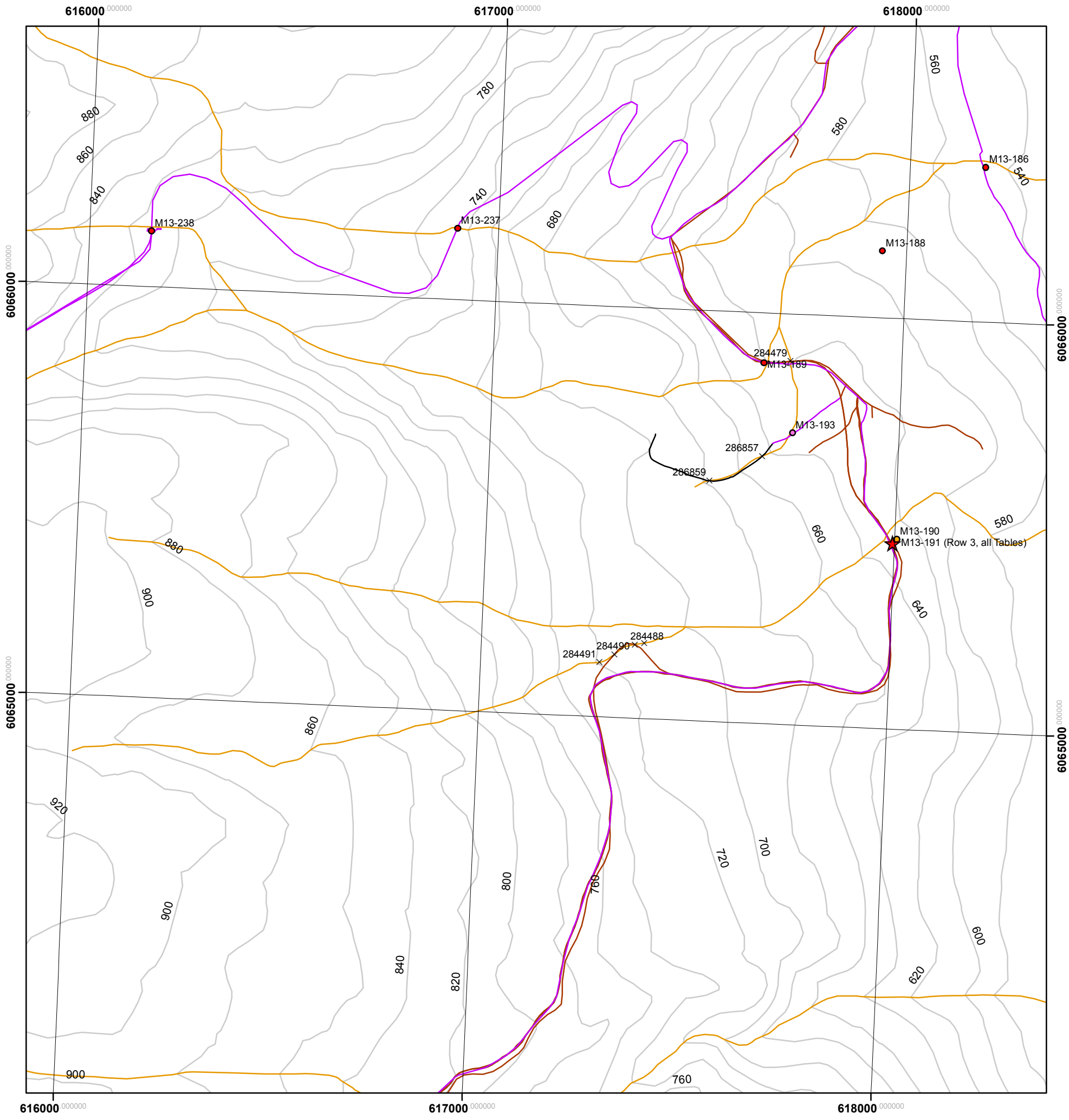

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-191

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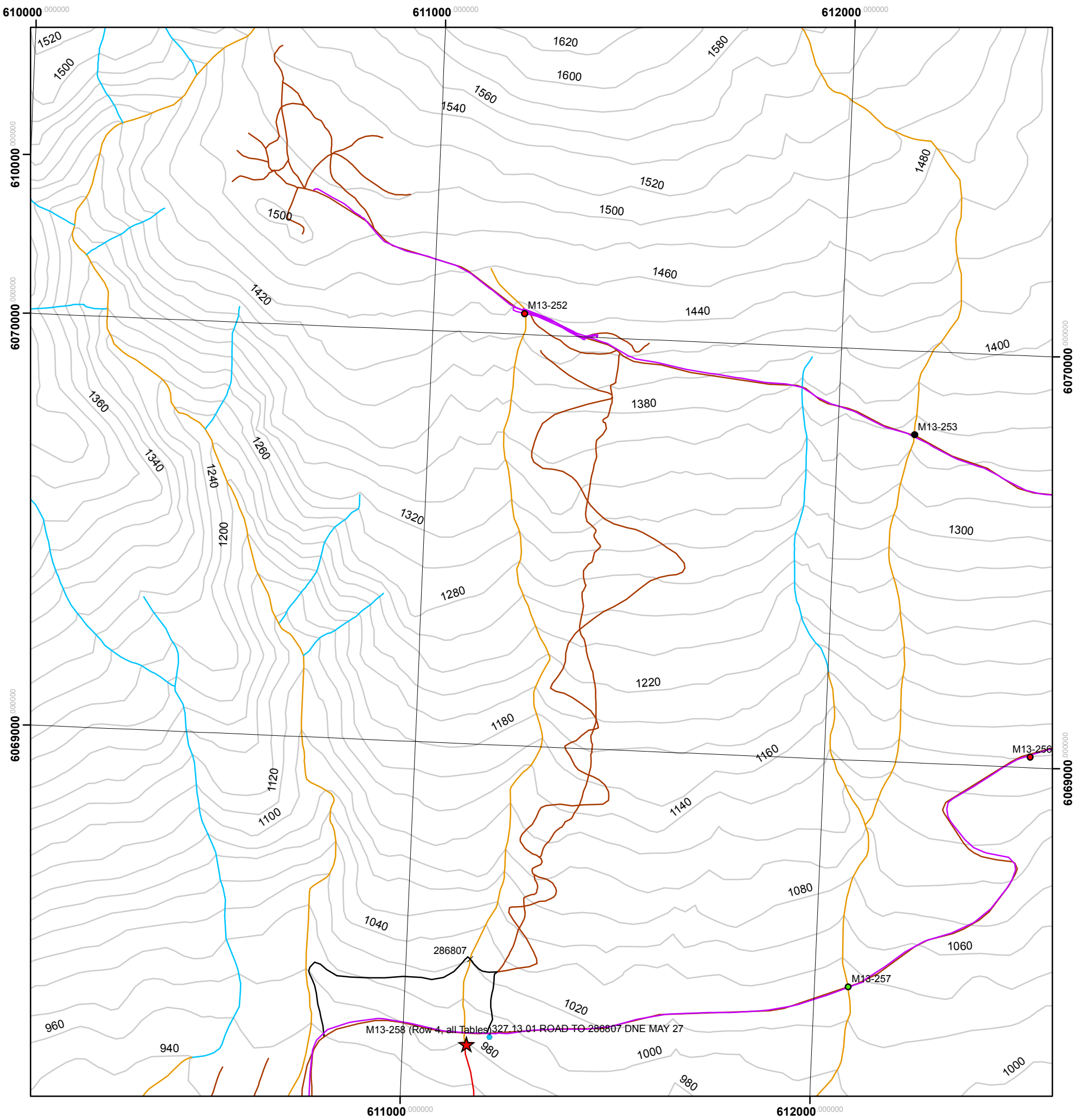

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-258

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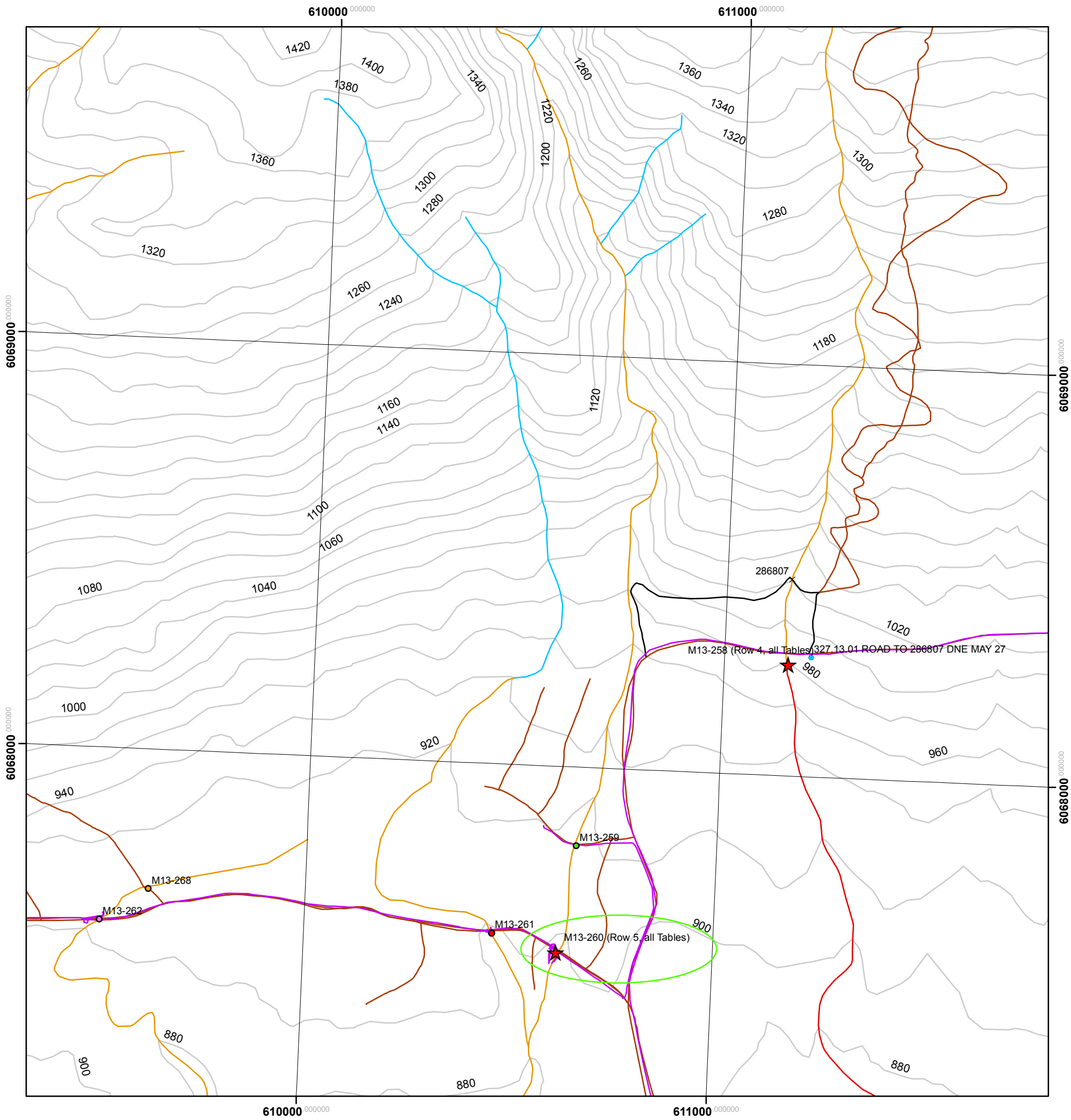

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-260

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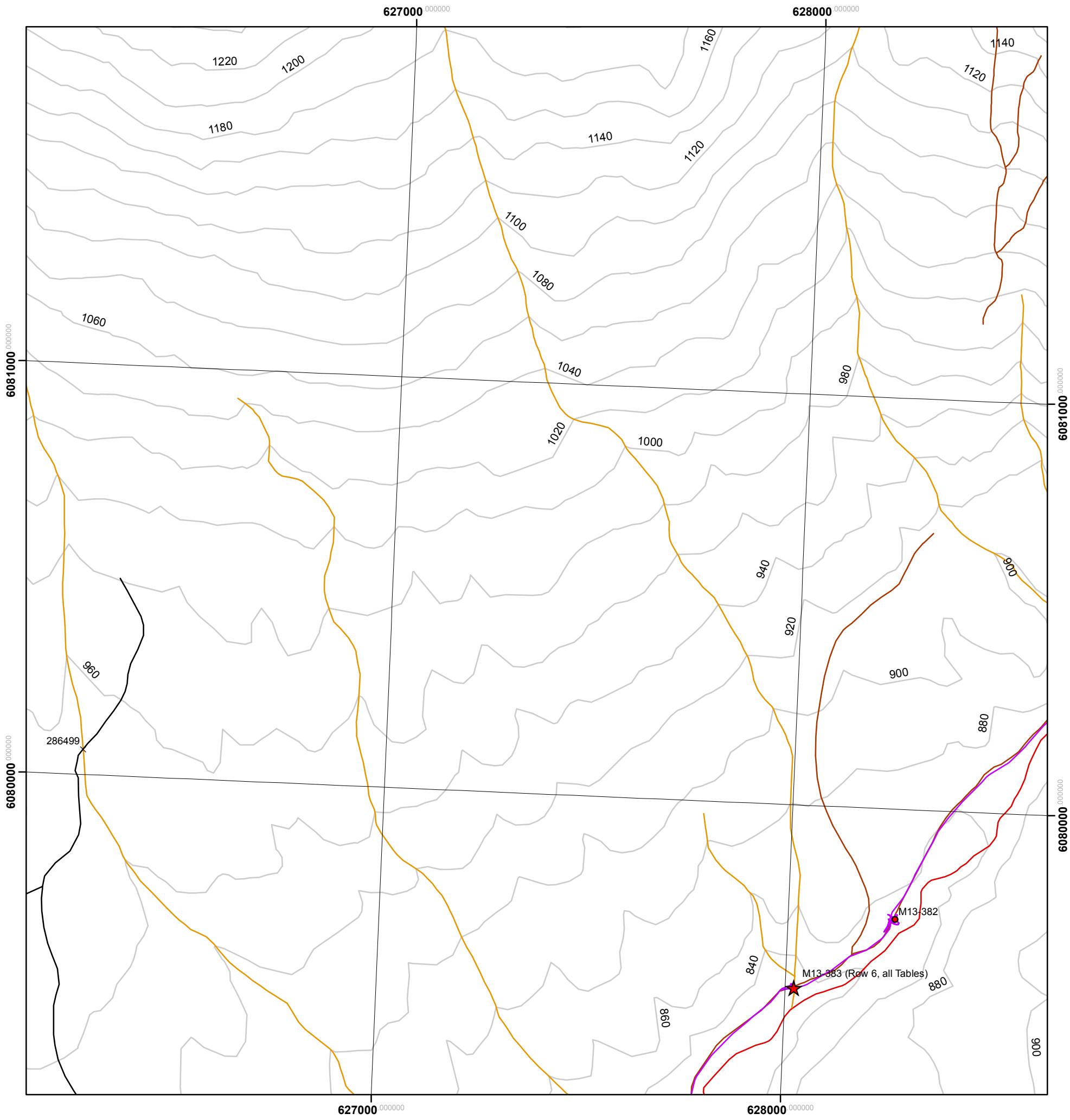

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-383

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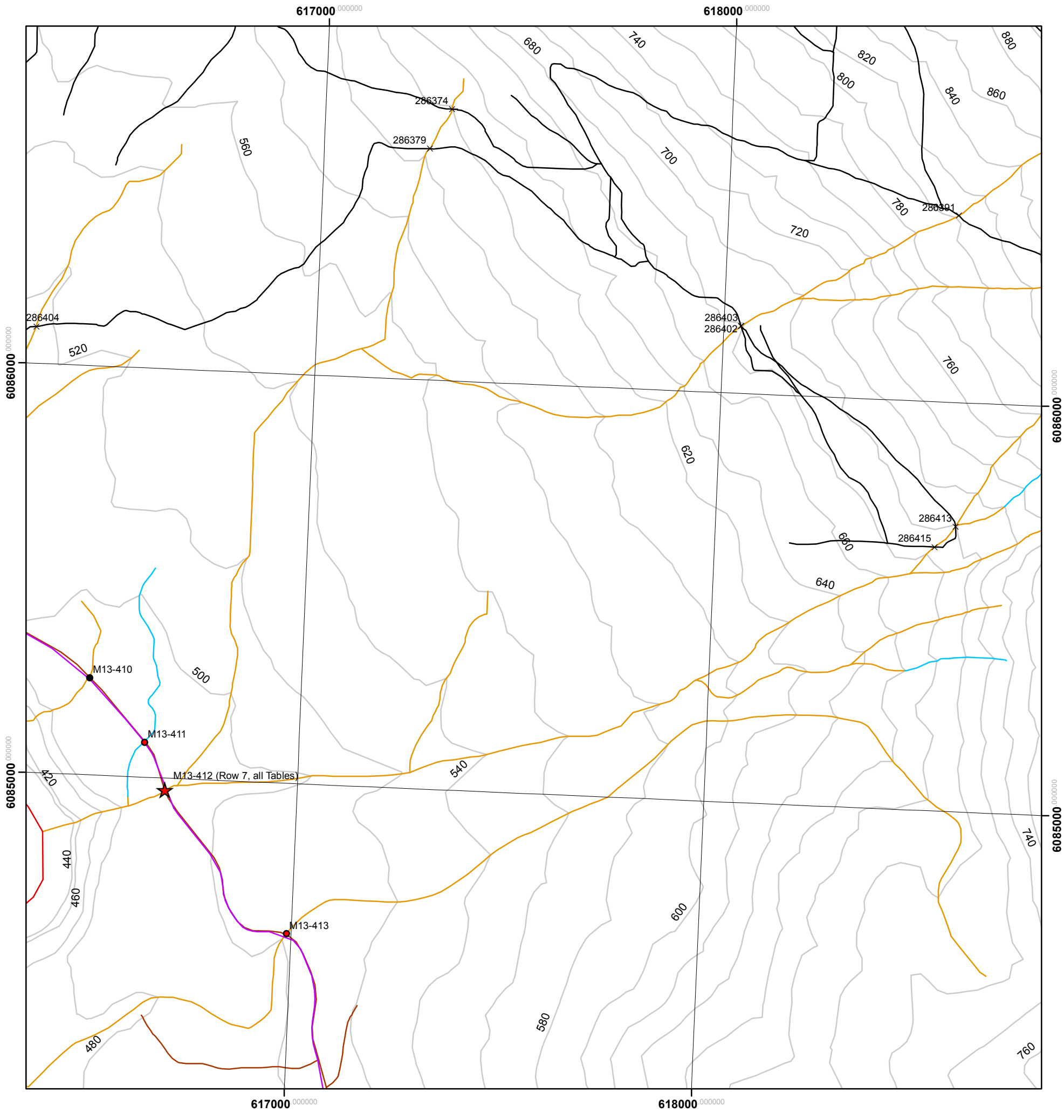

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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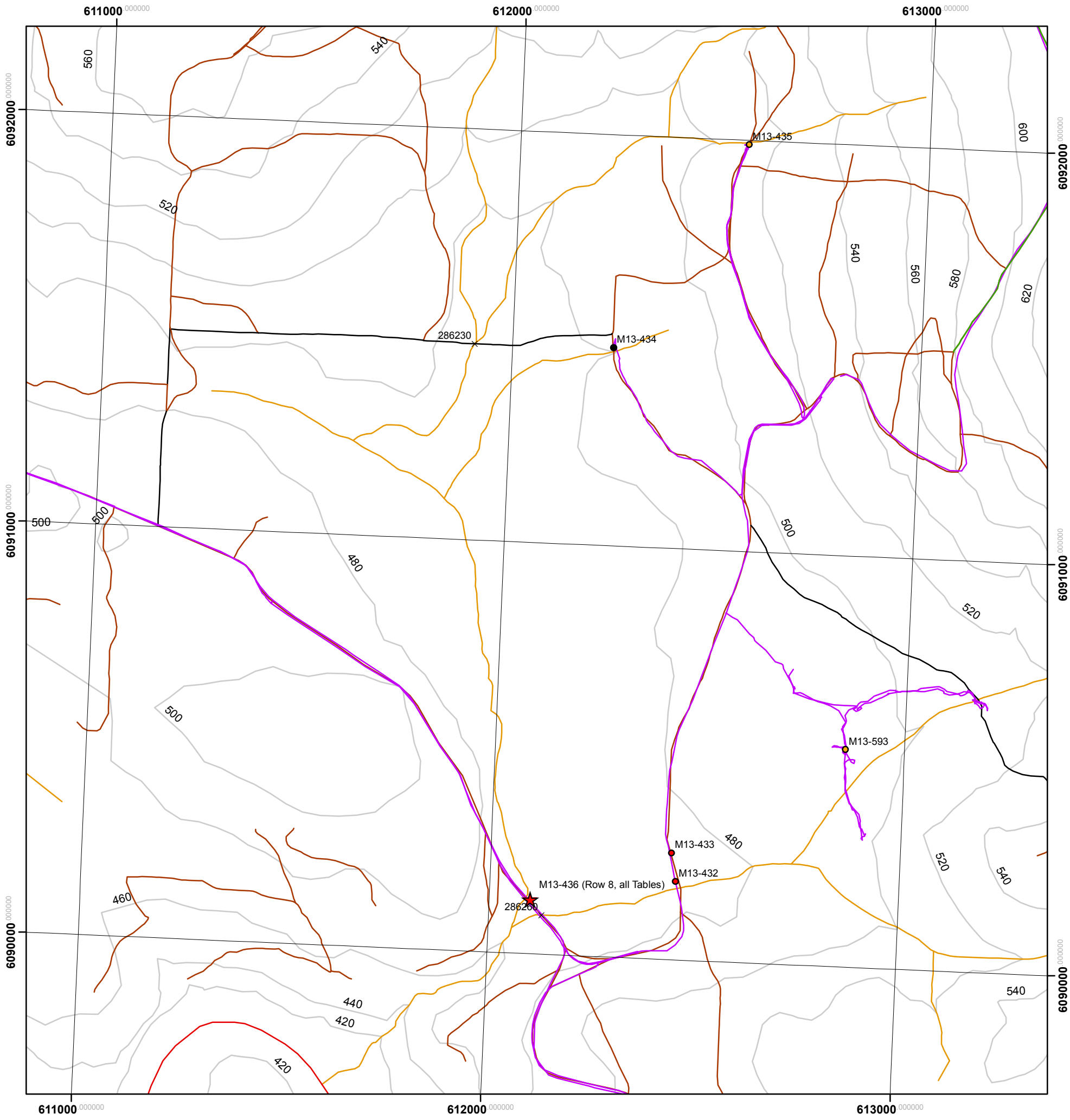

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-436

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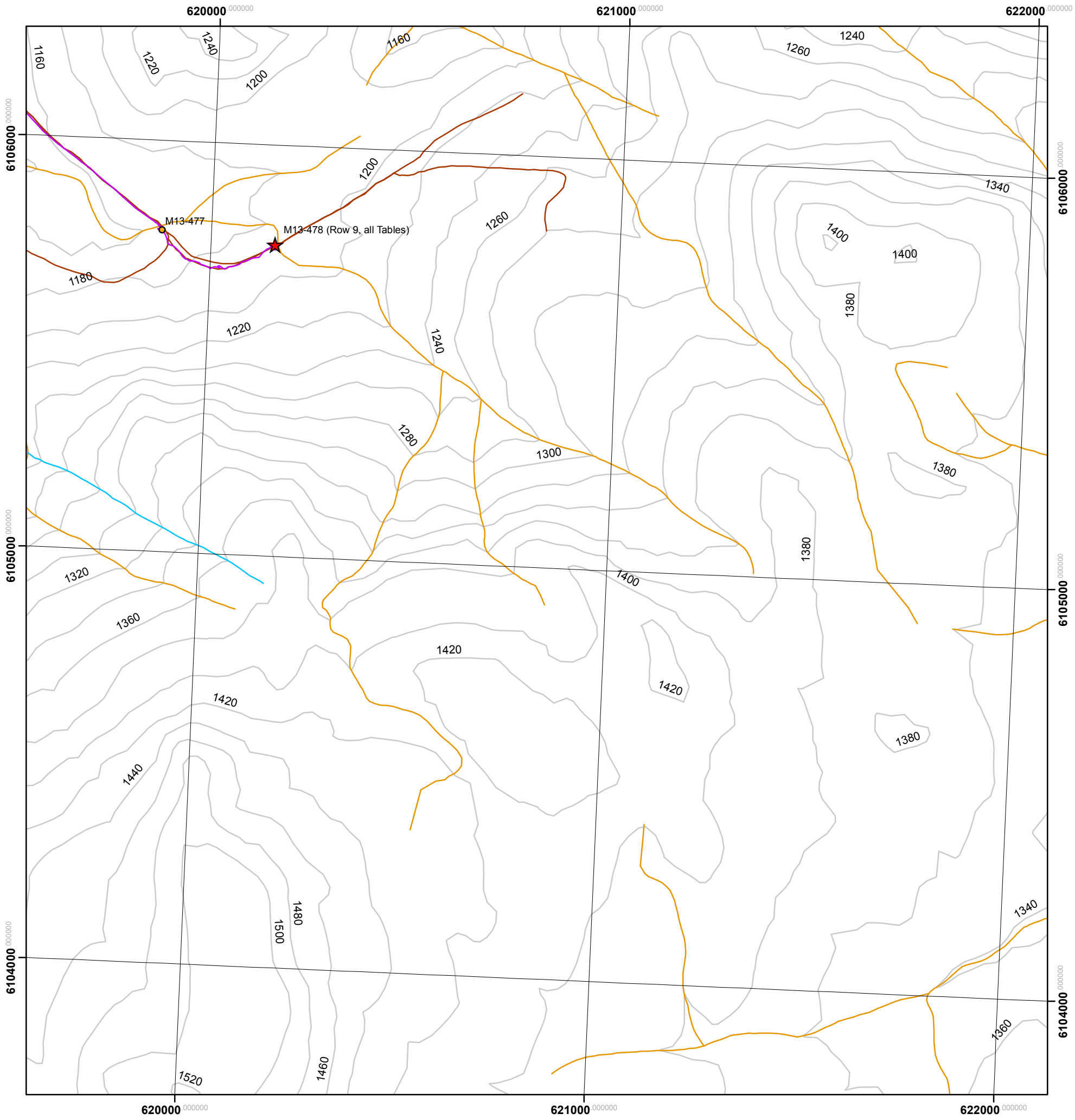

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Legend

Crossing Status by Year

2012
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE

2013
- Barrier
- Priority
- Passable
- Potential
- Unknown
- DNE
- Not Assessed
- Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-478

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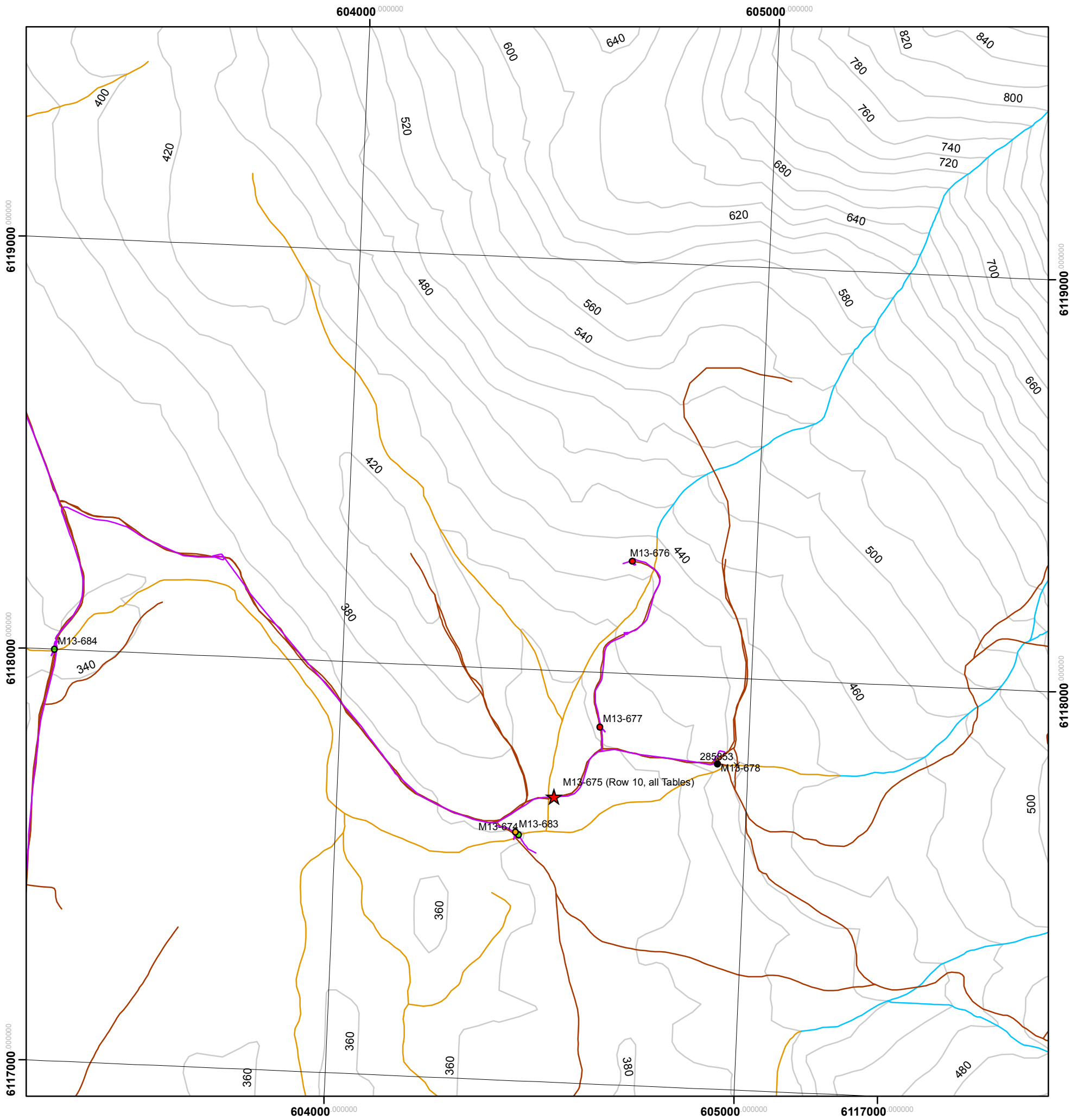

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Legend

Crossing Status by Year

2012	2013
Barrier	Barrier
Priority	Priority
Passable	Passable
Potential	Potential
Unknown	Unknown
DNE	DNE
	Not Assessed
	Access Data

Roads
- Unassessed
- Inaccessible
- Assessed 2012
- Assessed 2013

Contours
- 20m Interval

Fish Habitat
- None
- Inferred
- Observed

N

0 100 200 400 600 800 Meters

1:10,000

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Fish Passage Culvert Investigations - Babine TSA

Contract: EN13TLA010

Date: January 2014

Map Title: M13-675

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APPENDIX IV

FIELD ASSESSMENT FOR DETERMINING FISH PASSAGE STATUS OF CLOSED BOTTOM STRUCTURES – SCORING AND DATA COLLECTION SHEETS

Appendix 1: Closed Bottom Structure (CBS) Field Measurement Form

Closed Bottom Structure (CBS) Field Measurement Form

Location and Overview Data					**Field Observations and Assessment Measurements**			
Date of Assessment					*Crossing Type*	*OBS CBS Other*		
PSCIS Crossing ID *(only needed if this is a re-assessment)*					*Crossing Subtype*	*Bridge, Pipe Arch, Wood Box Culvert, Round Culvert, Oval Culvert, Concrete Box, Ford*		
My Crossing Reference					*Culvert Diameter or Span for OBS (m)*			
Crew Members					*Culvert Length or Width for OBS (m)*			
UTM/GPS (NAD 83)	*Zone*	*Easting*	*Northing*		*Continuous Embeddedment?*	*Yes No*		
Stream Name					*If Embedded, Average Depth of Embeddedment*	*Inlet* _____m	*Outlet* _____m	*Average* _____m
Road Name								
Road Km Mark					*Resemble Channel?*	*Yes No*		
Road Tenure					*Backwatered?*	*Yes No*		
					If Backwatered, to what Percentage			
Stream Information					*Fill Depth (m)*			
Channel Width *Stream Width Ratio*	*Avg. Channel Width*	*Culvert Dia.*	*SWR*		*Outlet Drop (A+B)*	*Invert-ToP (A)*	*ToP – BoC (B)*	*OD*
Stream Slope (%)					*Outlet Pool Depth (m) (C-B)*	*ToP –BoP (C)*	*ToP – BoC (B)*	*OPD*
Beaver Activity	*Yes No*				*Inlet drop*	*Yes No*		
Fish Sighted?	*Yes No*				*Culvert Slope (%)*			
Valley Fill	*DF SF BR*				**Recommendations**			
Habitat Value	*Low Medium High*				*Culvert Fix*	*RM OBS SS ASM BW*		
					Recommended Diameter or Span (m)			

Comments:

Fish Barrier Scoring[1]

Risk	Embedded[2]	value	Outlet drop	value	Slope	value	SWR	value	Length	value
low	> 30 cm. or > 20% of Diameter and continuous	0	< 15	0	< 1	0	< 1.0	0	< 15	0
mod	< 30 cm. or 20% of Diameter but continuous	5	15 - 30	5	1 - 3	5	1.0 - 1.3	3	15 – 30	3
high	No embeddment or discontinuous	10	> 30	10	> 3	10	> 1.3	6	> 30	6

Notes

1. For the barrier determination of multiple culverts, use the metrics from the pipe lowest in elevation at the outlet. For pipes installed at the same elevation at the outlet, add diameters for SWR criteria and use the highest slope, and length measurement.

2 Properly embedded culverts are considered passable as per natural stream channel. No further consideration of other surrogates is required.

Cumulative Score	Result
0 - 14	passable
15 - 19	potential barrier
> 20	barrier

APPENDIX V

PSCIS DATA TABLES

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-05-03		M13-1	RC, KR, NC, MG	9	639484.00	6039159.00	Tributary to Bulkley River	R05237	0.30		Closed Bottom Structure	Round Culvert	0.60	9.19	No		No	No		0.92	0	2.00
2013-05-03		M13-3	RC, KR, NC, MG	9	638832.00	6039157.00	Tributary to Bulkley River	R05237	0.70		Closed Bottom Structure	Round Culvert	0.46	24.50	No		No	No		3.20	0.05	0.00
2013-05-03		M13-8	RC, KR, NC	9	640756.00	6036312.00	Tributary to Bulkley River	Walcott FSR	12.30		Closed Bottom Structure	Round Culvert	0.50	9.29	No		No	No		0.58	0	0.06
2013-05-03		M13-11	RC, KR, NC	9	640956.00	6032469.00	Tributary to Bulkley River	Walcott FSR	1.70		Closed Bottom Structure	Round Culvert	0.50	12.30	No		No	No		0.75	0.46	0.02
2013-05-03		M13-12	RC, KR, NC	9	640559.00	6032145.00	Tributary to Bulkley River	Walcott FSR	2.20		Closed Bottom Structure	Round Culvert	0.50	9.10	No		No	No		0.45	0.02	0.09
2013-05-03		M13-13	RC, KR, NC	9	642538.00	6033162.00	Tributary to Bulkley River	Walcott FSR	9.50		Closed Bottom Structure	Round Culvert	2.30	34.28	Yes	0.55	Yes	No		4.25	0	0.00
2013-05-03		M13-14	RC, KR, NC	9	639723.00	6039415.00	Tributary to Bulkley River	Walcott FSR	16.10		Closed Bottom Structure	Round Culvert	0.80	9.30	No		No	No		0.32	0.21	0.16
2013-05-03		M13-15	RC, KR, NC	9	638893.00	6041172.00	Tributary to Bulkley River	Walcott FSR	18.00		Closed Bottom Structure	Round Culvert	0.60	15.70	No		No	No		0.82	0.23	0.02
2013-05-03		M13-16	RC, KR, NC	9	638229.00	6042968.00	Tributary to Bulkley River	Walcott FSR	19.90		Closed Bottom Structure	Round Culvert	0.63	12.14	No		No	No		0.27	0.78	0.06
2013-05-03		M13-17	RC, KR, NC	9	638199.00	6043425.00	Tributary to Bulkley River	Private Road	0.30		Other	Ford										
2013-05-04		M13-18	RC, KR, NC	9	637676.00	6043689.00	Tributary to Bulkley River	Walcott FSR	20.80		Closed Bottom Structure	Round Culvert	0.50	12.00	No		No	No		0.18	0	0.00
2013-05-04		M13-19	RC, KR, NC	9	637729.00	6043860.00	Tributary to Bulkley River	Grantham Road	0.10		Closed Bottom Structure	Round Culvert	0.73	12.13	No		No	No		0.54	0	0.05
2013-05-04		M13-20	RC, KR, NC	9	637632.00	6044015.00	Tributary to Bulkley River	Walcott FSR	21.10		Closed Bottom Structure	Round Culvert	1.23	13.90	No		No	No		0.57	0.28	0.18
2013-05-04		M13-21	RC, KR, NC	9	637710.00	6044746.00	Tributary to Bulkley River	Unnamed	0.10		Closed Bottom Structure	Round Culvert	0.40	9.05	No		No	No		0.24	0.08	0.06
2013-05-04		M13-22	RC, KR, NC	9	637152.00	6044750.00	Tributary to Bulkley River	Unnamed	0.05		Other	Ford										
2013-05-04		M13-23	RC, KR, NC	9	636996.00	6044484.00	Tributary to Bulkley River	Unnamed	0.10		Closed Bottom Structure	Round Culvert	0.90	25.20	No		No	No		1.85	0.65	0.37
2013-05-04		M13-24	RC, KR, NC	9	636981.00	6044283.00	Tributary to Bulkley River	Unnamed	0.35		Closed Bottom Structure	Round Culvert	0.40	15.00	Yes	0.18	No	No		1.08	0.01	0.04
2013-05-04		M13-25	RC, KR, NC	9	638116.00	6044799.00	Tributary to Bulkley River	Walcott FSR	22.10		Closed Bottom Structure	Round Culvert	0.60	15.00	No		No	No		0.53	0	0.16
2013-05-04		M13-26	RC, KR, NC	9	636994.00	6046587.00	Tributary to Bulkley River	Unnamed	0.20		Other	Ford										
2013-05-04		M13-28	RC, KR, NC	9	636792.00	6046772.00	Tributary to Bulkley River	Unnamed	0.40		Other	Ford										
2013-05-04		M13-29	RC, KR, NC	9	636467.00	6047905.00	Tributary to Bulkley River	Unnamed	0.60		Other	Ford										
2013-05-04		M13-30	RC, KR, NC	9	637126.00	6048186.00	Tributary to Bulkley River	Unnamed	0.30		Other	Ford										
2013-05-04		M13-31	RC, KR, NC	9	636968.00	6048247.00	Tributary to Bulkley River	Unnamed	0.10		Other	Ford										
2013-05-04		M13-32	RC, KR, NC	9	636441.00	6048615.00	Tributary to Bulkley River	Unnamed	0.50		Closed Bottom Structure	Round Culvert	0.60	13.40	No		No	No		0.51	0.11	0.15
2013-05-04		M13-33	RC, KR, NC	9	636453.00	6048631.00	Tributary to Bulkley River	Unnamed	0.49		Closed Bottom Structure	Round Culvert	0.64	12.20	No		No	No		0.44	0.37	0.43
2013-05-04		M13-34	RC, KR, NC	9	636755.00	6049091.00	Tributary to Bulkley River	Lawson FSR	23.60		Closed Bottom Structure	Round Culvert	0.78	14.06	No		No	No		0.33	0.68	0.21
2013-05-04		M13-35	RC, KR, NC	9	637155.00	6049646.00	Tributary to Bulkley River	Unnamed	0.15		Other	Ford										
2013-05-04		M13-36	RC, KR, NC	9	637072.00	6049916.00	Tributary to Bulkley River	Lawson FSR	22.60		Closed Bottom Structure	Round Culvert	0.50	9.60	No		No	No		0.12	0	0.35
2013-05-04		M13-37	RC, KR, NC	9	637366.00	6050329.00	Tributary to Bulkley River	Lawson FSR	21.30		Closed Bottom Structure	Round Culvert	0.80	12.10	No		No	Yes	100.00	0.59	0	0.23
2013-05-04		M13-38	RC, KR, NC	9	637841.00	6051549.00	Tributary to Bulkley River	Lawson FSR	20.80		Closed Bottom Structure	Round Culvert	0.60	11.09	No		No	No		0.24	0.21	0.20
2013-05-04		M13-39	RC, KR, NC	9	637634.00	6051657.00	Tributary to Bulkley River	Lawson FSR	20.50		Closed Bottom Structure	Round Culvert	0.60	11.40	No		No	No		0.22	0.14	0.70
2013-05-04		M13-41	RC, KR, NC	9	636162.00	6053920.00	Tributary to Bulkley River	Unnamed	1.20		Closed Bottom Structure	Round Culvert	0.90	15.60	No		No	No		0.46	0	0.15
2013-05-04		M13-44	RC, KR, NC	9	634876.00	6056566.00	Tributary to Lacroix Creek	Unnamed	0.00		Closed Bottom Structure	Round Culvert	1.20	8.20	No		No	No		0.80	0.05	0.17
2013-05-04		M13-45	RC, KR, NC	9	634874.00	6056682.00	Tributary to Lacroix Creek	Quick West Road	0.80		Closed Bottom Structure	Round Culvert	0.90	9.30	No		No	No		0.48	0	0.12
2013-05-04		M13-46	RC, KR, NC	9	634884.00	6056689.00	Tributary to Lacroix Creek	Unnamed			Closed Bottom Structure	Round Culvert	0.30	10.00	Yes	0.12	No	Yes	100.00	0.27	0.01	0.02
2013-05-05		M13-47	RC, KR, NC	9	642497.00	6048191.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	0.60	26.88	No		No	No		2.10	0.84	0.45
2013-05-05		M13-48	RC, KR, NC	9	642073.00	6049009.00	Thompson Creek	Highway 16			Open Bottom Structure	Pipe Arch	7.10	24.10								
2013-05-05		M13-49	RC, KR, NC	9	641626.00	6049390.00	Thompson Creek	Walcott Road	0.55		Closed Bottom Structure	Round Culvert	2.12	30.50	No		No	No		0.91	0.06	0.00
2013-05-05		M13-50	RC, KR, NC	9	640422.00	6048539.00	Thompson Creek	Unnamed	1.50		Open Bottom Structure	Bridge	15.27	4.77								
2013-05-05		M13-51	RC, KR, NC	9	642944.00	6048598.00	Thompson Creek	Private Road	0.60		Open Bottom Structure	Bridge	3.74	5.16								
2013-05-05		M13-52	RC, KR, NC	9	642971.00	6048238.00	Tributary to Thompson Creek	Private Road	0.05		Closed Bottom Structure	Round Culvert	0.84	5.75	No		No	No		0.29	0	0.19
2013-05-05		M13-53	RC, KR, NC	9	642939.00	6048204.00	Tributary to Thompson Creek	Private Road	0.05		Closed Bottom Structure	Round Culvert	0.93	6.05	No		No	No		0.23	0	0.29
2013-05-05		M13-56	RC, KR, NC	9	644682.00	6045594.00	Tributary to Thompson Creek	McNeil Road	1.60		Closed Bottom Structure	Round Culvert	3.44	14.30	No		No	No		0.66	0.53	0.13
2013-05-05		M13-57	RC, KR, NC	9	645862.00	6043513.00	Thompson Creek	Unnamed	0.95		Open Bottom Structure	Bridge	6.62	3.93								
2013-05-05		M13-58	RC, KR, NC	9	646953.00	6044086.00	Tributary to Thompson Creek	Unnamed	0.70		Closed Bottom Structure	Round Culvert	0.30	6.30	No		No	No		0.24	0.81	0.00
2013-05-05		M13-59	RC, KR, NC	9	646935.00	6043934.00	Tributary to Thompson Creek	Unnamed	0.90		Closed Bottom Structure	Round Culvert	0.60	5.90	No		No	No		0.36	0.25	0.08
2013-05-05		M13-62	RC, KR, NC	9	640359.00	6054478.00	Tributary to Robin Creek	Greene Road	2.10		Closed Bottom Structure	Round Culvert	0.60	14.60	No		No	Yes	100.00	0.55	0	0.25
2013-05-05		M13-64	RC, KR, NC	9	639847.00	6054601.00	Tributary to Robin Creek	Greene Road	1.40		Closed Bottom Structure	Round Culvert	0.90	7.60	No		No	No		0.29	0.06	0.07
2013-05-06		M13-65	RC, KR, NC	9	639025.00	6053553.00	Tributary to Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.60	28.10	No		No	Yes	100.00	2.68	0	0.14
2013-05-06		M13-66	RC, KR, NC	9	638939.00	6053633.00	Tributary to Robin Creek	Larch Road	0.30		Closed Bottom Structure	Round Culvert	0.60	12.50	No		No	Yes	100.00	1.09	0.02	0.08
2013-05-06		M13-67	RC, KR, NC	9	633609.00	6054566.00	Tributary to Robin Creek	Larch Road	1.30		Closed Bottom Structure	Round Culvert	0.80	12.07	No		No	Yes	100.00	0.26	0	0.35
2013-05-06		M13-68	RC, KR, NC	9	638641.00	6054575.00	Tributary to Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.20	19.50	No		No	No		1.23	0.35	0.42

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-05-06		M13-69	RC, KR, NC	9	638560.00	6054801.00	Lemieux Creek	Quick School Road	0.10		Closed Bottom Structure	Round Culvert	1.00	12.10	No		No	No		0.73	0	0.52
2013-05-06		M13-70	RC, KR, NC	9	638500.00	6054717.00	Lemieux Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.20	21.00	No		No	No		0.72	0.03	0.47
2013-05-06		M13-71	RC, KR, NC	9	638543.00	6055005.00	Lemieux Creek	Unnamed	0.30		Open Bottom Structure	Pipe Arch	1.60	6.00								
2013-05-06		M13-72	RC, KR, NC	9	639287.00	6055246.00	Lemieux Creek	Private Road	0.70		Open Bottom Structure	Pipe Arch	2.40	6.00								
2013-05-06		M13-73	RC, KR, NC	9	638668.00	6055487.00	Lemieux Creek	Private Road	0.80		Other	Ford										
2013-05-06		M13-74	RC, KR, NC	9	690163.00	6055025.00	Lemieux Creek	Unnamed	0.70		Closed Bottom Structure	Round Culvert	0.60	10.80	No		No	No		1.13	0.13	0.74
2013-05-06		M13-75	RC, KR, NC	9	642189.00	6056726.00	Tributary to Robin Creek	H. Kerr Road	1.60		Closed Bottom Structure	Round Culvert	0.60	12.00	No		No	No		1.60	0.29	0.66
2013-05-06		M13-78	RC, KR, NC	9	642168.00	6057719.00	Tributary to Lemieux Creek	H. Kerr Road	2.60		Closed Bottom Structure	Round Culvert	0.67	15.90	No		No	No		1.85	0.83	0.11
2013-05-06		M13-79	RC, KR, NC	9	642166.00	6057779.00	Tributary to Lemieux Creek	H. Kerr Road	2.65		Closed Bottom Structure	Round Culvert	0.44	15.25	No		No	No		1.63	0.89	0.10
2013-05-06		M13-80	RC, KR, NC	9	642147.00	6058213.00	Gardner Creek	H. Kerr Road	3.10		Closed Bottom Structure	Round Culvert	0.80	25.28	No		No	No		4.25	0.15	0.05
2013-05-06		M13-81	RC, KR, NC	9	642482.00	6058392.00	Gardner Creek	Private Road	0.80		Closed Bottom Structure	Round Culvert	0.62	7.90	No		No	No		0.60	0.61	0.20
2013-05-06		M13-82	RC, KR, NC	9	642910.00	6058615.00	Gardner Creek	Private Road	0.50		Closed Bottom Structure	Round Culvert	0.40	5.90	No		No	No		0.22	0.21	0.07
2013-05-06		M13-83	RC, KR, NC	9	642125.00	6057467.00	Tributary to Gardner Creek	Private Road	0.20		Closed Bottom Structure	Round Culvert	0.50	7.70	No		No	No		0.28	0.33	0.21
2013-05-06		M13-84	RC, KR, NC	9	642122.00	6058537.00	Tributary to Gardner Creek	Private Road	0.35		Closed Bottom Structure	Round Culvert	0.50	9.00	No		No	No		0.76	0.23	0.06
2013-05-06		M13-85	RC, KR, NC	9	642102.00	6059024.00	Tributary to Lemieux Creek	Private Road	0.70		Closed Bottom Structure	Round Culvert	0.40	8.00	No		No	No		0.42	0.4	0.21
2013-05-06		M13-86	RC, KR, NC	9	642953.00	6057703.00	Tributary to Lemieux Creek	Hill Road	1.00		Closed Bottom Structure	Round Culvert	0.90	12.30	No		No	No		0.53	0	0.12
2013-05-06		M13-87	RC, KR, NC	9	642947.00	6057883.00	Tributary to Lemieux Creek	Hill Road	1.20		Closed Bottom Structure	Round Culvert	0.90	12.17	No		No	No		1.22	0.21	0.09
2013-05-06		M13-88	RC, KR, NC	9	642943.00	6058026.00	Tributary to Lemieux Creek	Hill Road	1.30		Closed Bottom Structure	Round Culvert	0.60	9.00	No		No	No		0.17	0.2	0.21
2013-05-07		M13-91	RC, KR, NC	9	639786.00	6056365.00	Gardner Creek	Private Road	0.05		Closed Bottom Structure	Round Culvert	0.60	6.10	No		No	No		0.43	0	0.51
2013-05-07		M13-92	RC, KR, NC	9	638204.00	6054852.00	Tributary to Robin Creek	Quick East Road	0.10		Closed Bottom Structure	Round Culvert	0.60	9.40	No		No	Yes	100.00	1.48	0	0.00
2013-05-07		M13-93	RC, KR, NC	9	638104.00	6054712.00	Robin Creek	Quick East Road	0.25		Open Bottom Structure	Bridge	7.32	7.13								
2013-05-07		M13-94	RC, KR, NC	9	638100.00	6055053.00	Tributary to Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.60	21.00	No		No	Yes	50.00	2.26	0	0.00
2013-05-07		M13-95	RC, KR, NC	9	637701.00	6055188.00	Robin Creek	Private Road	0.30		Open Bottom Structure	Bridge	2.14	5.22								
2013-05-07		M13-97	RC, KR, NC	9	638195.00	6057940.00	Tributary to Lemieux Creek	Morden Road	2.40		Closed Bottom Structure	Round Culvert	0.60	12.10	No		No	No		0.56	0	0.40
2013-05-07		M13-98	RC, KR, NC	9	638345.00	6057939.00	Lemieux Creek	Morden Road	2.60		Closed Bottom Structure	Round Culvert	1.40	14.00	No		No	No		0.52	0	0.35
2013-05-07		M13-99	RC, KR, NC	9	638409.00	6057933.00	Tributary to Lemieux Creek	Morden Road	2.65		Closed Bottom Structure	Round Culvert	0.60	8.85	No		No	No		0.26	0	0.09
2013-05-07		M13-100	RC, KR, NC	9	638617.00	6058657.00	Lemieux Creek	Private Road	0.70		Closed Bottom Structure	Round Culvert	1.20	6.25	No		No	No		0.42	0.14	0.07
2013-05-07		M13-101	RC, KR, NC	9	639241.00	6057956.00	Tributary to Lemieux Creek	Morden Road	3.70		Closed Bottom Structure	Round Culvert	0.80	11.20	No		No	No		1.09	0	0.12
2013-05-07		M13-102	RC, KR, NC	9	639674.00	6057970.00	Tributary to Lemieux Creek	Morden Road	4.20		Closed Bottom Structure	Round Culvert	0.60	8.10	No		No	No		0.55	0	0.09
2013-05-07		M13-103	RC, KR, NC	9	639731.00	6058036.00	Tributary to Lemieux Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	0.60	12.10	No		No	No		0.63	0	0.02
2013-05-07		M13-104	RC, KR, NC	9	639730.00	6057802.00	Tributary to Lemieux Creek	Morden Road	4.50		Closed Bottom Structure	Round Culvert	0.50	8.00	No		No	No		0.38	0.05	0.12
2013-05-07		M13-105	RC, KR, NC	9	638167.00	6056578.00	Tributary to Robin Creek	Morden Road	1.40		Closed Bottom Structure	Round Culvert	0.80	12.30	No		No	No		0.44	0	0.29
2013-05-07		M13-106	RC, KR, NC	9	638130.00	6056570.00	Tributary to Robin Creek	Unnamed			Open Bottom Structure	Bridge	5.00	2.80								
2013-05-07		M13-108	RC, KR, NC	9	637254.00	6056049.00	Robin Creek	Unnamed	0.30		Open Bottom Structure	Bridge	10.20	5.00								
2013-05-07		M13-109	RC, KR, NC	9	636971.00	6056680.00	Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.40	26.50	No		No	No		1.75	0	0.53
2013-05-07		M13-110	RC, KR, NC	9	634832.00	6059233.00	Tributary to Round Lake	Woodmere Road	1.70		Closed Bottom Structure	Round Culvert	0.95	17.20	No		No	No		2.55	0	0.11
2013-05-07		M13-111	RC, KR, NC	9	635041.00	6059481.00	Tributary to Round Lake	Round Lake Road	0.10		Closed Bottom Structure	Round Culvert	0.60	12.70	No		No	No		1.25	0.15	0.07
2013-05-07		M13-112	RC, KR, NC	9	637529.00	6059363.00	Robin Creek	Round Lake Road	3.00		Closed Bottom Structure	Round Culvert	1.90	12.20	No		No	No		0.57	0.35	0.34
2013-05-07		M13-114	RC, KR, NC	9	633773.00	6059445.00	Tributary to Round Lake	Round Lake Road	3.20		Open Bottom Structure	Bridge	6.25	7.56								
2013-05-08		M13-115	RC, KR, NC	9	635489.00	6057497.00	Tributary to Lacroix Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.50	23.21	No		No	No		2.15	0	0.25
2013-05-08		M13-116	RC, KR, NC	9	633422.00	6057445.00	Lacroix Creek	Highway 16			Closed Bottom Structure	Round Culvert	2.00	25.70	No		No	No		2.40	0	0.17
2013-05-08		M13-117	RC, KR, NC	9	632021.00	6057657.00	Tributary to Lacroix Creek	Private Road	0.05		Closed Bottom Structure	Round Culvert	0.40	5.80	No		No	No		0.14	0	0.50
2013-05-08		M13-123	RC, KR, NC	9	632950.00	6061136.00	Lacroix Creek	Bree Road	2.50		Closed Bottom Structure	Round Culvert	0.80	11.80	No		No	No		0.98	0.27	0.53
2013-05-08		M13-126	RC, KR, NC	9	644017.00	6061611.00	Tributary to Lemieux Creek	Canyon Creek FSR	11.70		Closed Bottom Structure	Round Culvert	0.45	9.50	No		No	No		0.94	0	0.08
2013-05-08		M13-127	RC, KR, NC	9	636188.00	6062738.00	Tributary to Round Lake	Canyon Creek FSR	0.20		Closed Bottom Structure	Round Culvert	0.50	6.59	No		No	No		0.22	0	0.03
2013-05-08		M13-128	RC, KR, NC	9	636120.00	6061960.00	Tributary to Round Lake	Unnamed	9.50		Closed Bottom Structure	Round Culvert	0.50	12.10	No		No	Yes	100.00	1.06	0	0.17
2013-05-08		M13-129	RC, KR, NC	9	633564.00	6064430.00	Tributary to Round Lake	Private Road	0.60		Closed Bottom Structure	Round Culvert	0.40	6.00	No		No	No		0.24	0.2	0.08
2013-05-08		M13-130	RC, KR, NC	9	633551.00	6064748.00	Tributary to Lacroix Creek	Private Road	0.65		Other	Ford										
2013-05-08		M13-131	RC, KR, NC	9	633371.00	6064644.00	Tributary to Lacroix Creek	Private Road	1.10		Closed Bottom Structure	Round Culvert	0.64	6.00	No		No	No		0.52	0	0.01
2013-05-08		M13-132	RC, KR, NC	9	633085.00	6064903.00	Tributary to Lacroix Creek	Private Road	1.10		Open Bottom Structure	Wood Box Culvert	1.50	9.30								
2013-05-08		M13-133	RC, KR, NC	9	633111.00	6062645.00	Tributary to Lacroix Creek	Woodmere Road	6.80		Closed Bottom Structure	Round Culvert	1.40	28.00	No		No	No		5.60	0.55	0.43
2013-05-08		M13-134	RC, KR, NC	9	633112.00	6062646.00	Tributary to Lacroix Creek	Woodmere Road	6.80		Closed Bottom Structure	Round Culvert	0.60	18.60	No		No	No		1.16	5.51	0.43
2013-05-08		M13-135	RC, KR, NC	9	632756.00	6062633.00	Tributary to Lacroix Creek	Woodmere Road	6.50		Closed Bottom Structure	Round Culvert	0.90	16.90	No		No	No		1.37	1.97	0.32
2013-05-09		M13-137	RC, KR, NC	9	627238.00	6061456.00	Tyhee Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.80	40.00	No		No	No		5.04	0.71	0.22

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-05-09		M13-138	RC, KR, NC	9	627527.00	6061771.00	Tyhee Creek	Tyhee Lake Road	0.50		Closed Bottom Structure	Round Culvert	1.80	12.90	No		No	No		1.29	0	0.19
2013-05-09		M13-140	RC, KR, NC	9	629018.00	6065759.00	Victor Creek	Unnamed	0.95		Closed Bottom Structure	Round Culvert	0.40	9.20	No		No	No		0.52	2.07	0.09
2013-05-09		M13-141	RC, KR, NC	9	629028.00	6065337.00	Tributary to Victor Creek	Unnamed	0.45		Closed Bottom Structure	Round Culvert	0.70	9.00	No		No	No		0.55	0.9	0.24
2013-05-09		M13-142	RC, KR, NC	9	629037.00	6065302.00	Tributary to Victor Creek	Unnamed	0.40		Closed Bottom Structure	Round Culvert	0.90	9.00	No		No	No		0.97	0.94	0.05
2013-05-09		M13-143	RC, KR, NC	9	630153.00	6065524.00	Tributary to Victor Creek	Van Horne Road	0.20		Closed Bottom Structure	Round Culvert	0.65	8.10	No		No	No		0.72	0.12	0.22
2013-05-09		M13-144	RC, KR, NC	9	630663.00	6067510.00	Tributary to McDowell Creek	Hislop Road	6.40		Closed Bottom Structure	Round Culvert	0.80	6.20	No		No	No		0.64	0	0.12
2013-05-09		M13-145	RC, KR, NC	9	631109.00	6067419.00	Tributary to McDowell Creek	Hislop Road	6.90		Closed Bottom Structure	Round Culvert	0.65	6.30	No		No	No		0.60	0	0.40
2013-05-09		M13-146	RC, KR, NC	9	629513.00	6065420.00	Tributary to Victor Creek	Hislop Road	3.30		Closed Bottom Structure	Round Culvert	0.70	10.60	No		No	No		0.30	0.41	0.24
2013-05-09		M13-147	RC, KR, NC	9	628345.00	6063527.00	Tributary to Tyhee Lake	Hislop Road	0.50		Closed Bottom Structure	Round Culvert	0.50	13.20	No		No	No		0.42	0	0.04
2013-05-09		M13-148	RC, KR, NC	9	625563.00	6066480.00	Tributary to Tyhee Lake	Tyhee Lake Road	0.60		Closed Bottom Structure	Round Culvert	0.60	12.60	No		No	No		1.92	0.04	0.23
2013-05-09		M13-150	RC, KR, NC	9	625564.00	6066575.00	Tributary to Tyhee Lake	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.40	6.30	No		No	No		0.76	0	0.26
2013-05-09		M13-151	RC, KR, NC	9	626462.00	6066083.00	Tributary to Tyhee Lake	Unnamed	0.70		Closed Bottom Structure	Round Culvert	0.55	5.98	No		No	No		0.49	0.11	0.12
2013-05-09		M13-152	RC, KR, NC	9	626616.00	6066145.00	Tributary to Tyhee Lake	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.40	6.10	No		No	No		0.44	0.03	0.08
2013-05-09		M13-153	RC, KR, NC	9	626740.00	6066173.00	Tributary to Tyhee Lake	Tyhee Lake Road	1.90		Closed Bottom Structure	Round Culvert	0.60	15.90	No		No	No		1.49	0	0.16
2013-05-09		M13-154	RC, KR, NC	9	626775.00	6065867.00	Tributary to Tyhee Lake	Lake Road	0.10		Closed Bottom Structure	Round Culvert	0.90	11.23	No		No	No		0.57	0.32	0.45
2013-05-09		M13-156	RC, KR, NC	9	626897.00	6065662.00	Tributary to Tyhee Lake	Lake Road	0.30		Closed Bottom Structure	Round Culvert	1.20	12.00	No		No	No		0.72	0	0.00
2013-05-09		M13-157	RC, KR, NC	9	626829.00	6066043.00	Tributary to Tyhee Lake	Tyhee Lake Road	2.10		Closed Bottom Structure	Round Culvert	0.75	16.50	No		No	No		0.99	0	0.39
2013-05-09		M13-158	RC, KR, NC	9	627570.00	6064562.00	Tributary to Tyhee Lake	Tyhee Lake Road	3.80		Closed Bottom Structure	Round Culvert	0.80	17.80	No		No	No		0.83	0.03	0.06
2013-05-09		M13-160	RC, KR, NC	9	628035.00	6068045.00	Tributary to Tyhee Lake	Babine Lake Road	6.40		Closed Bottom Structure	Round Culvert	0.60	16.00	No		No	No		1.53	0.03	0.19
2013-05-22		M13-161	RC, KR	9	619775.00	6063612.00	Tributary to Powers Creek	Unnamed	0.05		Closed Bottom Structure	Round Culvert	0.24	7.00	No		No	Yes	100.00	0.34	0	0.10
2013-05-22		M13-162	RC, KR	9	619894.00	6063683.00	Powers Creek	Morgan Road	0.40		Closed Bottom Structure	Round Culvert	1.45	30.70	No		No	No		1.59	0.42	0.38
2013-05-22		M13-163	RC, KR	9	619177.00	6064183.00	Tributary to Powers Creek	Unnamed	1.00		Closed Bottom Structure	Round Culvert	0.60	6.20	No		No	No		0.35	0.18	0.32
2013-05-22		M13-164	RC, KR	9	619183.00	6064354.00	Tributary to Powers Creek	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.01	0.19	0.08
2013-05-22		M13-165	RC, KR	9	619556.00	6064058.00	Tributary to Powers Creek	Unnamed	0.60		Closed Bottom Structure	Round Culvert	0.80	7.00	No		No	No		1.42	0	0.23
2013-05-22		M13-166	RC, KR	9	619707.00	6064032.00	Powers Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	1.30	30.50	No		No	No		0.72	0.26	0.27
2013-05-22		M13-167	RC, KR	9	619723.00	6064094.00	Powers Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	2.40	26.20	No		No	No		2.91	0.51	0.65
2013-05-22		M13-168	RC, KR	9	619768.00	6064241.00	Tributary to Powers Creek	Unnamed	7.25		Closed Bottom Structure	Round Culvert	0.50	11.90	No		No	No		1.30	0.21	0.21
2013-05-22		M13-169	RC, KR	9	619997.00	6068074.00	Seymour Creek	Unnamed	3.00		Closed Bottom Structure	Round Culvert	1.00	13.35	No		No	Yes	100.00	0.49	0	0.53
2013-05-22		M13-170	RC, KR	9	620018.00	6068107.00	Seymour Creek	Stanga Road	0.05		Closed Bottom Structure	Round Culvert	1.70	12.00	No		No	No		0.42	0	0.18
2013-05-22		M13-171	RC, KR	9	619964.00	6068065.00	Seymour Creek	Railway			Closed Bottom Structure	Round Culvert	1.80	23.40	No		No	No		1.62	0	0.14
2013-05-22		M13-172	RC, KR	9	619959.00	6068291.00	Seymour Creek	Unnamed	0.00		Closed Bottom Structure	Round Culvert	1.60	10.00	No		No	No		0.54	0	0.36
2013-05-22		M13-173	RC, KR	9	619932.00	6068408.00	Seymour Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	2.30	10.05	No		No	No		0.82	0.57	0.22
2013-05-22		M13-174	RC, KR	9	619465.00	6069785.00	Bigelow Creek	Unnamed	1.20		Closed Bottom Structure	Round Culvert	0.80	25.00	No		No	No		2.31	0.19	0.46
2013-05-22		M13-175	RC, KR	9	619589.00	6069783.00	Bigelow Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	0.80	19.00	No		No	No		1.21	0.11	0.17
2013-05-22		M13-177	RC, KR	9	620053.00	6069493.00	Seymour Creek	Unnamed	0.00		Closed Bottom Structure	Round Culvert	0.90	10.90	No		No	No		1.44	0	0.39
2013-05-22		M13-178	RC, KR	9	619876.00	6069753.00	Seymour Creek	Unnamed	0.05		Closed Bottom Structure	Round Culvert	2.10	13.50	No		No	No		1.23	0.48	0.47
2013-05-22		M13-179	RC, KR	9	619838.00	6069413.00	Tributary to Seymour Creek	Unnamed	0.40		Closed Bottom Structure	Round Culvert	0.50	12.60	No		No	Yes	100.00	2.03	0	0.00
2013-05-22		M13-180	RC, KR	9	619859.00	6069293.00	Seymour Creek	Unnamed	0.50		Closed Bottom Structure	Round Culvert	0.90	11.80	No		No	No		1.22	0	0.32
2013-05-23		M13-181	RC, KR	9	619673.00	6070345.00	Seymour Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	1.60	11.50	No		No	Yes	100.00	0.59	0	1.00
2013-05-23		M13-183	RC, KR	9	618058.00	6069848.00	Seymour Creek	Dahli Road	0.60		Closed Bottom Structure	Round Culvert	0.60	13.30	No		No	No		0.68	0	0.11
2013-05-23		M13-184	RC, KR	9	619238.00	6067488.00	Seymour Creek	Stenset Road	1.30		Closed Bottom Structure	Round Culvert	1.25	7.00	No		No	No		0.61	0	0.58
2013-05-23		M13-185	RC, KR	9	617863.00	6067375.00	Tributary to Seymour Lake	Hudson Bay Mountain Road	3.40		Closed Bottom Structure	Round Culvert	0.90	16.40	No		No	No		0.50	1.76	0.23
2013-05-23		M13-186	RC, KR	9	618185.00	6066376.00	Tributary to Seymour Creek	Whistler Road	1.30		Closed Bottom Structure	Round Culvert	1.50	13.20	No		No	No		0.43	0.49	0.38
2013-05-23		M13-187	RC, KR	9	618563.00	6065639.00	Tributary to Seymour Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	0.60	11.80	Yes	0.06	No	No		0.45	0	0.12
2013-05-23		M13-188	RC, KR	9	617941.00	6066162.00	Tributary to Seymour Creek	Ptarmigan Road	0.00		Closed Bottom Structure	Round Culvert	0.90	25.00	No		No	No		1.76	1.33	0.24
2013-05-23		M13-189	RC, KR	9	617663.00	6065878.00	Tributary to Seymour Creek	Ptarmigan Road	0.40		Closed Bottom Structure	Round Culvert	1.40	22.80	No		No	No		1.53	1.17	0.04
2013-05-23		M13-190	RC, KR	9	618006.00	6065462.00	Tributary to Seymour Creek	Unnamed	0.50		Other	Ford										
2013-05-23		M13-191	RC, KR	9	617995.00	6065452.00	Tributary to Seymour Creek	Wood Creek FSR	0.35		Closed Bottom Structure	Round Culvert	0.50	8.25	No		No	No		0.49	0.76	0.34
2013-05-23		M13-192	RC, KR	9	616816.00	6064020.00	Tributary to Powers Creek	Wood Creek FSR	2.70		Closed Bottom Structure	Round Culvert	0.50	12.70	No		No	No		1.70	0.4	0.07
2013-05-23		M13-193	RC, KR	9	617740.00	6065710.00	Tributary to Seymour Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	0.45	9.38	No		No	No		0.14	0.07	0.10
2013-05-24		M13-194	RC, KR	9	624610.00	6057183.00	Help Creek	Unnamed	0.35		Closed Bottom Structure	Round Culvert	1.20	9.90	No		No	No		0.36	0.12	0.72
2013-05-24		M13-195	RC, KR	9	625092.00	6056527.00	Help Creek	Unnamed	1.20		Other	Ford										
2013-05-24		M13-196	RC, KR	9	625108.00	6056547.00	Tributary to Help Creek	Unnamed	1.20		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.32	0.15	0.08

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-05-24		M13-197	RC, KR	9	624169.00	6056900.00	Tributary to Help Creek	Unnamed	0.05		Other	Ford										
2013-05-24		M13-198	RC, KR	9	623958.00	6056728.00	Tributary to Help Creek	Unnamed	0.00		Other	Ford										
2013-05-24		M13-199	RC, KR	9	623292.00	6056173.00	Tributary to Help Creek	Power Line			Other	Ford										
2013-05-24		M13-200	RC, KR	9	623178.00	6056166.00	Tributary to Help Creek	Power Line			Closed Bottom Structure	Round Culvert	0.90	11.50	No		No	No		0.52	0	0.32
2013-05-24		M13-201	RC, KR	9	604480.00	6052429.00	Tributary to Help Creek	Power Line			Closed Bottom Structure	Round Culvert	0.90	11.80	No		No	No		1.49	0.01	0.39
2013-05-24		M13-202	RC, KR	9	604062.00	6053306.00	Tributary to Help Creek	Power Line			Closed Bottom Structure	Round Culvert	0.65	12.00	No		No	No		0.68	0.35	0.42
2013-05-24		M13-203	RC, KR	9	604172.00	6053384.00	Tributary to Help Creek	Power Line			Closed Bottom Structure	Round Culvert	1.00	12.50	No		No	No		2.08	0	0.14
2013-05-24		M13-204	RC, KR	9	603841.00	6053340.00	Tributary to Telkwa River	R09521 119-1	0.10		Other	Ford										
2013-05-24		M13-205	RC, KR	9	603366.00	6053467.00	Tributary to Telkwa River	R09521 119	3.90		Closed Bottom Structure	Round Culvert	0.45	9.20	No		No	No		0.59	0.14	0.06
2013-05-24		M13-206	RC, KR	9	603480.00	6054469.00	Tributary to Telkwa River	R09521 119-4B	0.70		Other	Ford										
2013-05-24		M13-207	RC, KR	9	603133.00	6054907.00	Tributary to Telkwa River	Unnamed	0.00		Closed Bottom Structure	Round Culvert	0.50	10.50	No		No	No		0.50	0.02	0.02
2013-05-24		M13-208	RC, KR	9	604394.00	6052258.00	Tributary to Telkwa River	Telkwa FSR	20.00		Open Bottom Structure	Bridge	9.46	5.31								
2013-05-24		M13-213	RC, KR	9	602305.00	6051989.00	John's Creek	Unnamed	0.00		Open Bottom Structure	Bridge	11.95	5.45								
2013-05-24		M13-214	RC, KR	9	598865.00	6052813.00	Tributary to Telkwa River	Telkwa FSR	22.20		Closed Bottom Structure	Round Culvert	0.80	10.50	No		No	No		0.26	0	0.14
2013-05-24		M13-215	RC, KR	9	598879.00	6053115.00	Tributary to Telkwa River	Unnamed	0.35		Closed Bottom Structure	Round Culvert	0.90	9.50	No		No	No		0.23	0.94	0.37
2013-05-25		M13-217	RC, KR	9	644380.00	6060987.00	Tributary to Lemieux Creek	Canyon Creek FSR	12.40		Open Bottom Structure	Pipe Arch	1.20	12.10								
2013-05-25		M13-218	RC, KR	9	644360.00	6061067.00	Tributary to Lemieux Creek	Canyon Creek FSR	12.30		Closed Bottom Structure	Round Culvert	0.50	9.10	No		No	No		0.21	0.26	0.08
2013-05-25		M13-219	RC, KR	9	644005.00	6061648.00	Lemieux Creek	Canyon Creek FSR	11.60		Open Bottom Structure	Pipe Arch	1.60	14.00								
2013-05-25		M13-220	RC, KR	9	643880.00	6061731.00	Tributary to Lemieux Creek	Canyon Creek FSR	11.50		Closed Bottom Structure	Round Culvert	0.50	14.00	No		No	No		1.44	0.42	0.08
2013-05-25		M13-221	RC, KR	9	643607.00	6062030.00	Tributary to Lemieux Creek	Canyon Creek FSR	10.05		Closed Bottom Structure	Round Culvert	0.86	13.00	No		No	No		1.06	0.36	0.21
2013-05-25		M13-222	RC, KR	9	643552.00	6062132.00	Tributary to Lemieux Creek	Canyon Creek FSR	10.95		Closed Bottom Structure	Round Culvert	0.80	10.00	No		No	No		0.37	0.4	0.13
2013-05-25		M13-223	RC, KR	9	643494.00	6062211.00	Tributary to Lemieux Creek	Canyon Creek FSR	10.85		Closed Bottom Structure	Round Culvert	0.50	9.10	No		No	No		0.46	0	0.07
2013-05-25		M13-224	RC, KR	9	643469.00	6062245.00	Tributary to Lemieux Creek	Canyon Creek FSR	10.80		Closed Bottom Structure	Round Culvert	0.45	9.40	No		No	No		0.74	0.06	0.09
2013-05-25		M13-225	RC, KR	9	643206.00	6062865.00	Tributary to Robin Creek	Canyon Creek FSR	10.10		Closed Bottom Structure	Round Culvert	0.60	11.00	No		No	No		0.64	0.11	0.22
2013-05-25		M13-226	RC, KR	9	643142.00	6063102.00	Tributary to Robin Creek	Canyon Creek FSR	9.90		Closed Bottom Structure	Round Culvert	0.50	9.00	No		No	No		0.25	0	0.02
2013-05-25		M13-227	RC, KR	9	643059.00	6063325.00	Tributary to Robin Creek	Canyon Creek FSR	9.65		Closed Bottom Structure	Round Culvert	0.50	10.00	No		No	No		0.42	0.32	0.02
2013-05-25		M13-228	RC, KR	9	649979.00	6063997.00	Tributary to Robin Creek	Canyon Creek FSR	9.45		Closed Bottom Structure	Round Culvert	0.50	10.00	No		No	No		0.63	0.12	0.14
2013-05-25		M13-229	RC, KR	9	642839.00	6063835.00	Tributary to Robin Creek	Canyon Creek FSR	9.10		Closed Bottom Structure	Round Culvert	0.45	9.50	No		No	No		0.33	0.18	0.05
2013-05-25		M13-230	RC, KR	9	642781.00	6064098.00	Tributary to Robin Creek	Canyon Creek FSR	8.80		Open Bottom Structure	Pipe Arch	1.70	10.20								
2013-05-25		M13-231	RC, KR	9	642485.00	6064505.00	Tributary to Robin Creek	Canyon Creek FSR	8.30		Open Bottom Structure	Pipe Arch	1.15	8.30								
2013-05-25		M13-234	RC, KR	9	628269.00	6060655.00	McDowell Creek	Unnamed	0.40		Closed Bottom Structure	Round Culvert	1.00	30.00	No		No	No		6.01	0.03	0.16
2013-05-25		M13-235	RC, KR	9	634036.00	6055744.00	Tributary to Lacroix Creek	Unnamed	0.15		Open Bottom Structure	Bridge	10.90	1.52								
2013-05-25		M13-236	RC, KR	9	634166.00	6055389.00	Tributary to Lacroix Creek	Unnamed	0.35		Open Bottom Structure	Bridge	10.90	5.00								
2013-05-26		M13-237	RC, KR	9	616900.00	6066173.00	Tributary to Seymour Creek	Hudson Bay Mountain Road	6.80		Closed Bottom Structure	Round Culvert	0.75	30.00	No		No	No		3.31	0.07	0.19
2013-05-26		M13-238	RC, KR	9	616151.00	6066135.00	Tributary to Seymour Creek	Hudson Bay Mountain Road	7.30		Closed Bottom Structure	Round Culvert	0.60	17.50	No		No	No		0.73	0.94	0.04
2013-05-26		M13-239	RC, KR	9	615102.00	6066928.00	Tributary to Seymour Creek	Unnamed	2.00		Open Bottom Structure	Bridge	3.60	68.84								
2013-05-26		M13-240	RC, KR	9	613449.00	6066605.00	Tributary to Pine Creek	Hudson Bay Mountain Road	9.40		Closed Bottom Structure	Round Culvert	0.60	15.86	No		No	No		0.59	0	0.31
2013-05-26		M13-241	RC, KR	9	613705.00	6067942.00	Tributary to Pine Creek	Hudson Bay FSR	1.80		Closed Bottom Structure	Round Culvert	0.50	8.40	No		No	No		0.35	0	0.37
2013-05-26		M13-242	RC, KR	9	613663.00	6067581.00	Tributary to Pine Creek	Hudson Bay FSR	0.00		Open Bottom Structure	Pipe Arch	1.20	7.90								
2013-05-26		M13-244	RC, KR	9	613732.00	6067815.00	Tributary to Pine Creek	HB 9112 04	0.25		Closed Bottom Structure	Round Culvert	0.50	7.90	No		No	No		0.26	0.1	0.08
2013-05-26		M13-245	RC, KR	9	613218.00	6067931.00	Tributary to Pine Creek	Unnamed	0.05		Other	Ford										
2013-05-26		M13-247	RC, KR	9	613488.00	6067720.00	Tributary to Pine Creek	Hudson Bay FSR	1.40		Closed Bottom Structure	Round Culvert	0.45	5.70	No		No	No		0.57	0.08	0.18
2013-05-26		M13-248	RC, KR	9	613219.00	6067614.00	Tributary to Pine Creek	Hudson Bay FSR	1.60		Open Bottom Structure	Bridge	9.13	5.41								
2013-05-26		M13-249	RC, KR	9	613122.00	6067861.00	Tributary to Pine Creek	Unnamed	0.25		Other	Ford										
2013-05-26		M13-250	RC, KR	9	612079.00	6066905.00	Tributary to Pine Creek	Hudson Bay FSR	12.10		Closed Bottom Structure	Round Culvert	1.80	18.50	No		No	No		0.38	0.13	0.22
2013-05-26		M13-251	RC, KR	9	611907.00	6066844.00	Tributary to Pine Creek	Hudson Bay FSR	12.25		Closed Bottom Structure	Round Culvert	1.10	18.26	No		No	No		0.28	0	0.27
2013-05-26		M13-252	RC, KR	9	611223.00	6070050.00	Tributary to Pine Creek	Hudson Bay Mountain Road	20.90		Closed Bottom Structure	Round Culvert	0.50	11.10	No		No	No		0.40	0	0.09
2013-05-26		M13-254	RC, KR	9	612847.00	6069229.00	Tributary to Pine Creek	Hudson Bay Mountain Road	18.30		Closed Bottom Structure	Round Culvert	1.40	18.00	No		No	No		0.84	0.23	0.28
2013-05-26		M13-255	RC, KR	9	612841.00	6069226.00	Tributary to Pine Creek	Hudson Bay Mountain Road	18.30		Closed Bottom Structure	Round Culvert	1.20	18.00	No		No	No		0.54	0.31	0.13
2013-05-26		M13-256	RC, KR	9	612504.00	6069025.00	Tributary to Pine Creek	Hudson Bay Mountain Road	17.90		Closed Bottom Structure	Oval Culvert	0.90	20.20	No		No	No		0.82	0.51	0.03
2013-05-26		M13-257	RC, KR	9	612083.00	6068448.00	Tributary to Pine Creek	Hudson Bay Mountain Road	16.80		Open Bottom Structure	Wood Box Culvert	1.52	25.00								

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-05-26		M13-258	RC, KR	9	611156.00	6068270.00	Tributary to Pine Creek	Hudson Bay Mountain Road	15.90		Closed Bottom Structure	Oval Culvert	1.35	20.20	No		No	No		1.29	0.66	0.25
2013-05-26		M13-259	RC, KR	9	610658.00	6067808.00	Tributary to Pine Creek	Unnamed	0.25		Open Bottom Structure	Bridge	10.56	6.50								
2013-05-26		M13-260	RC, KR	9	610617.00	6067548.00	Tributary to Pine Creek	McDonnell FSR	0.20		Closed Bottom Structure	Round Culvert	2.10	14.00	No		No	No		0.62	0.5	0.22
2013-05-26		M13-261	RC, KR	9	610460.00	6067588.00	Tributary to Pine Creek	McDonnell FSR	0.40		Closed Bottom Structure	Round Culvert	0.60	10.00	No		No	No		0.55	0	0.06
2013-05-26		M13-262	RC, KR	9	609501.00	6067581.00	Tributary to Pine Creek	McDonnell FSR	1.40		Closed Bottom Structure	Round Culvert	0.80	11.50	No		No	No		0.93	0	0.11
2013-05-26		M13-263	RC, KR	9	607525.00	6067555.00	Miller Creek	McDonnell FSR	3.30		Closed Bottom Structure	Round Culvert	2.60	18.00	No		No	No		0.43	0	0.28
2013-05-26		M13-265	RC, KR	9	605096.00	6065173.00	Tributary to Pine Creek	Unnamed	0.25		Open Bottom Structure	Bridge	2.58	16.00								
2013-05-26		M13-266	RC, KR	9	604598.00	6065538.00	Tributary to Pine Creek	Unnamed	4.40		Open Bottom Structure	Bridge	5.00	12.40								
2013-05-27		M13-267	RC, KR	9	611864.00	6066828.00	Tributary to Pine Creek	Hudson Bay Mountain Road			Closed Bottom Structure	Oval Culvert	1.75	18.60	No		No	No		0.33	0	0.15
2013-05-27		M13-268	RC, KR	9	609618.00	6067660.00	Tributary to Pine Creek	Unnamed	0.05		Other	Ford										
2013-05-27		M13-269	RC, KR	9	607615.00	6067375.00	Tributary to Pine Creek	700 Road	0.20		Closed Bottom Structure	Round Culvert	1.90	12.80	No		No	No		0.65	0.01	0.16
2013-05-27		M13-270	RC, KR	9	607481.00	6067218.00	Tributary to Pine Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	0.50	10.10	No		No	No		0.78	0.17	0.40
2013-05-27		M13-271	RC, KR	9	607623.00	6067157.00	Tributary to Pine Creek	700 Road	0.50		Closed Bottom Structure	Round Culvert	0.80	10.10	No		No	No		0.42	0.11	0.05
2013-05-27		M13-272	RC, KR	9	607682.00	6067039.00	Pine Creek	700 Road	0.60		Open Bottom Structure	Bridge	16.65	5.55								
2013-05-27		M13-273	RC, KR	9	607820.00	6066785.00	Tributary to Pine Creek	700 Road	0.85		Closed Bottom Structure	Round Culvert	1.65	10.90	No		No	No		0.53	0	0.26
2013-05-27		M13-275	RC, KR	9	610539.00	6065849.00	Tributary to Pine Creek	Unnamed	1.80		Open Bottom Structure	Wood Box Culvert	1.25	5.51								
2013-05-27		M13-276	RC, KR	9	604008.00	6056935.00	Tributary to Cumming Creek	700 Road	11.55		Closed Bottom Structure	Round Culvert	1.20	10.50	No		No	No		0.76	0	0.21
2013-05-27		M13-277	RC, KR	9	608647.00	6056981.00	Tributary to Cumming Creek	700 Road	15.90		Other	Ford										
2013-05-27		M13-278	RC, KR	9	637042.00	6057276.00	Robin Creek	Unnamed	0.80		Open Bottom Structure	Bridge	8.75	3.43								
2013-05-27		M13-279	RC, KR	9	641684.00	6047016.00	Tributary to Bulkley River	Walcott Road	3.00		Closed Bottom Structure	Round Culvert	0.80	15.80	No		No	No		1.07	0	0.27
2013-05-28		M13-280	RC, KR	9	609608.00	6054284.00	Cumming Creek	Telkwa FSR	13.85		Open Bottom Structure	Bridge	12.15	4.85								
2013-05-28		M13-281	RC, KR	9	606762.00	6055956.00	Tributary to Cumming Creek	R09521 116A	5.00		Closed Bottom Structure	Round Culvert	0.60	12.80	No		No	No		0.82	0.08	0.08
2013-05-28		M13-282	RC, KR	9	606337.00	6056083.00	Tributary to Cumming Creek	R09521 116A	5.50		Closed Bottom Structure	Round Culvert	1.00	18.00	No		No	No		0.85	0.09	0.11
2013-05-28		M13-283	RC, KR	9	605262.00	6055849.00	Cumming Creek	R09521 116A	6.70		Other	Ford										
2013-05-28		M13-284	RC, KR	9	601617.00	6053178.00	Tributary to Telkwa River	Unnamed	2.90		Closed Bottom Structure	Round Culvert	0.60	10.70	No		No	No		0.70	0	0.00
2013-05-28		M13-285	RC, KR	9	601564.00	6053310.00	Tributary to Telkwa River	Unnamed	0.05		Closed Bottom Structure	Round Culvert	1.00	7.90	No		No	No		0.40	0	0.01
2013-05-28		M13-286	RC, KR	9	601396.00	6053519.00	Tributary to Telkwa River	Unnamed	0.30		Other	Ford										
2013-05-28		M13-287	RC, KR	9	601297.00	6053689.00	Tributary to Telkwa River	Unnamed	0.10		Other	Ford										
2013-05-28		M13-288	RC, KR	9	601154.00	6053752.00	Tributary to Telkwa River	R09521 1000-3D	2.70		Closed Bottom Structure	Round Culvert	0.60	8.30	No		No	No		0.55	0	0.00
2013-05-28		M13-289	RC, KR	9	600768.00	6054131.00	Tributary to Telkwa River	Unnamed	0.10		Other	Ford										
2013-05-28		M13-290	RC, KR	9	600944.00	6054238.00	Tributary to Telkwa River	R09521 1000-3D	3.60		Closed Bottom Structure	Round Culvert	0.70	9.40	No		No	No		0.67	1.2	0.00
2013-05-28		M13-291	RC, KR	9	600843.00	6054628.00	Tributary to Telkwa River	R09521 1000-3D	4.15		Closed Bottom Structure	Round Culvert	1.00	11.00	No		No	No		0.51	0	0.05
2013-05-28		M13-292	RC, KR	9	600523.00	6054951.00	Tributary to Telkwa River	Unnamed	0.10		Other	Ford										
2013-05-28		M13-293	RC, KR	9	601033.00	6054719.00	Tributary to Telkwa River	R09521 1000-3E	0.25		Closed Bottom Structure	Round Culvert	1.00	13.90	No		No	No		0.47	0	0.01
2013-05-28		M13-294	RC, KR	9	601068.00	6053573.00	Tributary to Telkwa River	R09521 1000-3D	2.20		Closed Bottom Structure	Round Culvert	1.80	18.00	No		No	No		2.18	0.25	0.31
2013-05-28		M13-295	RC, KR	9	604106.00	6052190.00	Tributary to Telkwa River	Telkwa FSR	19.70		Closed Bottom Structure	Round Culvert	1.20	11.90	No		No	No		0.35	0.09	0.05
2013-06-02		M13-2	MG	9	637793.00	6040775.00	Tributary to Bulkley River	Unnamed	3.50		Closed Bottom Structure	Round Culvert	0.48	14.00	No		No	No		1.90	0	0.00
2013-06-02		M13-297	MG	9	639113.00	6045964.00	Tributary to Bulkley River	Unnamed	2.90		Other	Ford										
2013-06-02		M13-298	MG	9	639133.00	6047659.00	Tributary to Bulkley River	Unnamed	1.90		Other	Ford										
2013-06-02		M13-299	MG	9	637786.00	6048811.00	Tributary to Bulkley River	Unnamed	0.60		Other	Ford										
2013-06-02		M13-300	MG	9	637669.00	6048829.00	Tributary to Bulkley River	Unnamed	0.55		Other	Ford										
2013-06-02		M13-301	MG	9	637307.00	6049007.00	Tributary to Bulkley River	Unnamed	0.20		Other	Ford										
2013-06-02		M13-302	MG	9	637443.00	6049351.00	Tributary to Bulkley River	Unnamed	0.70		Other	Ford										
2013-06-03		M13-304	MG	9	623478.00	6053202.00	Tributary to Help Creek	R09521 100-1	1.70		Closed Bottom Structure	Round Culvert	0.90	14.50	No		No	Yes	10.00	5.50	3.45	0.30
2013-06-03		M13-305	MG	9	624054.00	6053178.00	Tributary to Help Creek	R09521 100-1	2.05		Closed Bottom Structure	Round Culvert	1.00	19.50	No		No	No		3.75	0.33	0.33
2013-06-03		M13-306	MG	9	624460.00	6053278.00	Tributary to Help Creek	R09521 100-1	2.40		Closed Bottom Structure	Round Culvert	0.40	13.50	No		No	No		2.85	0.02	0.02
2013-06-03		M13-307	MG	9	624238.00	6052528.00	Tributary to Help Creek	R09521 100-1	3.20		Closed Bottom Structure	Round Culvert	6.00	14.80	No		No	No		1.80	0.11	0.21
2013-06-03		M13-308	MG	9	623689.00	6052591.00	Tributary to Help Creek	R09521 100-1	3.60		Closed Bottom Structure	Round Culvert	0.60	15.50	No		No	No		7.50	1.27	0.06
2013-06-03		M13-309	MG	9	625174.00	6052376.00	Tributary to Help Creek	R09521 100-1	5.30		Closed Bottom Structure	Round Culvert	1.00	13.00	No		No	No		3.25	0.1	0.03
2013-06-03		M13-311	MG	9	623633.00	6056086.00	Tributary to Help Creek	Power line			Closed Bottom Structure	Round Culvert	0.95	11.00	No		No	No		2.10	0.48	0.18
2013-06-03		M13-312	MG	9	623603.00	6056054.00	Tributary to Help Creek	Unnamed	2.15		Closed Bottom Structure	Round Culvert	9.00	17.00	No		No	No		4.10	0.5	0.12
2013-06-03		M13-313	MG	9	624463.00	6055879.00	Tributary to Help Creek	Power line			Closed Bottom Structure	Round Culvert	0.90	10.50	No		No	Yes	40.00	2.75	0	0.13
2013-06-03		M13-314	MG	9	624422.00	6055819.00	Tributary to Help Creek	Unnamed	2.60		Closed Bottom Structure	Round Culvert	0.90	22.00	No		No	No		6.50	0.64	0.44

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-06-03		M13-315	MG	9	624636.00	6055833.00	Tributary to Help Creek	Unnamed	0.15		Closed Bottom Structure	Round Culvert	0.90	11.50	No		No	No		3.00	0.68	0.54
2013-06-03		M13-316	MG	9	624629.00	6055829.00	Tributary to Help Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.80	1.2	0.00
2013-06-03		M13-317	MG	9	624595.00	6055775.00	Tributary to Help Creek	Power line			Closed Bottom Structure	Round Culvert	1.00	20.00	No		No	No		6.10	0	0.02
2013-06-03		M13-318	MG	9	624708.00	6055912.00	Tributary to Help Creek	Unnamed	0.15		Other	Ford										
2013-06-03		M13-319	MG	9	624576.00	6056004.00	Tributary to Help Creek	Unnamed	0.25		Other	Ford										
2013-06-04		M13-320	MG	9	624957.00	6055678.00	Tributary to Help Creek	Unnamed	1.30		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.60	0.9	0.13
2013-06-04		M13-321	MG	9	624952.00	6055655.00	Tributary to Help Creek	Unnamed	1.50		Closed Bottom Structure	Round Culvert	0.48	14.00	No		No	No		1.25	0.59	0.30
2013-06-04		M13-322	MG	9	625050.00	6055625.00	Tributary to Help Creek	Unnamed	1.70		Closed Bottom Structure	Round Culvert	0.48	13.50	No		No	Yes	50.00	1.10	0	0.10
2013-06-04		M13-323	MG	9	625063.00	6055675.00	Tributary to Help Creek	Unnamed	1.50		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.35	0	0.07
2013-06-04		M13-324	MG	9	625103.00	6055617.00	Tributary to Help Creek	Unnamed	1.90		Closed Bottom Structure	Round Culvert	0.48	14.50	No		No	No		0.95	0.14	0.24
2013-06-04		M13-325	MG	9	625113.00	6055657.00	Tributary to Help Creek	Unnamed	1.80		Closed Bottom Structure	Round Culvert	0.48	14.00	No		No	No		0.20	0	0.23
2013-06-04		M13-327	MG	9	625266.00	6055572.00	Tributary to Help Creek	Unnamed	1.90		Closed Bottom Structure	Round Culvert	0.48	10.00	No		No	No		1.25	0	0.50
2013-06-04		M13-328	MG	9	625274.00	6055595.00	Tributary to Help Creek	Unnamed	1.95		Closed Bottom Structure	Round Culvert	0.60	6.50	No		No	No		0.30	0.58	0.50
2013-06-06		M13-329	MG	9	647688.00	6046591.00	Tributary to Thompson Creek	Unnamed	3.80		Closed Bottom Structure	Round Culvert	0.60	7.25	No		No	Yes	100.00	0.62	0	0.07
2013-06-06		M13-330	MG	9	648493.00	6047180.00	Tributary to Thompson Creek	Unnamed	4.75		Closed Bottom Structure	Round Culvert	0.80	8.20	No		No	No		1.05	0.46	0.14
2013-06-06		M13-331	MG	9	648491.00	6047180.00	Tributary to Thompson Creek	Unnamed	4.75		Closed Bottom Structure	Round Culvert	0.80	8.20	No		No	No		0.98	0	0.07
2013-06-06		M13-332	MG	9	649141.00	6047042.00	Tributary to Thompson Creek	Unnamed	5.35		Closed Bottom Structure	Round Culvert	0.75	6.45	Yes	0.25	No	No		0.82	0.4	0.08
2013-06-06		M13-333	MG	9	646288.00	6044192.00	Tributary to Thompson Creek	Unnamed	0.65		Other	Ford										
2013-06-06		M13-334	MG	9	646459.00	6044130.00	Tributary to Thompson Creek	Unnamed	0.50		Other	Ford										
2013-06-06		M13-335	MG	9	646493.00	6043932.00	Tributary to Thompson Creek	Unnamed	0.40		Other	Ford										
2013-06-06		M13-336	MG	9	646357.00	6043825.00	Tributary to Thompson Creek	Unnamed	0.35		Other	Ford										
2013-06-12		M13-337	RC/RO	9	641535.00	6075372.00	Canyon Creek	Babine Lake FSR	23.40		Open Bottom Structure	Bridge	9.75	8.88								
2013-06-12		M13-338	RC/RO	9	641500.00	6074447.00	Canyon Creek	Unnamed	0.30		Other	Ford										
2013-06-12		M13-339	RC/RO	9	641205.00	6074326.00	Tributary to Canyon Creek	Babine Lake FSR	22.30		Closed Bottom Structure	Round Culvert	0.60	14.50	No		No	No		1.00	0.81	0.59
2013-06-12		M13-340	RC/RO	9	640964.00	6073581.00	Tributary to Canyon Creek	Babine Lake FSR	21.50		Closed Bottom Structure	Round Culvert	0.75	24.80	No		No	No		2.10	0	0.00
2013-06-12		M13-341	RC/RO	9	640901.00	6073357.00	Tributary to Canyon Creek	Babine Lake FSR	21.20		Closed Bottom Structure	Round Culvert	0.60	15.00	No		No	No		1.80	0.05	0.90
2013-06-12		M13-342	RC/RO	9	640845.00	6073166.00	Tributary to Canyon Creek	Babine Lake FSR	21.10		Closed Bottom Structure	Round Culvert	0.70	14.75	No		No	No		0.64	0.2	0.16
2013-06-12		M13-343	RC/RO	9	640550.00	6072378.00	Tributary to Canyon Creek	Babine Lake FSR	20.10		Closed Bottom Structure	Round Culvert	0.75	14.75	No		No	No		0.67	0.13	0.19
2013-06-12		M13-345	RC/RO	9	640430.00	6072031.00	Tributary to Canyon Creek	Babine Lake FSR	19.70		Closed Bottom Structure	Round Culvert	0.60	16.70	No		No	No		0.83	0.13	0.09
2013-06-12		M13-346	RC/RO	9	640381.00	6071885.00	Tributary to Canyon Creek	Babine Lake FSR	19.60		Closed Bottom Structure	Round Culvert	0.60	14.70	No		No	No		0.68	0.23	0.19
2013-06-12		M13-347	RC/RO	9	641068.00	6071778.00	Canyon Creek	Unnamed	1.10		Other	Ford										
2013-06-12		M13-348	RC/RO	9	641555.00	6071586.00	Tributary to Canyon Creek	Unnamed	1.60		Other	Ford										
2013-06-12		M13-349	RC/RO	9	618978.00	6071197.00	Dahlie Creek	Hwy 16			Closed Bottom Structure	Round Culvert	2.00	40.00	No		No	No		1.42	0.35	0.25
2013-06-12		M13-350	RC/RO	9	618804.00	6070993.00	Dahlie Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	4.50	25.30	Yes	1.00	Yes	Yes	10.00	1.00	0	0.00
2013-06-13		M13-351	RC/RO	9	618118.00	6070674.00	Dahlie Creek	Railway Ave.	1.80		Closed Bottom Structure	Round Culvert	1.80	65.00	No		No	No		0.23	0.28	1.45
2013-06-12		M13-352	RC/RO	9	618060.00	6070582.00	Dahlie Creek	Unnamed	0.70		Closed Bottom Structure	Round Culvert	1.60	20.00	No		No	No		1.30	0	0.50
2013-06-12		M13-353	RC/RO	9	617646.00	6070109.00	Dahlie Creek	Dahlie Road	1.60		Closed Bottom Structure	Round Culvert	0.18	11.00	No		No	No		0.64	0	0.53
2013-06-13		M13-354	RC/RO	9	619388.00	6071844.00	Dahlie Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	1.20	19.60	No		No	No		1.49	0.03	0.28
2013-06-13		M13-355	RC/RO	9	619404.00	6071956.00	Dahlie Creek	Unnamed	0.20		Other	Ford										
2013-06-13		M13-357	RC/RO	9	619285.00	6071731.00	Dahlie Creek	Unnamed	1.00		Closed Bottom Structure	Round Culvert	1.00	15.00	No		No	No		1.67	0.31	0.62
2013-06-13		M13-358	RC/RO	9	604777.00	6050538.00	Tributary to Telkwa River	R09521 1018	3.30		Closed Bottom Structure	Round Culvert	2.00	18.10	No		No	Yes	50.00	1.83	0	0.21
2013-06-13		M13-359	RC/RO	9	604165.00	6050511.00	Tributary to Telkwa River	R09521 1018	0.60		Closed Bottom Structure	Round Culvert	1.00	12.00	No		No	Yes	10.00	0.27	0.02	0.10
2013-06-13		M13-360	RC/RO	9	603813.00	6050480.00	Tributary to Telkwa River	R09521 1018	0.95		Open Bottom Structure	Bridge	9.00	4.80								
2013-06-13		M13-361	RC/RO	9	602355.00	6050612.00	Tributary to Telkwa River	R09521 1018	2.30		Closed Bottom Structure	Round Culvert	1.00	13.10	No		No	Yes	40.00	0.33	0.03	0.00
2013-06-13		M13-362	RC/RO	9	602298.00	6050599.00	Tributary to Telkwa River	R09521 1018	2.40		Closed Bottom Structure	Round Culvert	0.60	9.60	No		No	No		0.40	0.14	0.10
2013-06-13		M13-363	RC/RO	9	602047.00	6050560.00	Tributary to Telkwa River	R09521 1018	2.60		Closed Bottom Structure	Round Culvert	0.45	10.00	No		No	Yes	40.00	1.08	0	0.09
2013-06-13		M13-364	RC/RO	9	603929.00	6050488.00	Tributary to Bulkley River	R09521 1018	2.20		Open Bottom Structure	Bridge	6.06	4.80								
2013-06-13		M13-365	RC/RO	9	604255.00	6050150.00	Tributary to Bulkley River	R09521 118	0.60		Closed Bottom Structure	Oval Culvert	1.00	10.00	No		No	No		2.03	0.2	0.16
2013-06-13		M13-366	RC/RO	9	604213.00	6050118.00	Tributary to Bulkley River	R09521 118	0.70		Closed Bottom Structure	Oval Culvert	1.70	15.80	No		No	No		2.05	0.11	0.07
2013-06-13		M13-367	RC/RO	9	604101.00	6049802.00	Tributary to Bulkley River	R09521 118	3.75		Closed Bottom Structure	Oval Culvert	1.55	15.80	No		No	Yes	50.00	2.19	0	0.06
2013-06-13		M13-369	RC/RO	9	604779.00	6048756.00	Tributary to Telkwa River	R09521 1018	2.50		Closed Bottom Structure	Round Culvert	1.50	16.00	No		No	No		1.40	0.07	0.11
2013-06-13		M13-370	RC/RO	9	603556.00	6048359.00	Tributary to Telkwa River	R09521 118-2	1.80		Closed Bottom Structure	Round Culvert	0.60	10.60	No		No	No		0.39	0.06	0.09
2013-06-13		M13-372	RC/RO	9	619620.00	6073049.00	Tributary to Bulkley River	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.70	8.70	Yes	0.15	Yes	No		0.92	0	0.00
2013-06-13		M13-373	RC/RO	9	620010.00	6073011.00	Tributary to Bulkley River	Unnamed	1.30		Open Bottom Structure	Wood Box Culvert	1.00	16.00								
2013-06-14		M13-375	RC/RO	9	630231.00	6082104.00	Driftwood Creek	Driftwood Road	10.20		Open Bottom Structure	Bridge	21.50	5.03								

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-06-14		M13-376	RC/RO	9	630082.00	6081724.00	Driftwood Creek	Driftwood Road	9.80		Open Bottom Structure	Bridge	18.45	5.10								
2013-06-14		M13-377	RC/RO	9	629915.00	6081268.00	Tributary to Driftwood Creek	Driftwood Road	9.20		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.23	0.24	0.14
2013-06-14		M13-378	RC/RO	9	629319.00	6080664.00	Tributary to Driftwood Creek	Driftwood Road	8.30		Closed Bottom Structure	Round Culvert	0.60	9.60	No		No	No		0.66	0.05	0.06
2013-06-14		M13-379	RC/RO	9	629209.00	6080573.00	Tributary to Driftwood Creek	Driftwood Road	7.90		Closed Bottom Structure	Round Culvert	0.50	9.60	Yes	0.25	No	Yes	90.00	0.23	0	0.12
2013-06-14		M13-381	RC/RO	9	628981.00	6080459.00	Driftwood Creek	Driftwood Road	7.30		Open Bottom Structure	Bridge	18.50	5.00								
2013-06-14		M13-382	RC/RO	9	628262.00	6079731.00	Tributary to Driftwood Creek	Driftwood Road	6.90		Closed Bottom Structure	Round Culvert	0.45	9.00	No		No	No		0.68	0.45	0.03
2013-06-14		M13-383	RC/RO	9	628021.00	6079554.00	Tributary to Driftwood Creek	Driftwood Road	6.30		Closed Bottom Structure	Round Culvert	1.00	10.00	No		No	No		0.37	0.86	0.40
2013-06-14		M13-384	RC/RO	9	627771.00	6079150.00	Driftwood Creek	Driftwood Road	5.90		Open Bottom Structure	Bridge	27.70	5.00								
2013-06-14		M13-385	RC/RO	9	627017.00	6077792.00	Driftwood Creek	Driftwood Road	4.30		Open Bottom Structure	Bridge	25.35	5.61								
2013-06-14		M13-386	RC/RO	9	627029.00	6077840.00	Tributary to Driftwood Creek	Unnamed	4.20		Open Bottom Structure	Bridge	5.05	3.70								
2013-06-14		M13-388	RC/RO	9	625308.00	6076555.00	Driftwood Creek	Driftwood Road	1.80		Open Bottom Structure	Bridge	33.70	6.00								
2013-06-14		M13-390	RC/RO	9	624330.00	6077294.00	Tributary to Driftwood Creek	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	Yes	50.00	1.00	0.2	0.18
2013-06-14		M13-391	RC/RO	9	625023.00	6077495.00	Tributary to Driftwood Creek	Unnamed	1.60		Closed Bottom Structure	Round Culvert	0.80	9.20	No		No	No		0.13	0.04	0.17
2013-06-14		M13-392	RC/RO	9	624988.00	6077568.00	Tributary to Driftwood Creek	Unnamed	1.40		Closed Bottom Structure	Round Culvert	0.45	9.00	No		No	No		0.31	0	0.00
2013-06-14		M13-394	RC/RO	9	623824.00	6079134.00	Tributary to Driftwood Creek	Adams Road	1.80		Closed Bottom Structure	Round Culvert	1.10	12.00	No		No	No		0.54	0.24	0.06
2013-06-14		M13-395	RC/RO	9	623343.00	6079870.00	Tributary to Driftwood Creek	Adams Road	3.00		Closed Bottom Structure	Round Culvert	0.45	13.50	No		No	No		0.87	0.63	0.05
2013-06-14		M13-396	RC/RO	9	623446.00	6079992.00	Tributary to Driftwood Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	0.60	6.00	No		No	No		0.59	0.56	0.13
2013-06-14		M13-397	RC/RO	9	623203.00	6079377.00	Tributary to Driftwood Creek	Unnamed	0.20		Closed Bottom Structure	Round Culvert	0.60	4.80	No		No	No		0.50	0.87	0.22
2013-06-14		M13-398	RC/RO	9	623384.00	6049463.00	Tributary to Driftwood Creek	Adams Road	2.50		Closed Bottom Structure	Round Culvert	1.10	8.15	No		No	No		0.32	0.18	0.29
2013-06-15		M13-399	RC/RO	9	623321.00	6077524.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.60	11.20	No		No	Yes	5.00	0.50	0.04	0.21
2013-06-15		M13-401	RC/RO	9	622690.00	6078956.00	Tributary to Bulkley River	Bruce Road	0.40		Open Bottom Structure	Bridge	4.25	1.34								
2013-06-15		M13-402	RC/RO	9	619489.00	6080746.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	1.40	12.40	No		No	No		0.59	0.3	0.09
2013-06-15		M13-403	RC/RO	9	619393.00	6080538.00	Tributary to Bulkley River	Snake Road	8.10		Closed Bottom Structure	Round Culvert	0.90	12.00	No		No	No		0.23	0.14	0.34
2013-06-15		M13-405	RC/RO	9	619378.00	6081210.00	Tributary to Bulkley River	Snake Road	8.80		Closed Bottom Structure	Oval Culvert	0.90	12.00	No		No	No		0.50	0.2	0.61
2013-06-15		M13-406	RC/RO	9	619059.00	6081242.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.60	4.50	Yes	0.16	No	Yes	100.00	0.05	0	0.06
2013-06-15		M13-407	RC/RO	9	619067.00	6081262.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.60	9.00	No		No	No		0.67	0.05	0.09
2013-06-15		M13-408	RC/RO	9	617172.00	6083806.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.90	11.80	No		No	No		0.74	0.38	0.09
2013-06-15		M13-409	RC/RO	9	615773.00	6085767.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.60	11.50	No		No	Yes	10.00	1.33	0.02	0.04
2013-06-15		M13-411	RC/RO	9	616621.00	6085085.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.75	12.00	No		No	No		0.78	0.21	0.19
2013-06-15		M13-412	RC/RO	9	616675.00	6084970.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	1.30	30.00	No		No	No		9.00	0.91	1.49
2013-06-15		M13-413	RC/RO	9	616989.00	6084632.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.75	9.25	No		No	Yes	80.00	0.23	0.15	0.08
2013-06-15		M13-415	RC/RO	9	613210.00	6088846.00	Tributary to Bulkley River	Telkwa High Road			Closed Bottom Structure	Round Culvert	0.60	12.00	No		No	No		1.90	0.37	0.08
2013-06-15		M13-417	RC/RO	9	614259.00	6089531.00	Tributary to Bulkley River	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.45	8.85	No		No	No		0.67	0	0.00
2013-06-15		M13-418	RC/RO	9	614151.00	6089103.00	Tributary to Bulkley River	Unnamed	0.80		Closed Bottom Structure	Round Culvert	1.00	6.80	No		No	No		0.37	0.04	0.56
2013-06-15		M13-419	RC/RO	9	615145.00	6089583.00	Tributary to Bulkley River	R09533 240-2	0.90		Other	Ford										
2013-06-15		M13-420	RC/RO	9	615524.00	6089685.00	Tributary to Bulkley River	R09533 240-2	1.30		Closed Bottom Structure	Round Culvert	1.60	12.00	No		No	No		0.90	1.1	0.48
2013-06-15		M13-421	RC/RO	9	615102.00	6089678.00	Tributary to Bulkley River	R09533 240-2	0.60		Closed Bottom Structure	Round Culvert	1.80	12.00	Yes	0.10	Yes	No		0.31	0.2	0.40
2013-06-16		M13-422	RC/RO	9	616859.00	6090440.00	Tributary to Bulkley River	9000 Road	5.10		Closed Bottom Structure	Round Culvert	0.60	9.60	No		No	No		0.12	0	0.00
2013-06-16		M13-423	RC/RO	9	616630.00	6090487.00	Tributary to Bulkley River	9000 Road	4.90		Closed Bottom Structure	Round Culvert	1.00	14.40	No		No	No		0.58	0.03	0.02
2013-06-16		M13-424	RC/RO	9	616205.00	6090499.00	Tributary to Bulkley River	9000 Road	4.40		Closed Bottom Structure	Round Culvert	1.05	14.20	No		No	No		0.63	0.34	0.20
2013-06-16		M13-425	RC/RO	9	616314.00	6090341.00	Tributary to Bulkley River	R09533 904-4	0.20		Other	Ford										
2013-06-16		M13-426	RC/RO	9	614731.00	6090846.00	Meed Creek	Unnamed	0.60		Open Bottom Structure	Bridge	9.80	5.45								
2013-06-16		M13-428	RC/RO	9	613985.00	6091995.00	Tributary to Meed Creek	R11343 2	0.20		Closed Bottom Structure	Round Culvert	0.60	10.40	No		No	No		0.78	0.1	0.07
2013-06-16		M13-429	RC/RO	9	614070.00	6091727.00	Tributary to Meed Creek	R11343 1	0.80		Closed Bottom Structure	Round Culvert	0.60	14.00	No		No	No		1.27	0.82	0.01
2013-06-16		M13-430	RC/RO	9	614360.00	6091639.00	Tributary to Meed Creek	R11343 1	0.50		Closed Bottom Structure	Round Culvert	0.40	12.60	No		No	No		1.27	0.21	0.01
2013-06-16		M13-431	RC/RO	9	614503.00	6095153.00	Tributary to Meed Creek	R11343 1	0.30		Closed Bottom Structure	Round Culvert	0.60	10.50	No		No	No		1.86	0.09	0.05
2013-06-16		M13-432	RC/RO	9	612454.00	6090190.00	Tributary to Meed Creek	8000 Road	0.50		Closed Bottom Structure	Round Culvert	0.45	12.30	No		No	Yes	100.00	0.89	0	0.13
2013-06-16		M13-433	RC/RO	9	612442.00	6090259.00	Meed Creek	8000 Road	0.51		Closed Bottom Structure	Round Culvert	0.90	12.40	No		No	No		0.68	0.09	0.38
2013-06-16		M13-435	RC/RO	9	612558.00	6091989.00	Tributary to Meed Creek	R16340 4	0.70		Other	Ford										
2013-06-16		M13-436	RC/RO	9	612101.00	6090132.00	Meed Creek	Telkwa High Road			Closed Bottom Structure	Oval Culvert	2.00	16.00	No		No	No		1.65	1.15	1.35
2013-06-17		M13-437	RC/RO	9	610376.00	6088741.00	Tributary to Bulkley River	Palmeson Road	1.70		Closed Bottom Structure	Round Culvert	0.50	9.00	No		No	No		0.53	0	0.05
2013-06-17		M13-438	RC/RO	9	611929.00	6087406.00	Tributary to Bulkley River	Engman Road	2.10		Closed Bottom Structure	Round Culvert	1.00	16.00	No		No	No		0.47	0.48	0.30
2013-06-17		M13-440	RC/RO	9	616148.00	6063441.00	Tributary to Powers Creek	R11260 1	3.60		Closed Bottom Structure	Round Culvert	0.60	13.50	No		No	No		1.60	0.43	0.32
2013-06-17		M13-441	RC/RO	9	615862.00	6063134.00	Tributary to Powers Creek	R11260 1	4.10		Closed Bottom Structure	Round Culvert	0.60	8.50	No		No	No		0.67	0.14	0.09
2013-06-24		M13-444	RC/RO	9	622605.00	6065529.00	Tributary to Bulkley River	Good Road	0.95		Closed Bottom Structure	Round Culvert	0.90	9.30	No		No	No		0.18	0	0.04

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-06-24		M13-445	RC/RO	9	621248.00	6066654.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.8	27.00	No		No	No		0.73	0.25	0.65
2013-06-24		M13-446	RC/RO	9	625394.00	6087477.00	Tributary to Reiseter Creek	9000 Road	32.30		Closed Bottom Structure	Round Culvert	0.45	9.90	No		No	No		0.63	0.13	0.05
2013-06-24		M13-448	RC/RO	9	624474.00	6088228.00	Tributary to Reiseter Creek	9000 Road	30.60		Closed Bottom Structure	Round Culvert	0.45	9.60	No		No	Yes	80.00	0.62	0	0.01
2013-06-24		M13-450	RC/RO	9	624915.00	6088530.00	Tributary to Reiseter Creek	9000 Road	29.80		Closed Bottom Structure	Round Culvert	0.60	9.60	No		No	No		1.06	0.48	0.30
2013-06-24		M13-452	RC/RO	9	625321.00	6088692.00	Tributary to Reiseter Creek	9000 Road	29.30		Open Bottom Structure	Bridge	7.20	4.70								
2013-06-24		M13-453	RC/RO	9	626044.00	6088464.00	Tributary to Reiseter Creek	Unnamed	0.90		Closed Bottom Structure	Round Culvert	0.60	9.60	No		No	No		0.52	0.34	0.30
2013-06-24		M13-454	RC/RO	9	625201.00	6088890.00	Tributary to Reiseter Creek	9000 Road	29.50		Closed Bottom Structure	Round Culvert	0.60	14.50	No		No	No		1.86	0.31	0.00
2013-06-24		M13-455	RC/RO	9	624534.00	6088879.00	Tributary to Reiseter Creek	9000 Road	28.80		Open Bottom Structure	Bridge	14.00	4.50								
2013-06-24		M13-456	RC/RO	9	624315.00	6089083.00	Tributary to Reiseter Creek	9000 Road	28.20		Closed Bottom Structure	Round Culvert	0.60	12.00	No		No	No		1.66	0.11	0.01
2013-06-25		M13-457	RC/RO	9	606630.00	6097190.00	John Brown Creek	Highway 16			Closed Bottom Structure	Round Culvert	8.00	30.00	No		No	No		2.00	0.7	1.50
2013-06-25		M13-458	RC/RO	9	604364.00	6098219.00	Tributary to Corya Creek	Unnamed	2.00		Closed Bottom Structure	Round Culvert	0.50	8.30	No		No	No		0.69	0.07	0.32
2013-06-25		M13-459	RC/RO	9	604343.00	6098251.00	Tributary to Corya Creek	Unnamed	2.10		Closed Bottom Structure	Round Culvert	0.60	8.30	No		No	No		0.57	0.23	0.35
2013-06-25		M13-461	RC/RO	9	603910.00	6098594.00	Tributary to Corya Creek	Unnamed	2.80		Closed Bottom Structure	Round Culvert	1.00	8.30	No		No	No		0.46	0.73	0.54
2013-06-25		M13-462	RC/RO	9	603827.00	6097132.00	Tributary to John Brown Creek	Unnamed	1.00		Other	Ford										
2013-06-25		M13-463	RC/RO	9	606436.00	6099733.00	Tributary to Corya Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.60	16.00	No		No	No		1.88	0.12	0.25
2013-06-25		M13-464	RC/RO	9	606463.00	6100147.00	Tributary to Corya Creek	Highway 16			Closed Bottom Structure	Round Culvert	4.00	30.00	No		No	No		1.60	0	1.50
2013-06-25		M13-466	RC/RO	9	607128.00	6101110.00	Tributary to Corya Creek	Campbell Road	1.30		Closed Bottom Structure	Round Culvert	1.00	12.00	No		No	No		1.25	0.02	0.35
2013-06-25		M13-467	RC/RO	9	605391.00	6103204.00	Graphite Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.25	17.00	No		No	No		0.48	0	0.06
2013-06-25		M13-468	RC/RO	9	608484.00	6108167.00	Tributary to Kwun Creek	210 Road	3.78		Closed Bottom Structure	Round Culvert	0.60	12.00	No		No	No		2.00	0.4	0.03
2013-06-25		M13-469	RC/RO	9	609620.00	6106678.00	Kwun Creek	210 Road	1.90		Open Bottom Structure	Bridge	12.00	6.00								
2013-06-25		M13-470	RC/RO	9	608690.00	6100560.00	Causqua Creek	2000 Road	4.10		Open Bottom Structure	Bridge	18.50	5.50								
2013-06-26		M13-472	RC/RO	9	616210.00	6108101.00	Tributary to Blunt Creek	R09533 218	1.60		Closed Bottom Structure	Round Culvert	0.90	22.30	No		No	No		2.00	0.2	0.07
2013-06-25		M13-473	RC/RO	9	617234.00	6108684.00	Tributary to Blunt Creek	R12610 218	1.30		Open Bottom Structure	Bridge	9.40	4.90								
2013-06-25		M13-474	RC/RO	9	617274.00	6108731.00	Tributary to Blunt Creek	R12610 218			Other	Ford										
2013-06-26		M13-476	RC/RO	9	615304.00	6107325.00	Tributary to Blunt Creek	R09533 218	0.40		Closed Bottom Structure	Round Culvert	0.90	9.30	No		No	No		1.30	0.22	0.07
2013-06-26		M13-477	RC/RO	9	619879.00	6105782.00	Tributary to Blunt Creek	R09533 222-1	1.90		Other	Ford										
2013-06-26		M13-478	RC/RO	9	620156.00	6105758.00	Tributary to Blunt Creek	R09533 222-1	2.30		Closed Bottom Structure	Round Culvert	1.00	12.00	No		No	No		1.70	0.18	0.34
2013-06-26		M13-479	RC/RO	9	618401.00	6106610.00	Tributary to Blunt Creek	Blunt Creek FSR	21.95		Open Bottom Structure	Bridge	12.90	4.80								
2013-06-26		M13-480	RC/RO	9	618303.00	6106550.00	Tributary to Blunt Creek	Blunt Creek FSR	21.80		Closed Bottom Structure	Round Culvert	0.60	14.20	No		No	No		1.35	0.09	0.56
2013-06-26		M13-482	RC/RO	9	617990.00	6106344.00	Tributary to Blunt Creek	Blunt Creek FSR	21.50		Closed Bottom Structure	Round Culvert	0.45	12.40	No		No	No		1.15	0.69	0.32
2013-06-26		M13-483	RC/RO	9	617906.00	6106297.00	Tributary to Blunt Creek	Blunt Creek FSR	21.30		Closed Bottom Structure	Round Culvert	0.60	14.00	No		No	No		0.52	0.21	0.34
2013-06-26		M13-484	RC/RO	9	617663.00	6106252.00	Tributary to Blunt Creek	Blunt Creek FSR	21.00		Closed Bottom Structure	Round Culvert	0.90	14.00	No		No	No		1.05	0	0.06
2013-06-26		M13-485	RC/RO	9	617611.00	6106255.00	Tributary to Blunt Creek	Blunt Creek FSR	20.90		Closed Bottom Structure	Round Culvert	1.20	12.00	No		No	No		0.42	0.08	0.38
2013-06-26		M13-486	RC/RO	9	616100.00	6106763.00	Tributary to Blunt Creek	Blunt Creek FSR	19.30		Closed Bottom Structure	Round Culvert	0.90	13.70	No		No	No		0.39	0.26	0.46
2013-06-26		M13-487	RC/RO	9	615760.00	6106892.00	Tributary to Blunt Creek	Blunt Creek FSR	18.90		Closed Bottom Structure	Round Culvert	0.90	14.00	No		No	No		0.47	0.16	0.27
2013-06-26		M13-488	RC/RO	9	615198.00	6106633.00	Tributary to Blunt Creek	Unnamed	0.05		Other	Ford										
2013-06-26		M13-489	RC/RO	9	614768.00	6107059.00	Tributary to Blunt Creek	Blunt Creek FSR	17.80		Closed Bottom Structure	Round Culvert	0.45	9.30	No		No	No		0.36	0.21	0.00
2013-06-26		M13-490	RC/RO	9	616034.00	6105949.00	Tributary to Blunt Creek	R09533 217-1	2.30		Closed Bottom Structure	Round Culvert	0.60	14.00	No		No	No		0.75	0.25	0.05
2013-06-26		M13-491	RC/RO	9	615730.00	6105919.00	Tributary to Blunt Creek	R09533 217-1	2.04		Closed Bottom Structure	Round Culvert	1.20	14.00	No		No	No		1.85	0.15	0.22
2013-06-26		M13-492	RC/RO	9	616642.00	6104593.00	Tributary to Blunt Creek	R09533 211	9.10		Open Bottom Structure	Bridge	9.00	5.00								
2013-06-27		M13-494	RC/RO	9	602627.00	6107416.00	Tributary to Boulder Creek	Unnamed	0.02		Open Bottom Structure	Bridge	7.00	5.00								
2013-06-27		M13-495	RC/RO	9	603277.00	6107704.00	East Boulder Creek	Highway 16			Open Bottom Structure	Bridge	28.00	12.00								
2013-06-27		M13-497	RC/RO	9	603162.00	6108700.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.50	30.00	No		No	No		2.50	0.12	0.63
2013-06-27		M13-498	RC/RO	9	602622.00	6109632.00	Tributary to Bulkley River	Klockner Road	1.33		Closed Bottom Structure	Round Culvert	0.90	12.20	Yes	0.05	Yes	No		0.31	0	0.00
2013-06-27		M13-500	RC/RO	9	605535.00	6105420.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.60	50.00	No		No	No		3.00	0	0.28
2013-06-17		M13-442	RC/RO	9	636562.00	6044598.00	Tributary to Bulkley River	Unnamed	1.50		Closed Bottom Structure	Round Culvert	0.60	9.00	No		No	No		0.46	0.52	0.38
2013-08-06		M13-501	RC/RO	9	633315.00	6057211.00	Lacroix Creek	Neal Road	0.40		Other	Ford										
2013-08-07		M13-502	RC/RO	9	605512.00	6100847.00	Tributary to Corya Creek	Schmid Road	1.00		Open Bottom Structure	Pipe Arch	1.1	5.70								
2013-08-07		M13-503	RC/RO	9	605089.00	6099886.00	Corya Creek	Unnamed	2.50		Open Bottom Structure	Bridge	3.90	16.00								
2013-08-07		M13-504	RC/RO	9	604255.00	6101960.00	Tributary to Corya Creek	Unnamed	1.40		Closed Bottom Structure	Round Culvert	0.90	11.30	No		No	Yes	100.00	2.00	0	0.11
2013-08-07		M13-505	RC/RO	9	605227.00	6100951.00	Tributary to Corya Creek	Unnamed	0.60		Closed Bottom Structure	Round Culvert	0.90	5.90	No		No	No		0.25	0.04	0.30
2013-08-07		M13-506	RC/RO	9	605333.00	6100883.00	Tributary to Corya Creek	Schmid Road	1.00		Closed Bottom Structure	Round Culvert	0.95	7.00	No		No	No		0.20	0	0.14
2013-08-07		M13-507	RC/RO	9	605369.00	6100880.00	Tributary to Corya Creek	Unnamed	0.01		Closed Bottom Structure	Round Culvert	0.14	5.50	No		No	No		0.60	0	0.00

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2013-08-07		M13-508	RC/RO	9	606049.00	6100146.00	Tributary to Corya Creek	Unnamed	0.25		Closed Bottom Structure	Round Culvert	0.45	6.10	No		No	Yes	100.00	0.20	0.11	0.01
2013-08-07		M13-509	RC/RO	9	605935.00	6100158.00	Tributary to Corya Creek	Unnamed	0.40		Closed Bottom Structure	Round Culvert	3.00	26.80	No		No	No		1.80	0	0.00
2013-08-07		M13-510	RC/RO	9	609445.00	6090698.00	Tributary to Bulkley River	Unnamed	0.40		Other	Ford										
2013-08-07		M13-511	RC/RO	9	619458.00	6080597.00	Tributary to Driftwood Creek	Unnamed	0.10		Closed Bottom Structure	Round Culvert	1.00	6.10	No		No	No		0.40	0	0.00
2013-08-08		M13-516	RC/RO	9	619859.00	6062796.00	Tributary to Powers Creek	Unnamed	1.00		Closed Bottom Structure	Round Culvert	0.60	5.20	No		No	No		1.20	0	0.30
2013-08-08		M13-517	RC/RO	9	620457.00	6062296.00	Tributary to Powers Creek	Unnamed	0.05		Closed Bottom Structure	Round Culvert	1.00	9.10	No		No	No		0.40	0.08	0.14
2013-08-08		M13-518	RC/RO	9	620316.00	6062301.00	Tributary to Powers Creek	Unnamed	0.25		Closed Bottom Structure	Round Culvert	0.40	9.00	No		No	No		0.70	0	0.00
2013-08-08		M13-519	RC/RO	9	619870.00	6063335.00	Powers Creek	Unnamed	0.00		Closed Bottom Structure	Round Culvert	1.90	7.90	No		No	No		0.80	0.1	0.47
2013-08-08		M13-521	RC/RO	9	640605.00	6056890.00	Gardener Creek	Unnamed	0.55		Other	Ford										
2013-08-08		M13-522	RC/RO	9	643059.00	6058630.00	Gardener Creek	Unnamed	1.20		Closed Bottom Structure	Oval Culvert	0.68	7.00	No		No	No		0.56	0.16	0.20
2013-08-09		M13-524	RC/RO	9	620894.00	6079723.00	Tributary to Driftwood Creek	Unnamed	0.30		Closed Bottom Structure	Round Culvert	0.45	9.00	No		No	No		0.70	0.1	0.00
2013-08-09		M13-526	RC/RO	9	639055.00	6042994.00	Tributary to Bulkley River	Unnamed	0.30		Closed Bottom Structure	Round Culvert	1.20	5.80	No		No	No		0.25	0.18	0.15
2013-08-14		M13-527	MG	9	602797.00	6098595.00	Tributary to Corya Creek	Unnamed	5.30		Closed Bottom Structure	Round Culvert	0.50	7.75	No		No	No		1.14	0.15	0.15
2013-08-14		M13-528	MG	9	602781.00	6098656.00	Tributary to Corya Creek	Unnamed	5.40		Closed Bottom Structure	Round Culvert	0.9	11.25	No		No	No		1.05	0.53	0.21
2013-08-14		M13-529	MG	9	602672.00	6098966.00	Tributary to Corya Creek	Unnamed	5.70		Closed Bottom Structure	Round Culvert	0.90	7.25	No		No	No		0.57	0.59	0.33
2013-08-14		M13-530	MG	9	602623.00	6099318.00	Tributary to Corya Creek	Unnamed	6.20		Closed Bottom Structure	Round Culvert	0.50	8.50	No		No	No		0.32	0.07	0.00
2013-08-14		M13-531	MG	9	601893.00	6099823.00	Tributary to Corya Creek	Unnamed	9.00		Closed Bottom Structure	Round Culvert	0.50	6.00	Yes	0.20	No	No		0.57	0.2	0.00
2013-08-14		M13-532	MG	9	602152.00	6100035.00	Tributary to Corya Creek	Unnamed	8.00		Closed Bottom Structure	Round Culvert	0.50	8.50	No		No	No		0.30	0.67	0.00
2013-08-14		M13-535	MG	9	602605.00	6098957.00	Tributary to Corya Creek	Unnamed	0.20		Other	Ford										
2013-08-14		M13-536	MG	9	602583.00	6098499.00	Tributary to Corya Creek	Unnamed	0.70		Open Bottom Structure	Wood Box Culvert	2.60	8.25								
2013-08-14		M13-537	MG	9	605035.00	6098394.00	Tributary to Corya Creek	Unnamed	1.20		Closed Bottom Structure	Round Culvert	0.65	5.50	No		No	No		0.78	0.18	0.00
2013-08-14		M13-539	MG	9	605065.00	6098714.00	John Brown Creek	Unnamed	1.60		Other	Ford										
2013-08-14		M13-540	MG	9	605223.00	6096726.00	John Brown Creek	Unnamed	1.80		Open Bottom Structure	Bridge	25.00	8.50								
2013-08-14		M13-543	MG	9	604574.00	6095828.00	Tributary to John Brown Creek	Unnamed	1.20		Closed Bottom Structure	Round Culvert	0.50	6.00	No		No	No		0.05	0.27	0.00
2013-08-14		M13-544	MG	9	604199.00	6095798.00	Tributary to John Brown Creek	Unnamed	1.00		Open Bottom Structure	Wood Box Culvert	4.50	12.00								
2013-08-15		M13-546	MG	9	610263.00	6100271.00	Tributary to Causqua Creek	Unnamed	2.30		Other	Ford										
2013-08-15		M13-547	MG	9	610231.00	6099612.00	Tributary to Causqua Creek	Unnamed	3.00		Other	Ford										
2013-08-15		M13-550	MG	9	600124.00	6107919.00	Tributary to Boulder Creek	Unnamed	6.70		Open Bottom Structure	Bridge	13.00	6.00								
2013-08-15		M13-551	MG	9	599537.00	6108430.00	Tributary to Boulder Creek	Unnamed	7.60		Other	Ford										
2013-08-15		M13-552	MG	9	598189.00	6108690.00	Tributary to Boulder Creek	Unnamed	9.20		Closed Bottom Structure	Round Culvert	0.50	6.50	No		No	No		0.75	0.05	0.23
2013-08-15		M13-553	MG	9	598015.00	6108609.00	Tributary to Boulder Creek	Unnamed	9.70		Other	Ford										
2013-08-15		M13-554	MG	9	597764.00	6108660.00	Tributary to Boulder Creek	Unnamed	10.00		Other	Ford										
2013-08-15		M13-555	MG	9	597145.00	6108905.00	Tributary to Boulder Creek	Unnamed	10.70		Other	Ford										
2013-08-15		M13-557	MG	9	596150.00	6108330.00	Tributary to Boulder Creek	Unnamed	12.10		Other	Ford										
2013-08-15		M13-558	MG	9	597582.00	6108873.00	Tributary to Boulder Creek	Unnamed	10.30		Other	Ford										
2013-08-16		M13-559	MG	9	609259.00	6108591.00	Tributary to Kwun Creek	R09533 210-5	1.80		Closed Bottom Structure	Round Culvert	1.00	13.50	No		No	No		2.25	1.44	0.03
2013-08-16		M13-560	MG	9	612330.00	6108229.00	Tributary to Kwun Creek	R09533 210	2.30		Other	Ford										
2013-08-16		M13-561	MG	9	615203.00	6109645.00	Tributary to Blunt Creek	R09533 218B	0.85		Other	Ford										
2013-08-16		M13-562	MG	9	614945.00	6109590.00	Tributary to Kwun Creek	R09533 218B	1.20		Other	Ford										
2013-08-16		M13-563	MG	9	614531.00	6109816.00	Tributary to Kwun Creek	R09533 218C	0.50		Other	Ford										
2013-08-16		M13-564	MG	9	614595.00	6109399.00	Tributary to Kwun Creek	R09533 218B	1.50		Other	Ford										
2013-08-16		M13-565	MG	9	614331.00	6109143.00	Tributary to Kwun Creek	R09533 218B	1.80		Other	Ford										
2013-08-16		M13-566	MG	9	614214.00	6109103.00	Tributary to Kwun Creek	R09533 218B	1.90		Other	Ford										
2013-08-16		M13-567	MG	9	613400.00	6108958.00	Tributary to Kwun Creek	Unnamed	0.20		Other	Ford										
2013-08-16		M13-568	MG	9	614082.00	6109016.00	Tributary to Kwun Creek	R09533 218B	2.00		Other	Ford										
2013-08-16		M13-571	MG	9	616090.00	6092231.00	Tributary to Meed Creek	R09533 240-1	4.70		Other	Ford										
2013-08-16		M13-573	MG	9	618962.00	6093158.00	Tributary to Meed Creek	Unnamed	0.90		Other	Ford										
2013-08-17		M13-574	MG	9	644383.00	6072064.00	Tributary to Canyon Creek	Unnamed	5.50		Other	Ford										
2013-08-17		M13-575	MG	9	646251.00	6072793.00	Tributary to Canyon Creek	Unnamed	8.00		Other	Ford										
2013-08-17		M13-576	MG	9	646746.00	6072256.00	Tributary to Canyon Creek	Unnamed	9.20		Other	Ford										
2013-08-17		M13-577	MG	9	643282.00	6071745.00	Tributary to Canyon Creek	Unnamed	4.00		Other	Ford										
2013-08-17		M13-578	MG	9	641162.00	6073627.00	Tributary to Canyon Creek	Unnamed	0.90		Other	Ford										

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-08-17		M13-579	MG	9	641394.00	6073448.00	Canyon Creek	Unnamed	0.35		Open Bottom Structure	Bridge	9.25	2.50								
2013-08-17		M13-580	MG	9	641372.00	6073546.00	Tributary to Canyon Creek	Unnamed	0.40		Other	Ford										
2013-08-17		M13-582	MG	9	641234.00	6073638.00	Tributary to Canyon Creek	Unnamed	0.05		Other	Ford										
2013-08-17		M13-584	MG	9	619864.00	6061271.00	Powers Creek	Unnamed	1.50		Closed Bottom Structure	Round Culvert	0.60	10.00	No		No	No		2.50	0.35	0.09
2013-08-17		M13-586	MG	9	617746.00	6061761.00	Powers Creek	Unnamed	5.00		Other	Ford										
2013-08-18		M13-587	MG	9	607242.00	6106637.00	Kwun Creek	Unnamed	7.10		Open Bottom Structure	Bridge	10.25	1.75								
2013-08-18		M13-588	MG	9	607245.00	6106652.00	Tributary to Kwun Creek	Unnamed	7.20		Other	Ford										
2013-08-18		M13-589	MG	9	607341.00	6106173.00	Tributary to Bulkley River	Unnamed	6.60		Open Bottom Structure	Wood Box Culvert	16.50	2.50								
2013-08-18		M13-590	MG	9	607693.00	6104741.00	Tributary to Bulkley River	Unnamed	5.10		Open Bottom Structure	Wood Box Culvert	10.50	3.50								
2013-08-18		M13-593	MG	9	612856.00	6090529.00	Tributary to Meed Creek	Unnamed	0.50		Other	Ford										
2013-08-27		M13-596	MG	9	608088.00	6057003.00	Tributary to Cummings Creek	R09521 710-1	4.30		Closed Bottom Structure	Round Culvert	1.00	9.25	No		No	No		0.65	0.4	0.31
2013-08-27		M13-597	MG	9	607963.00	6056896.00	Tributary to Cummings Creek	R09521 710-1	4.50		Other	Ford										
2013-08-27		M13-598	MG	9	607847.00	6056997.00	Tributary to Cummings Creek	R09521 710-1	4.60		Other	Ford										
2013-08-27		M13-599	MG	9	607000.00	6056880.00	Tributary to Cummings Creek	R09521 710-1	4.90		Other	Ford										
2013-08-27		M13-600	MG	9	605831.00	6057201.00	Tributary to Cummings Creek	R09521 710-1	10.50		Other	Ford										
2013-08-27		M13-602	MG	9	607367.00	6056492.00	Tributary to Cummings Creek	Unnamed	1.13		Closed Bottom Structure	Round Culvert	0.60	10.25	No		No	No		0.85	0.06	0.08
2013-08-27		M13-603	MG	9	607574.00	6056457.00	Tributary to Cummings Creek	Unnamed	0.69		Closed Bottom Structure	Round Culvert	0.60	9.50	No		No	No		1.40	0.28	0.25
2013-08-27		M13-604	MG	9	608063.00	6057447.00	Tributary to Cummings Creek	R09521 710-2	0.33		Closed Bottom Structure	Round Culvert	0.46	9.75	No		No	No		0.90	0.3	0.04
2013-08-27		M13-605	MG	9	608083.00	6057717.00	Tributary to Cummings Creek	R09521 710-2	1.62		Closed Bottom Structure	Round Culvert	1.00	15.00	No		No	No		3.75	0.01	0.05
2013-08-27		M13-606	MG	9	607871.00	6057846.00	Tributary to Cummings Creek	R09521 710-2	1.90		Other	Ford										
2013-08-27		M13-607	MG	9	608114.00	6057913.00	Tributary to Cummings Creek	R09521 710-3	0.30		Other	Ford										
2013-08-27		M13-608	MG	9	608274.00	6057026.00	Tributary to Cummings Creek	R09521 710-1	4.15		Closed Bottom Structure	Round Culvert	6.00	11.50	No		No	No		0.65	0.46	0.25
2013-08-27		M13-610	MG	9	609241.00	6056258.00	Tributary to Cummings Creek	Unnamed	1.50		Closed Bottom Structure	Round Culvert	0.50	7.50	No		No	No		0.32	0	0.00
2013-10-30		M13-611	RC	9	586606.00	6122365.00	Station Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.50	99.00	No		No	No		9.99	1.4	1.30
2013-10-30		M13-614	RC	9	589478.00	6123044.00	Tributary to Waterfall Creek	11th Avenue	0.06		Closed Bottom Structure	Round Culvert	2.1	14.40	No		No	Yes	100.00	1.02	0	0.00
2013-10-30		M13-615	RC	9	589497.00	6123163.00	Tributary to Waterfall Creek	Highway 16			Closed Bottom Structure	Round Culvert	2.20	30.00	No		No	No		3.60	0	0.00
2013-10-30		M13-616	RC	9	589770.00	6123268.00	Tributary to Waterfall Creek	Railway			Closed Bottom Structure	Round Culvert	2.00	20.30	No		No	Yes	100.00	1.50	0	0.00
2013-10-30		M13-617	RC	9	589485.00	6122990.00	Tributary to Waterfall Creek	Railway			Closed Bottom Structure	Round Culvert	2.20	23.20	No		No	Yes	100.00	1.80	0	0.73
2013-10-30		M13-621	RC	9	585860.00	6124533.00	Tributary to Bulkley River	Unnamed	0.23		Closed Bottom Structure	Round Culvert	1.00	18.00	No		No	Yes	90.00	1.10	0	0.05
2013-10-30		M13-622	RC	9	586609.00	6124874.00	Tributary to Bulkley River	Unnamed	0.41		Closed Bottom Structure	Round Culvert	0.30	6.00	No		No	No		1.06	0	0.00
2013-10-30		M13-623	RC	9	587346.00	6125073.00	Two Mile Creek	Highway 62	3.32		Closed Bottom Structure	Oval Culvert	2.00	32.00	Yes	0.10	Yes	Yes	100.00	1.65	0	0.00
2013-10-30		M13-624	RC	9	587331.00	6125340.00	Two Mile Creek	Cordova Street	0.08		Closed Bottom Structure	Oval Culvert	2.00	12.00	Yes	0.15	Yes	Yes	100.00	0.45	0	0.00
2013-10-30		M13-625	RC	9	587350.00	6125435.00	Two Mile Creek	Hazelton Street	0.14		Closed Bottom Structure	Oval Culvert	2.00	12.40	Yes	0.15	Yes	Yes	100.00	0.60	0	0.00
2013-10-30		M13-626	RC	9	587366.00	6128292.00	Two Mile Creek	Silver Standard	3.70		Closed Bottom Structure	Round Culvert	1.10	16.30	No		No	Yes	100.00	0.45	0.15	0.12
2013-10-30		M13-627	RC	9	587358.00	6128288.00	Two Mile Creek	Silver Standard	3.70		Closed Bottom Structure	Round Culvert	1.20	14.30	No		No	No		0.60	0.49	0.25
2013-10-30		M13-629	RC	9	588106.00	6129096.00	Tributary to Two Mile Creek	Unnamed	1.11		Open Bottom Structure	Wood Box Culvert	2.00	7.00								
2013-10-30		M13-631	RC	9	588429.00	6129530.00	Tributary to Two Mile Creek	Unnamed	1.82		Closed Bottom Structure	Round Culvert	0.30	8.00	No		No	No		0.20	0	0.00
2013-10-31		M13-635	RC	9	587635.00	6127234.00	Two Mile Creek	Unnamed	0.75		Closed Bottom Structure	Round Culvert	0.80	12.20	No		No	No		0.35	0.54	0.65
2013-10-31		M13-636	RC	9	597371.00	6125777.00	Nine Mile Creek	Unnamed	4.22		Open Bottom Structure	Bridge	14.80	1.80								
2013-10-31		M13-637	RC	9	595265.00	6125996.00	Tributary to Bulkley River	Unnamed	1.76		Closed Bottom Structure	Round Culvert	0.50	8.00	No		No	Yes	90.00	0.40	0	0.00
2013-10-31		M13-639	RC	9	594664.00	6126162.00	Tributary to Bulkley River	Unnamed	1.02		Closed Bottom Structure	Round Culvert	0.60	6.30	No		No	Yes	30.00	0.20	0	0.19
2013-10-31		M13-640	RC	9	593905.00	6126290.00	Saul Creek	Unnamed	0.28		Closed Bottom Structure	Round Culvert	1.20	4.90	No		No	No		0.28	0.3	0.36
2013-10-31		M13-641	RC	9	593500.00	6126395.00	Tributary to Six Mile Creek	Six Mile Road	6.03		Closed Bottom Structure	Round Culvert	1.40	16.20	No		No	No		1.50	0.3	0.22
2013-10-31		M13-642	RC	9	593125.00	6126347.00	Six Mile Creek	Six Mile Road	5.58		Closed Bottom Structure	Round Culvert	1.40	12.00	No		No	Yes	25.00	0.45	0.7	0.51
2013-10-31		M13-644	RC	9	590505.00	6132224.00	Tributary to Two Mile Creek	Unnamed	5.75		Open Bottom Structure	Wood Box Culvert	1.10	10.40								
2013-10-31		M13-645	RC	9	590112.00	6132627.00	Tributary to Two Mile Creek	Unnamed	0.43		Open Bottom Structure	Wood Box Culvert	1.50	12.00								
2013-10-31		M13-646	RC	9	587677.00	6126545.00	Tributary to Two Mile Creek	Silver Standard	1.63		Closed Bottom Structure	Round Culvert	0.60	12.20	No		No	No		0.33	0.6	0.00
2013-10-31		M13-649	RC	9	590213.00	6125514.00	Four Mile Creek	Six Mile Road	2.06		Closed Bottom Structure	Round Culvert	1.20	35.00	No		No	No		7.60	0.58	0.47
2013-10-31		M13-650	RC	9	590199.00	6125333.00	Four Mile Creek	Unnamed	0.41		Closed Bottom Structure	Round Culvert	1.75	6.00	No		No	No		0.70	0.68	0.42
2013-10-31		M13-651	RC	9	589419.00	6125506.00	Tributary to Four Mile Creek	Six Mile Road	1.28		Closed Bottom Structure	Round Culvert	1.00	35.00	No		No	No		3.00	0	0.00
2013-11-01		M13-652	RC	9	597427.00	6119279.00	Mudflat Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.80	45.00	No		No	No		9.99	2.2	0.60
2013-11-01		M13-653	RC	9	597756.00	6119239.00	Tributary to Mudflat Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.50	60.00	No		No	No		9.99	0.98	1.49
2013-11-01		M13-654	RC	9	598778.00	6119329.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	0.50	27.00	No		No	No		1.70	0.47	0.63

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-11-01		M13-655	RC	9	599689.00	6118948.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.00	40.00	No		No	No		7.00	0.9	0.63
2013-11-01		M13-658	RC	9	602639.00	6115844.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.20	30.00	No		No	No		5.00	3.53	0.14
2013-11-01		M13-659	RC	9	591609.00	6123085.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	0.80	30.00	No		No	Yes	100.00	3.60	0	0.00
2013-11-01		M13-660	RC	9	592820.00	6122590.00	Tributary to Bulkley River	Birch Road	0.55		Closed Bottom Structure	Round Culvert	0.80	13.30	No		No	No		1.20	0.18	0.46
2013-11-01		M13-662	RC	9	592785.00	6123909.00	Tributary to Bulkley River	Unnamed	1.02		Closed Bottom Structure	Round Culvert	0.95	60.00	No		No	No		9.99	1.5	0.00
2013-11-01		M13-663	RC	9	594183.00	6123847.00	Tributary to Bulkley River	Ross Lake Road	2.04		Closed Bottom Structure	Round Culvert	0.50	12.30	No		No	No		0.52	0.27	0.06
2013-11-01		M13-664	RC	9	589612.00	6122535.00	Waterfall Creek	Unnamed	0.15		Closed Bottom Structure	Round Culvert	0.50	7.00	No		No	No		0.25	0	0.00
2013-11-01		M13-665	RC	9	590949.00	6122282.00	Waterfall Creek	Unnamed	0.15		Closed Bottom Structure	Round Culvert	0.90	8.90	No		No	No		0.79	0.26	0.01
2013-11-01		M13-666	RC	9	590913.00	6122109.00	Tributary to Waterfall Creek	Unnamed	0.37		Closed Bottom Structure	Round Culvert	0.50	16.90	No		No	Yes	100.00	2.20	0	0.18
2013-11-01		M13-667	RC	9	590831.00	6121810.00	Tributary to Station Creek	Unnamed	0.67		Closed Bottom Structure	Round Culvert	0.90	9.60	No		No	Yes	100.00	0.23	0	0.05
2013-11-01		M13-668	RC	9	590845.00	6121475.00	Tributary to Station Creek	Unnamed	1.12		Closed Bottom Structure	Round Culvert	0.60	6.90	No		No	No		0.58	0.16	0.05
2013-11-01		M13-670	RC	9	592666.00	6123063.00	Tributary to Bulkley River	Ross Lake Road	0.06		Closed Bottom Structure	Round Culvert	0.60	11.00	No		No	Yes	100.00	1.19	0.03	0.00
2013-11-01		M13-671	RC	9	596672.00	6121519.00	Tributary to Bulkley River	Bulkley Canyon Road	0.59		Closed Bottom Structure	Round Culvert	0.40	9.60	No		No	No		0.70	0	0.12
2013-11-01		M13-672	RC	9	597191.00	6119846.00	Bunker Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.50	24.00	No		No	No		1.70	0	1.59
2013-11-01		M13-673	RC	9	597374.00	6119663.00	Bunker Creek	Unnamed	0.14		Open Bottom Structure	Bridge	5.00	5.00								
2013-11-02		M13-674	RC	9	604448.00	6117597.00	Tributary to Corduroy Creek	Corduroy Creek Road	0.15		Open Bottom Structure	Bridge	5.30	1.50								
2013-11-02		M13-675	RC	9	604530.00	6117693.00	Tributary to Corduroy Creek	R10108-2	1.55		Closed Bottom Structure	Round Culvert	0.90	9.00	No		No	No		0.65	0.58	0.42
2013-11-02		M13-676	RC	9	604697.00	6118273.00	Tributary to Corduroy Creek	R10108-3	0.47		Closed Bottom Structure	Round Culvert	0.50	9.70	No		No	No		0.58	0.18	0.10
2013-11-02		M13-677	RC	9	604635.00	6117867.00	Tributary to Corduroy Creek	R10108-3	0.12		Closed Bottom Structure	Round Culvert	1.00	5.40	No		No	No		0.37	0	0.00
2013-11-02		M13-679	RC	9	598925.00	6120045.00	Mudflat Creek	Suskwa FSR	1.14		Open Bottom Structure	Bridge	6.50	4.90								
2013-11-02		M13-680	RC	9	602248.00	6120584.00	Tributary to Bulkley River	Suskwa-Moricetown FSR	2.29		Closed Bottom Structure	Round Culvert	1.50	30.00	No		No	No		2.60	0	0.00
2013-11-02		M13-681	RC	9	602566.00	6119920.00	Tributary to Bulkley River	Suskwa-Moricetown FSR	3.00		Closed Bottom Structure	Round Culvert	1.00	14.00	No		No	No		0.75	0.34	0.48
2013-11-02		M13-682	RC	9	602900.00	6119217.00	Tributary to Bulkley River	Suskwa-Moricetown FSR	3.78		Closed Bottom Structure	Round Culvert	0.80	17.50	No		No	No		2.40	0.19	0.17
2013-11-02		M13-683	RC	9	604440.00	6117603.00	Tributary to Corduroy Creek	Corduroy Creek Road	0.06		Other	Ford										
2013-11-02		M13-684	RC	9	603296.00	6117999.00	Corduroy Creek	Suskwa-Moricetown FSR	5.18		Open Bottom Structure	Bridge	15.50	4.90								
2013-11-02		M13-685	RC	9	604125.00	6114330.00	Tributary to Corduroy Creek	R101086	0.41		Closed Bottom Structure	Round Culvert	0.50	8.80	No		No	Yes	100.00	0.27	0	0.00
2013-11-02		M13-686	RC	9	603667.00	6113132.00	Luno Creek	Suskwa-Moricetown FSR	10.58		Open Bottom Structure	Bridge	18.90	4.90								
2013-11-02		M13-687	RC	9	604520.00	6111171.00	Sharpe Creek	Suskwa-Moricetown FSR	12.94		Open Bottom Structure	Bridge	9.90	5.00								
2013-11-02		M13-688	RC	9	605203.00	6110120.00	Tributary to Sharpe Creek	Suskwa-Moricetown FSR	13.33		Closed Bottom Structure	Round Culvert	0.90	10.25	Yes	0.50	No	Yes	100.00	0.36	0	0.00
2013-11-02		M13-689	RC	9	605879.00	6109306.00	Tributary to Bulkley River	Suskwa-Moricetown FSR	14.19		Closed Bottom Structure	Round Culvert	0.80	8.80	No		No	Yes	100.00	0.25	0	0.00
2013-11-02		M13-690	RC	9	605194.00	6112050.00	Tributary to Sharpe Creek	R119912	1.00		Closed Bottom Structure	Round Culvert	0.50	9.40	No		No	No		0.30	0.2	0.11
2013-11-02		M13-691	RC	9	605534.00	6111978.00	Sharpe Creek	R119912	1.41		Open Bottom Structure	Bridge	7.50	7.70								
2013-11-02		M13-692	RC	9	605756.00	6111982.00	Sharpe Creek	Unnamed	0.26		Other	Ford										
2013-11-02		M13-693	RC	9	602301.00	6120468.00	Tributary to Bulkley River	Suskwa-Moricetown FSR	2.44		Closed Bottom Structure	Round Culvert	1.20	9.00	No		No	No		4.50	0.4	0.26
2013-11-02		M13-694	RC	9	602454.00	6121662.00	Layard Creek	Unnamed	0.86		Closed Bottom Structure	Round Culvert	0.60	6.20	No		No	No		0.27	0.19	0.14
2013-11-02		M13-695	RC	9	602409.00	6121671.00	Tributary to Bulkley River	Unnamed	0.81		Closed Bottom Structure	Round Culvert	0.32	5.20	No		No	No		0.31	0	0.00
2013-11-02		M13-696	RC	9	610814.00	6117190.00	China Creek	Highway 16			Closed Bottom Structure	Round Culvert	2.30	40.00	No		No	No		5.00	1.13	0.76
2013-11-09		M13-698	RC	9	603073.00	6113363.00	Porphyry Creek	Highway 16			Closed Bottom Structure	Round Culvert	6.00	80.00	No		No	No		9.99	2.75	1.75
2013-11-10		M13-707	RC	9	608140.00	6097700.00	Tributary to Bulkley River	Blunt Creek FSR	0.84		Closed Bottom Structure	Round Culvert	0.60	9.80	No		No	No		1.50	0.38	0.36
2013-11-10		M13-708	RC	9	608101.00	6097551.00	Tributary to Bulkley River	Blunt Creek FSR	1.09		Closed Bottom Structure	Round Culvert	0.30	11.30	No		No	No		1.05	0	0.00
2013-11-10		M13-709	RC	9	619764.00	6068825.00	Seymour Creek	Unnamed	0.21		Open Bottom Structure	Bridge	6.20	4.90								
2013-11-10		M13-710	RC	9	615935.00	6056700.00	Tributary to Telkwa River	Telkwa River Road	2.83		Closed Bottom Structure	Round Culvert	0.80	16.00	No		No	No		0.48	0.16	0.07
2013-11-10		M13-717	RC	9	610146.00	6054631.00	Tributary to Telkwa River	Telkwa River Road	9.76		Closed Bottom Structure	Oval Culvert	0.90	10.10	No		No	No		0.30	0.18	0.31
2013-11-10		M13-718	RC	9	608933.00	6053765.00	Tributary to Telkwa River	Telkwa River Road	11.46		Closed Bottom Structure	Round Culvert	0.60	14.00	No		No	No		1.40	0.34	0.47
2013-11-10		M13-719	RC	9	607242.00	6053133.00	Tributary to Telkwa River	Telkwa River Road	13.22		Closed Bottom Structure	Round Culvert	0.45	10.50	No		No	Yes	40.00	0.25	0	0.08
2013-11-10		M13-722	RC	9	598115.00	6053375.00	Winfield Creek	Telkwa River Road	23.43		Open Bottom Structure	Bridge	46.20	4.80								
2013-11-10		M13-723	RC	9	596350.00	6053669.00	Sinclair Creek	Telkwa River Road	25.25		Open Bottom Structure	Bridge	24.70	5.30								
2013-11-11		M13-724	RC	9	614287.00	6056563.00	Telkwa River	Telkwa River Road	2.08		Open Bottom Structure	Bridge	41.20	5.00								
2013-11-11		M13-725	RC	9	617413.00	6057294.00	Tributary to Telkwa River	Telkwa River Road	1.06		Closed Bottom Structure	Round Culvert	0.40	18.40	No		No	No		0.65	0.56	0.13
2013-11-11		M13-728	RC	9	621411.00	6058530.00	Tributary to Telkwa River	Telkwa River Road	2.55		Closed Bottom Structure	Round Culvert	0.70	10.20	No		No	No		0.37	0	0.10
2013-11-11		M13-730	RC	9	627552.00	6058697.00	Helps Creek	Walcott FSR	4.54		Closed Bottom Structure	Round Culvert	1.50	13.00	No		No	Yes	100.00	0.55	0.31	0.00
2013-11-11		M13-732	RC	9	630661.00	6055713.00	Tributary to Bulkley River	Walcott FSR	8.58		Closed Bottom Structure	Concrete Box	1.88	22.80	No		Yes	Yes	100.00	1.50	0.62	0.57
2013-11-11		M13-733	RC	9	632070.00	6054348.00	Tributary to Bulkley River	Walcott FSR	10.87		Closed Bottom Structure	Round Culvert	1.40	18.00	No		No	No		1.68	1.17	0.58
2013-11-11		M13-734	RC	9	633492.00	6054452.00	Tributary to Bulkley River	Walcott FSR	12.44		Closed Bottom Structure	Round Culvert	0.60	12.00	No		No	Yes	50.00	0.58	0	0.00
2013-11-11		M13-735	RC	9	634323.00	6054587.00	Coffin Creek	Walcott FSR	13.28		Closed Bottom Structure	Round Culvert	3.00	12.20	Yes	0.15	Yes	No		0.35	0	0.00

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered? Yes / No	Percentage Backwatered	Fill Depth (meters)	Outlet Drop (meters)	Outlet Pool Depth (0.01m)
2013-11-11		M13-736	RC	9	631913.00	6053759.00	Tributary to Bulkley River	Unnamed	0.18		Closed Bottom Structure	Round Culvert	1.25	12.20	No		No	No		0.60	0.53	0.08
2013-11-11		M13-737	RC	9	631919.00	6053186.00	Tributary to Bulkley River	Unnamed	1.61		Closed Bottom Structure	Round Culvert	0.80	8.00	No		No	Yes	100.00	0.42	0	0.04
2013-11-11		M13-738	RC	9	631327.00	6052832.00	Tributary to Bulkley River	Unnamed	2.37		Closed Bottom Structure	Round Culvert	1.10	11.20	No		No	No		1.20	0.22	0.37
2013-11-11		M13-739	RC	9	639789.00	6051567.00	Deep Creek	Farewell Creek Road	0.23		Open Bottom Structure	Bridge	5.00	4.90								
2013-11-20		M13-742	MG	9	636920.00	6059540.00	Vanderven Creek	Woodmere Road	6.38		Closed Bottom Structure	Round Culvert	1.80	14.50	Yes	1.00	Yes	Yes	100.00	0.52	0	0.15
2013-11-20		M13-743	MG	9	637140.00	6063400.00	Vanderven Creek	Deception Lake FSR	1.49		Closed Bottom Structure	Round Culvert	0.90	12.50	No		No	No		0.20	0.33	0.20
2013-11-20		M13-744	MG	9	637142.00	6063360.00	Vanderven Creek	Deception Lake FSR	1.49		Closed Bottom Structure	Round Culvert	0.60	9.25	No		No	No		0.62	0.1	0.20

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	4.00	2.15	5.5	Yes	No	Deep Fill	High	3.58	0	10	0	10	6	26	Barrier	Streambed Simulation		No action required - Beaver activity has created a stable environment with excellent rearing habitat and seasonal access
Yes	6.00	0.64	6.5	No	No	Deep Fill	Medium	1.39	3	10	0	10	6	29	Barrier	Streambed Simulation		No action required - no access from downstream
No	2.00	1.15	2.5	Yes	No	Deep Fill	Low	2.30	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish habitat present, substrate is fines/iron precipitate - no action required
Yes	4.00	0.82	5	No	No	Deep Fill	Medium	1.64	0	10	10	10	6	36	Barrier	Streambed Simulation		Very low habitat value present, CV plugged at inlet, should be unblocked
Yes	10.00	0.63	8.5	Yes	No	Deep Fill	Medium	1.26	0	10	0	10	3	23	Barrier	Streambed Simulation		Very shallow, seasonal channel with good gravels and pools - culvert needs to be cleaned
No	1.50	4.83	1	No	No	Deep Fill	High	2.10	6	0	0	5	6	17	Potential	Streambed Simulation		Excellent spawning habitat present, there should be no access issues at this site - no action required
No	4.00	0.92	3	Yes	No	Deep Fill	High	1.15	0	10	5	10	3	28	Barrier	Open Bottom Structure	0.92	Good habitat present, replace with a properly embedded culvert or OBS if proven a barrier
Yes	3.00	1.10	4	No	No	Deep Fill	Medium	1.83	3	10	5	10	6	34	Barrier	Open Bottom Structure	1.1	Good habitat present, replace with a properly embedded culvert or OBS if proven a barrier
No	3.50	1.12	4	No	No	Deep Fill	Medium	1.78	0	10	10	10	6	36	Barrier	Streambed Simulation	1.12	Moderate habitat present, replace with a properly embedded culvert if proven a barrier
				No	No			0.00	0	0	0	0	0	0	Unknown	Streambed Simulation		No access or passage concerns - no action required
No	1.00	0.75	3	No	No	Deep Fill	Medium	1.50	0	10	0	5	6	21	Barrier	Streambed Simulation	0.75	Moderate habitat present, replace with a properly embedded culvert if proven a barrier
Yes	7.00	1.23	3	No	No	Deep Fill	High	1.68	0	10	0	10	6	26	Barrier	Streambed Simulation	1.23	Good habitat present, replace with a properly embedded culvert or OBS if proven a barrier
No	4.00	1.27	2	No	No	Deep Fill	High	1.03	0	10	5	10	3	28	Barrier	Open Bottom Structure	1.27	Good habitat present, culverts should be replaced with OBS if fish present/proven a barrier - 2 culverts present
No	11.00	0.62	4	No	No	Deep Fill	Low	1.55	0	10	0	10	6	26	Barrier	Removal		Channel goes subsurface immediately upstream of crossing - remove if road is deactivated
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Channel is undefined - no action required
Yes	7.00	1.25	6	No	No	Deep Fill	High	1.39	3	10	10	10	6	39	Barrier	Removal		Culvert is a barrier, should be removed and the road deactivated
Yes	4.00	0.82	6.5	No	No	Deep Fill	Medium	2.05	3	5	0	10	6	24	Barrier	Removal		Culvert is buried, should be removed and the road deactivated
Yes	1.50	0.53	2.5	No	No	Deep Fill	Medium	0.88	3	10	0	5	0	18	Potential	Streambed Simulation		Very low habitat value present, access unlikely - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No access or passage concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No access or passage concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No access or passage concerns - no action required
Yes	1.50	1.37	2	No	No	Deep Fill	High	2.28	0	10	0	5	6	21	Barrier	Removal		Channel too big for CV, another has been installed 10m d/s (M13-33) - replace both with a properly embedded CV and restore channel
Yes	5.00	1.37	2	No	No	Deep Fill	High	2.14	0	10	10	10	6	36	Barrier	Removal		See M13-32
No	5.00	1.12	4	No	No	Deep Fill	High	1.44	0	10	10	10	6	36	Barrier	Streambed Simulation	1.12	Replace with a larger, embedded CV if fish present
				Yes	No			0.00	0	0	0	0	0	0	Unknown	Streambed Simulation	1.69	No access or passage concerns - no action required
No	2.00	1.11	1	No	No	Deep Fill	Low	2.22	0	10	0	5	6	21	Barrier	Streambed Simulation	1.11	Culvert quite damaged and too small for runoff levels - should be replaced for drainage purposes
No	1.00	0.69	2.5	No	No	Deep Fill	Low	0.86	0	10	0	5	0	15	Potential	Streambed Simulation		Very marshy upstream, low habitat value and access unlikely - no action required
No	3.50	0.77	3.5	No	No	Deep Fill	High	1.28	0	10	5	10	3	28	Barrier	Streambed Simulation	0.77	Culvert is damaged and won't carry water at low flow - replace with properly embedded CV
No	3.50	0.90	2	Yes	No	Deep Fill	High	1.50	0	10	0	10	6	26	Barrier	Streambed Simulation	0.90	Good rearing habitat upstream if fish present - replace with properly embedded CV
No	2.50	0.87	2.5	No	No	Deep Fill	High	0.97	3	10	0	5	0	18	Potential	Streambed Simulation	0.87	Channel looks possibly manmade, immediate access to river, may have spawning/rearing potential - embed larger CV if fish present
No	2.50	1.23	3	No	No	Deep Fill	Low	1.03	0	10	0	5	3	18	Potential	Streambed Simulation		Low habitat value, lots of fines from upstream pasture - no action required
No	2.00	0.90	1.5	No	No	Deep Fill	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		Low habitat value, lots of fines from upstream pasture - no action required - 2 culverts present
No	2.00	0.30	1.5	No	No	Deep Fill	Low	1.00	0	5	0	5	3	13	Passable			Low habitat value, lots of fines from upstream pasture - no action required
No	7.00	1.61	3.5	No	No	Deep Fill	Medium	2.68	3	10	10	10	6	39	Barrier	Streambed Simulation	1.61	Grate on CV inlet, embed larger CV if fish present
				Yes	No			0.00	3	0	0	0	0	3	Passable			No access or passage concerns - no action required
No	3.00	3.62	1.5	No	No	Deep Fill	High	1.71	6	10	0	10	6	32	Barrier	Open Bottom Structure	3.62	Install baffles in culverts, or replace with OBS - 2 culverts present
				No	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Not much shade through farmyard, but no access or passage concerns
Yes	2.00	1.57	2	No	No	Deep Fill	Medium	1.87	0	10	0	5	6	21	Barrier	Streambed Simulation	1.57	Good upstream habitat, but value decreases downstream through farmland
No	3.50	1.57	2	No	No	Deep Fill	Medium	1.69	0	10	0	10	6	26	Barrier	Streambed Simulation	1.57	Good upstream habitat, but value decreases downstream through farmland
No	1.50	1.60	1	No	No	Deep Fill	High	0.47	0	10	10	5	0	25	Barrier	Open Bottom Structure	1.60	Either backwater channel and install baffles, or replace with OBS - 3 culverts present
				No	No			0.00	0	0	0	0	0	0	Passable			Some siltation present from livestock activity, no access or passage concerns
No	7.00	0.63	9	No	No	Deep Fill	Low	2.10	0	10	10	10	6	36	Barrier	Streambed Simulation		No upstream fish habitat present - no action required
Yes	2.00	0.95	12	No	No	Deep Fill	Medium	1.58	0	10	5	5	6	26	Barrier	Streambed Simulation	0.95	Seasonal channel with moderate habitat present - embed if fish present
No	1.00	1.12	1	No	No	Deep Fill	Low	1.87	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish habitat or access, no action required
No	3.50	0.47	1.5	No	No	Deep Fill	Low	0.52	0	10	0	10	0	20	Barrier	Streambed Simulation		Channel is intermittent upstream, low habitat value - no action required - 2 culverts present
No	6.00	1.53	1.5	No	No	Deep Fill	Low	2.55	3	10	0	10	6	29	Barrier	Streambed Simulation		Stagnant channel with poor connectivity - no action required
No	1.50	0.97	1.5	No	No	Deep Fill	Low	1.62	0	10	0	5	6	21	Barrier	Streambed Simulation		Upstream channel intermittent - no action required
No	6.50	1.50	2	Yes	No	Deep Fill	Medium	1.88	0	10	0	10	6	26	Barrier	Streambed Simulation	1.50	Embed larger CV if fish present
No	3.50	1.52	2	No	No	Deep Fill	Medium	1.27	3	10	10	10	3	36	Barrier	Streambed Simulation	1.52	Embed larger CV if fish present - 2 culverts present

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	2.00	2.15	1	No	No	Deep Fill	High	2.15	0	10	0	5	6	21	Barrier	Streambed Simulation	2.15	Embed larger CV if fish present
No	1.00	2.89	2	No	No	Deep Fill	High	2.41	3	10	0	5	6	24	Barrier	Streambed Simulation	2.89	Embed larger CV if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No access or passage concerns - no action required
No	4.00	0.47	3	No	No	Deep Fill	Low	0.78	0	10	0	10	0	20	Barrier	Streambed Simulation		Seasonal channel with no fish habitat - no action required
Yes	7.50	0.92	7	No	No	Deep Fill	Low	1.53	0	10	5	10	6	31	Barrier	Streambed Simulation		Seasonal channel with no fish habitat - no action required
No	6.00	1.46	6.5	No	No	Deep Fill	Medium	2.18	3	10	10	10	6	39	Barrier	Streambed Simulation		Seasonal channel with poor access - no action required
No	5.50	1.02	8	No	No	Deep Fill	High	2.32	3	10	10	10	6	39	Barrier	Streambed Simulation	1.02	Embed larger CV if fish present
Yes	6.50	0.97	7	No	No	Deep Fill	High	1.21	3	10	5	10	3	31	Barrier	Streambed Simulation	0.97	Embed larger CV or install OBS if fish present
No	5.00	0.98	0.5	No	No	Deep Fill	High	1.58	0	10	10	10	6	36	Barrier	Streambed Simulation	0.98	Embed larger CV if fish present
Yes	6.00	1.73	6.5	No	No	Deep Fill	Medium	4.33	0	10	5	10	6	31	Barrier	Streambed Simulation	1.73	Embed larger CV if fish present
No	5.00	0.82	4.5	No	No	Deep Fill	Medium	1.64	0	10	10	10	6	36	Barrier	Streambed Simulation	0.82	Embed larger CV if fish present
No	7.50	0.74	8.5	No	No	Deep Fill	Medium	1.48	0	10	5	10	6	31	Barrier	Streambed Simulation	0.74	Embed larger CV if fish present
No	5.50	0.51	7.5	No	No	Deep Fill	Low	1.28	0	10	10	10	3	33	Barrier	Streambed Simulation		Poor habitat value - no action required
No	8.50	1.36	7	No	No	Deep Fill	High	1.51	0	10	0	10	6	26	Barrier	Streambed Simulation	1.36	Embed larger CV if fish present
No	6.50	1.32	5.5	No	No	Deep Fill	High	1.47	0	10	5	10	6	31	Barrier	Streambed Simulation	1.32	Embed larger CV if fish present
No	3.50	0.75	7	No	No	Deep Fill	High	1.25	0	10	5	10	3	28	Barrier	Streambed Simulation	0.75	Embed larger CV if fish present
No	2.00	1.59	3.5	No	No	Deep Fill	High	2.65	0	10	0	5	6	21	Barrier	Streambed Simulation	1.59	Embed larger CV if fish present
No	5.00	0.00	1.5	No	No	Deep Fill	Low	0.00	0	10	0	10	0	20	Barrier	Streambed Simulation		Channel is stagnant - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
No	1.00	0.00	1.5	No	No	Deep Fill	Low	0.00	3	10	0	5	0	18	Potential	Streambed Simulation		Channel is primarily drainage, no habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
No	3.00	2.03	3.5	No	No	Deep Fill	High	3.38	0	10	0	10	6	26	Barrier	Streambed Simulation	2.03	Channel quite silty through pasture, embed larger CV if fish present
No	2.00	6.76	1	No	No	Deep Fill	High	4.83	0	10	0	5	6	21	Barrier	Open Bottom Structure	6.67	Embed larger CV or install OBS if fish present
No	2.00	1.04	1.5	No	No	Deep Fill	Medium	1.73	0	10	0	5	6	21	Barrier	Streambed Simulation	1.04	Embed larger CV if fish present
No	1.00	2.57	3	No	No	Deep Fill	High	2.14	0	10	0	5	6	21	Barrier	Open Bottom Structure	2.57	Embed larger CV or install OBS - Landowner says fish are present
No	2.00	1.77	3	No	No	Deep Fill	High	2.21	0	10	0	5	6	21	Barrier	Streambed Simulation	1.77	Embed larger CV or install OBS if fish present
No	7.50	0.40	2	No	No	Deep Fill	Low	0.67	0	10	0	10	0	20	Barrier	Streambed Simulation		No habitat present - no action required
Yes	0.00	0.71	2.5	No	No	Deep Fill	Low	1.18	0	10	0	0	3	13	Passable			No habitat present - no action required
Yes	5.00	1.06	3.5	No	No	Deep Fill	High	2.12	0	10	0	10	6	26	Barrier	Streambed Simulation	1.06	Embed larger CV if fish present
No	2.50	0.94	2	No	No	Deep Fill	High	1.18	0	10	0	5	3	18	Potential	Streambed Simulation	0.94	Embed larger CV if fish present - hole in CV inlet
				No	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
				Yes	No			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required
No	2.50	3.17	3.5	Yes	No	Deep Fill	High	2.26	3	10	0	5	6	24	Barrier	Open Bottom Structure	3.17	Embed larger CV or install OBS if fish present - hole in CV inlet
Yes	4.00	0.97	2	No	No	Deep Fill	Low	1.02	3	10	0	10	3	26	Barrier	Streambed Simulation		No fish habitat or access - right cv is buried at outlet - no action required
No	2.50	0.79	3.5	No	No	Deep Fill	Low	1.32	0	10	5	5	6	26	Barrier	Streambed Simulation		No access from d/s, big hole in bottom of CV ~1m from inlet, water flowing underneath -should be replaced
Yes	3.50	1.96	2	No	No	Deep Fill	High	1.03	0	10	10	10	3	33	Barrier	Streambed Simulation	1.96	Embed larger CV or install OBS if fish present - 2 culverts present
				Yes	Yes			0.00	0	0	0	0	0	0	Passable			No access or passage concerns - no action required - Fish observed
No	2.50	0.87	3	No	No	Deep Fill	Low	1.74	3	10	0	5	6	24	Barrier	Streambed Simulation		No fish habitat or access - no action required
Yes	1.50	2.22	1.5	No	No	Deep Fill	High	1.11	3	10	0	5	3	21	Barrier	Open Bottom Structure	2.22	Some baffles present in CV - Install OBS if proven a barrier
No	1.00	0.40	1.5	No	No	Deep Fill	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		Extensive wetland both u/s and d/s - passage is possible if fish present
No	2.50	2.77	3	No	No	Deep Fill	High	3.46	0	10	5	5	6	26	Barrier	Streambed Simulation	2.77	Embed larger CV or install OBS if fish present
Yes	3.00	1.70	17.5	No	No	Deep Fill	Medium	3.78	0	10	0	10	6	26	Barrier	Streambed Simulation	1.70	Embed larger CV if fish present
No	2.00	0.58	2.5	No	No	Deep Fill	Low	1.16	0	10	0	5	3	18	Potential	Streambed Simulation		No good habitat present - no action required
Yes	1.50	0.55	2	No	No	Deep Fill	Low	1.10	0	10	0	5	3	18	Potential	Streambed Simulation	0.55	No good habitat present - culvert damaged at inlet and outlet and should be replaced for drainage purposes
No	3.00	0.56	3.5	No	No	Deep Fill	Low	1.40	0	10	5	10	6	31	Barrier	Streambed Simulation		No upstream fish habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Streambed Simulation		No access or passage concerns - no action required
Yes	2.00	1.03	4	No	No	Deep Fill	Medium	1.61	0	10	0	5	6	21	Barrier	Streambed Simulation	1.03	Embed larger CV if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			Barrier - Remove logs and embed proper culvert if fish present
No	10.00	1.27	6	No	No	Deep Fill	High	0.91	3	10	10	10	0	33	Barrier	Open Bottom Structure	1.27	Replace with OBS if fish present - appears to have issues with floodwater 3rd CV is installed higher up bank as well (M13-
No	6.00	1.27	6	No	No	Deep Fill	High	2.12	3	10	10	10	6	39	Barrier	Removal		Replace with OBS if fish present - overflow culvert for M13-133, appears to back up significantly with runoff
No	3.00	0.85	4	No	No	Deep Fill	High	0.94	3	10	10	10	0	33	Barrier	Streambed Simulation	0.85	Crossing has 1/2 CV at outlet, big fish barrier - embed larger cv or install OBS if fish present
Yes	3.00	2.06	2	Yes	Yes	Deep Fill	High	1.14	6	10	10	10	3	39	Barrier	Open Bottom Structure	2.06	Fish observed in d/s channel - replace with OBS, or backwater and install baffles in CVs if proven a barrier

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	1.00	1.89	2.5	Yes	No	Deep Fill	High	1.05	0	10	0	5	3	18	Potential	Additional Substrate Material		Round CV that has been squashed to Oval, some baffles in CV and used to be a grate at the inlet (fallen over in channel) - no concerns
No	8.00	1.12	9	No	No	Deep Fill	High	2.80	0	10	10	10	6	36	Barrier	Streambed Simulation	1.12	Embed larger CV or install OBS if fish present - good pond for rearing u/s
Yes	4.00	1.11	11	No	No	Deep Fill	High	1.59	0	10	10	10	6	36	Barrier	Streambed Simulation	1.11	Embed larger CV or install OBS if fish present
No	5.00	2.10	17	No	No	Deep Fill	High	2.33	0	10	10	10	6	36	Barrier	Streambed Simulation	2.10	Embed larger CV or install OBS if fish present - CV outlet very bent in
No	2.00	0.88	5	No	No	Deep Fill	Medium	1.35	0	10	0	5	6	21	Barrier	Streambed Simulation	0.88	Embed larger CV if fish present
Yes	2.00	1.30	2	No	No	Deep Fill	Medium	1.63	0	10	0	5	6	21	Barrier	Streambed Simulation	1.30	Embed larger CV if fish present
No	1.00	1.26	2.5	No	No	Deep Fill	High	1.94	0	10	0	5	6	21	Barrier	Streambed Simulation	1.26	Embed larger CV if fish present
No	1.50	1.54	3.5	No	No	Deep Fill	Medium	2.20	0	10	10	5	6	31	Barrier	Streambed Simulation	1.54	Embed larger CV if fish present
Yes	2.50	0.55	4	No	No	Deep Fill	Medium	1.10	0	10	0	5	3	18	Potential	Streambed Simulation	0.55	Embed larger CV if fish present
Yes	7.00	0.79	2	No	No	Deep Fill	Low	1.32	0	10	0	10	6	26	Barrier	Streambed Simulation		No good habitat present - no action required
No	3.50	0.91	3	No	No	Deep Fill	Low	2.28	0	10	0	10	6	26	Barrier	Streambed Simulation		No good habitat present - no action required
No	0.00	1.18	2	No	No	Deep Fill	Low	2.15	0	10	0	0	6	16	Potential	Streambed Simulation		No good habitat present - no action required
Yes	5.00	0.83	2	No	No	Deep Fill	Low	2.08	0	10	0	10	6	26	Barrier	Streambed Simulation		No good habitat present - no action required
Yes	3.50	0.62	2.5	No	No	Deep Fill	Low	1.03	3	10	0	10	3	26	Barrier	Streambed Simulation		No habitat or access - no action required
No	5.00	1.06	5	No	No	Deep Fill	High	1.18	0	10	10	10	3	33	Barrier	Streambed Simulation	1.06	Embed larger CV if fish present
No	2.00	0.41	0.5	No	No	Deep Fill	Low	0.34	0	10	0	5	0	15	Potential	Streambed Simulation		Redirected channel is runoff only - no action required
Yes	3.50	1.17	6	No	No	Deep Fill	Medium	1.56	3	10	0	10	6	29	Barrier	Streambed Simulation	1.17	Embed larger CV if fish present
Yes	4.00	1.52	3	No	No	Deep Fill	High	1.90	3	10	0	10	6	29	Barrier	Streambed Simulation	1.52	Embed larger CV if fish present
Yes	4.00	1.97	5	No	No	Deep Fill	Medium	3.28	3	10	0	10	6	29	Barrier	Streambed Simulation	1.97	Embed larger CV if fish present
No	1.50	0.35	1	No	No	Deep Fill	Low	1.46	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish habitat or access present - no action required
No	1.50	2.15	3	Yes	No	Deep Fill	High	1.48	6	10	10	5	6	37	Barrier	Backwater	2.15	Backwater culvert and install baffles, or install a properly embedded culvert
No	3.00	1.85	2	No	No	Deep Fill	Medium	3.08	0	10	5	10	6	31	Barrier	Backwater	1.85	Backwater culvert and install baffles, or install a properly embedded culvert
No	2.50	1.36	4	No	No	Deep Fill	Medium	2.27	0	10	5	5	6	26	Barrier	Streambed Simulation	1.36	Install a properly embedded culvert if fish present
No	2.50	0.54	8	No	No	Deep Fill	Low	0.68	0	10	0	5	0	15	Potential	Streambed Simulation		No fish habitat or access present - no action required
No	2.00	2.16	3.5	No	No	Deep Fill	High	1.66	6	10	5	5	6	32	Barrier	Removal		Remove culvert - has been mostly washed out and is damaged
Yes	5.00	5.63	4	No	No	Deep Fill	High	2.35	3	10	10	10	6	39	Barrier	Open Bottom Structure	5.63	Install an OBS, or backwater using weirs and install baffles
No	3.50	0.57	6.5	No	No	Deep Fill	Low	1.14	0	10	5	10	3	28	Barrier	Streambed Simulation		No fish habitat or access present - no action required
Yes	2.50	1.87	2	No	No	Deep Fill	High	1.87	0	10	0	5	6	21	Barrier	Additional Substrate Material	1.87	Debris at inlet should be cleared, but culvert is passable - no action required
Yes	0.00	1.72	2.5	No	No	Deep Fill	High	1.01	0	10	0	0	3	13	Passable			Culvert is passable, no action required
Yes	0.50	1.72	2	Yes	No	Deep Fill	High	0.96	3	10	0	0	0	13	Passable			Culvert is passable, no action required
Yes	1.00	3.49	1.5	Yes	No	Deep Fill	High	2.18	0	10	0	5	6	21	Barrier	Streambed Simulation		Culvert is passable, no action required
No	2.00	5.00	1.5	Yes	No	Deep Fill	High	2.17	0	10	10	5	6	31	Barrier	Streambed Simulation	5.00	Install an OBS
No	2.50	0.95	2	No	No	Deep Fill	Medium	1.19	3	10	5	5	3	26	Barrier	Streambed Simulation	0.95	Install a properly embedded culvert if fish present
Yes	2.00	1.21	2	No	No	Deep Fill	Medium	1.51	3	10	0	5	6	24	Barrier	Streambed Simulation	1.21	Install a properly embedded culvert if fish present
No	1.50	2.39	1	No	No	Deep Fill	High	2.66	0	10	0	5	6	21	Barrier	Backwater	2.39	Backwater culvert and install baffles, or install a properly embedded culvert
No	3.00	3.53	2	No	No	Deep Fill	High	1.68	0	10	10	10	6	36	Barrier	Streambed Simulation	3.53	Culvert is passable, no action required
No	1.00	4.85	1	No	No	Deep Fill	Low	9.70	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish habitat or access present - no action required
No	0.00	2.66	1	Yes	No	Deep Fill	High	2.96	0	10	0	0	6	16	Potential	Streambed Simulation		Inlet is damaged but culvert should be passable - no action required
No	1.00	1.60	1	No	No	Deep Fill	High	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		Unable to see inside culverts, but will be passable unless plugged in middle - no action required
No	2.00	0.58	1.5	No	No	Deep Fill	Medium	0.97	0	10	0	5	0	15	Potential	Streambed Simulation	0.58	Install a properly embedded culvert if fish present
No	1.50	2.21	3	No	No	Deep Fill	High	1.77	0	10	0	5	6	21	Barrier	Streambed Simulation		Culvert is passable, no action required
Yes	2.00	0.85	7	No	No	Deep Fill	Medium	0.94	3	10	10	5	0	28	Barrier	Streambed Simulation		Waterfall immediately upstream - no action required
Yes	4.50	2.38	2	No	No	Deep Fill	High	1.59	0	10	10	10	6	36	Barrier	Open Bottom Structure	2.38	Install an OBS, or backwater using weirs and install baffles
No	2.50	1.10	5	No	No	Deep Fill	Medium	1.83	0	5	0	5	6	16	Potential	Streambed Simulation		Culvert is passable, no action required
Yes	6.50	0.96	7	No	No	Deep Fill	High	1.07	3	10	10	10	3	36	Barrier	Streambed Simulation	0.96	Install a properly embedded culvert or OBS
No	2.00	1.40	4.5	No	No	Deep Fill	High	1.00	3	10	10	5	3	31	Barrier	Streambed Simulation	2.21	Install a properly embedded culvert or OBS
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No action required
Yes	4.50	0.79	6.5	No	No	Deep Fill	High	1.58	0	10	10	10	6	36	Barrier	Streambed Simulation	0.79	Install a properly embedded culvert if fish present
Yes	2.00	0.59	5	No	No	Deep Fill	Medium	1.18	0	10	10	5	3	28	Barrier	Streambed Simulation	0.59	Install a properly embedded culvert if fish present
No	2.00	0.42	3.5	No	No	Deep Fill	Low	0.93	0	10	0	5	0	15	Potential	Streambed Simulation		Drainage only - No action required
Yes	1.00	3.68	1.5	No	No	Deep Fill	High	3.07	0	10	0	5	6	21	Barrier	Open Bottom Structure	3.68	Install a properly embedded culvert if fish present
				No	Yes			0.00	0	0	0	0	0	0	Unknown	Removal		Culvert has been washed out - remove from channel
No	2.00	1.23	2	No	No	Deep Fill	High	2.05	0	10	5	5	6	26	Barrier	Removal		Remove culvert - has been mostly washed out and is damaged

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
				No	No			0.00	0	0	0	0	0	0	Unknown	Removal		Culvert has been washed out - remove from channel
				No	No			0.00	0	0	0	0	0	0	Unknown	Removal		Culvert has been washed out - remove from channel
				Yes	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	2.50	1.32	1.5	No	No	Deep Fill	Medium	1.47	0	10	0	5	6	21	Barrier	Removal		Remove culvert or replace with properly embedded structure if fish present
Yes	3.00	1.79	7	Yes	No	Deep Fill	High	1.99	0	10	0	10	6	26	Barrier	Streambed Simulation	1.79	Install a properly embedded culvert if fish present
Yes	3.00	0.90	6	No	No	Deep Fill	High	1.38	0	10	10	10	6	36	Barrier	Streambed Simulation	0.90	Install a properly embedded culvert if fish present
Yes	3.50	1.68	7	No	No	Deep Fill	High	1.68	0	10	0	10	6	26	Barrier	Streambed Simulation	1.68	Install a properly embedded culvert if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	7.00	0.45	2.5	No	No	Deep Fill	Low	1.00	0	10	0	10	3	23	Barrier	Streambed Simulation		No fish habitat or access present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	1.00	0.30	9	No	No	Deep Fill	Low	0.60	0	10	0	5	0	15	Potential	Streambed Simulation		No fish habitat or access present - no action required
				Yes	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
Yes	2.00	1.26	2	No	No	Deep Fill	High	1.58	0	10	0	5	6	21	Barrier	Streambed Simulation		Culvert is passable, no action required
Yes	2.50	1.12	5	No	No	Deep Fill	High	1.24	0	10	10	5	3	28	Barrier	Streambed Simulation	1.12	Remove culvert or replace with properly embedded structure if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
No	3.00	1.36	9	No	No	Deep Fill	Medium	2.72	0	10	5	10	6	31	Barrier	Streambed Simulation	1.36	Install a properly embedded culvert if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
No	6.50	0.73	5	No	No	Deep Fill	Low	1.46	0	10	10	10	6	36	Barrier	Streambed Simulation	0.73	Install a properly embedded culvert if fish present
No	6.00	1.02	8	No	No	Deep Fill	High	1.19	0	10	10	10	3	33	Barrier	Streambed Simulation	1.02	Install a properly embedded culvert if fish present
No	4.00	0.69	5.5	No	No	Deep Fill	Medium	0.86	0	10	10	10	0	30	Barrier	Streambed Simulation	0.69	Install a properly embedded culvert if fish present
Yes	5.00	0.83	10	No	No	Deep Fill	Medium	1.66	0	10	0	10	6	26	Barrier	Streambed Simulation	0.83	Culvert is passable, no action required
Yes	0.00	0.45	4.5	No	No	Deep Fill	Low	1.00	0	10	0	0	3	13	Passable			No fish habitat or access present - no action required
No	3.50	0.86	7	No	No	Deep Fill	Low	1.43	0	10	0	10	6	26	Barrier	Streambed Simulation		No fish habitat or access present - no action required
No	2.50	0.68	7.5	No	No	Deep Fill	Low	1.36	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish habitat or access present - no action required
No	3.50	0.75	5	No	No	Deep Fill	Low	1.50	0	10	10	10	6	36	Barrier	Streambed Simulation		No fish habitat or access present - no action required
No	5.00	0.51	4	No	No	Deep Fill	Low	1.02	0	10	0	10	3	23	Barrier	Streambed Simulation		No fish habitat or access present - no action required
No	10.00	0.48	4	No	No	Deep Fill	Low	1.07	0	10	5	10	3	28	Barrier	Streambed Simulation		No fish habitat or access present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
Yes	3.50	2.90	2.5	No	No	Deep Fill	High	2.90	6	10	0	10	6	32	Barrier	Backwater	2.90	Remove culvert or replace with properly embedded structure if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
				No	Yes			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
No	12.50	2.18	11	No	No	Deep Fill	High	2.91	6	10	0	10	6	32	Barrier	Open Bottom Structure	2.18	Install a properly embedded culvert or OBS if fish present
No	30.00	0.51	10	No	No	Deep Fill	Low	0.85	3	10	10	10	0	33	Barrier	Streambed Simulation	0.51	No fish habitat or access present - no action required
				No	No			0.00	6	0	0	0	0	6	Passable			Poorly defined channel through wetland, passage possible if fish present - no action required
Yes	2.00	0.98	1.5	No	No	Deep Fill	Low	1.63	3	10	0	5	6	24	Barrier	Streambed Simulation	0.98	No fish habitat or access present - no action required
No	1.50	1.62	1.5	No	No	Deep Fill	Medium	3.24	0	10	0	5	6	21	Barrier	Streambed Simulation	1.62	Culvert should be passable - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Culvert is passable, no action required
No	4.50	0.67	0.5	No	No	Deep Fill	Low	1.34	0	10	0	10	6	26	Barrier	Streambed Simulation	0.67	No fish habitat or access present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Open Bottom Structure	1.90	Install a properly embedded culvert or OBS if fish present
Yes	4.00	1.43	5	No	No	Deep Fill	High	3.18	0	10	0	10	6	26	Barrier	Open Bottom Structure	1.43	Install a properly embedded culvert or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			Passable - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Open Bottom Structure	1.81	Install a properly embedded culvert or OBS if fish present
No	3.00	3.01	1.5	No	No	Deep Fill	High	1.67	3	10	0	10	6	29	Barrier	Open Bottom Structure	3.01	Culvert may be passable, install properly embedded CV or OBS if proven a barrier
No	1.00	1.60	2.5	No	No	Deep Fill	High	1.45	3	10	0	5	6	24	Barrier	Streambed Simulation	1.60	Culvert is passable, no action required
Yes	5.00	0.92	15	No	No	Deep Fill	Medium	1.84	0	10	0	10	6	26	Barrier	Streambed Simulation	0.92	Install a properly embedded culvert or OBS if fish present
No	6.00	1.56	15.5	No	No	Deep Fill	High	1.11	3	10	5	10	3	31	Barrier	Streambed Simulation	1.56	Install a properly embedded culvert or OBS if fish present
No	4.50	1.56	15.5	No	No	Deep Fill	High	1.30	3	10	10	10	6	39	Barrier	Streambed Simulation	1.56	Install a properly embedded culvert or OBS if fish present
No	4.00	0.91	17	No	No	Deep Fill	Low	1.01	3	10	10	10	3	36	Barrier	Streambed Simulation	0.91	Install a properly embedded culvert or OBS if fish present
				No	No			0.00	3	0	0	0	0	3	Passable			Logs are a barrier to fish passage, should be removed and replaced with OBS if fish present

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	4.00	1.91	11	No	No	Deep Fill	High	1.41	3	10	10	10	6	39	Barrier	Streambed Simulation	1.91	Install a properly embedded culvert or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			Passable - no action required
No	4.00	4.28	4	No	No	Deep Fill	High	2.04	0	10	10	10	6	36	Barrier	Open Bottom Structure	4.28	Install an OBS if fish present
Yes	4.00	2.04	4	No	No	Deep Fill	High	3.40	0	10	0	10	6	26	Barrier	Streambed Simulation	2.04	Install a properly embedded culvert or OBS if fish present
No	1.50	0.61	5	No	No	Deep Fill	High	0.76	0	10	0	5	0	15	Potential	Streambed Simulation	0.61	Install a properly embedded culvert or OBS if fish present
No	1.50	5.33	1	No	No	Deep Fill	High	2.05	3	10	0	5	6	24	Barrier	Open Bottom Structure	5.33	Remove all structures and replace with a bridge.
				No	No			0.00	#REF!	0	0	0	0	#REF!	#REF!			Remove structure and deactivate road
				No	No			0.00	3	0	0	0	0	3	Passable			No passage or access concerns - no action required
Yes	1.50	1.57	1	No	No	Deep Fill	High	0.31	0	10	0	5	0	15	Passable			Small inlet drop (used to have a debris grate), passable - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Removal		Some logs placed across channel, should be removed or a proper structure installed
No	1.50	3.29	3	No	No	Deep Fill	High	1.73	0	10	0	5	6	21	Barrier	Open Bottom Structure	3.29	Install a properly embedded culvert or OBS if fish present
No	1.50	1.08	2.5	No	No	Deep Fill	High	2.16	0	10	5	5	6	26	Barrier	Streambed Simulation	1.08	Install a properly embedded culvert or OBS if fish present
No	0.50	1.22	3	No	No	Deep Fill	High	1.53	0	10	0	0	6	16	Potential	Streambed Simulation	1.22	Install a properly embedded culvert or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
No	2.50	1.89	1	No	No	Deep Fill	Medium	1.15	0	10	0	5	3	18	Potential	Additional Substrate Material		Add substrate to culvert to facilitate passage
				No	No			0.00	0	0	0	0	0	0	Passable			Install a properly embedded culvert or OBS if fish present
No	2.00	0.58	3.5	No	No	Deep Fill	Low	0.48	0	10	0	5	0	15	Potential	Streambed Simulation		Drainage only - No action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
No	2.00	0.95	3.5	No	No	Deep Fill	Low	1.19	3	10	0	5	3	21	Barrier	Streambed Simulation		No fish habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No passage or access concerns - no action required
No	0.00	0.72	6	No	No	Deep Fill	Medium	1.20	0	10	0	0	3	13	Passable			Install a properly embedded culvert or OBS if fish present
No	5.00	1.53	5.5	No	No	Deep Fill	Medium	1.53	3	10	0	10	6	29	Barrier	Streambed Simulation	1.53	Install a properly embedded culvert or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Bridge removed, no passage or access concerns - no action required
No	9.00	0.72	3	No	No	Deep Fill	Low	1.20	0	10	0	10	3	23	Barrier	Streambed Simulation		Inlet is damaged but culvert should be passable - no action required
No	1.50	1.12	2	No	No	Deep Fill	Low	1.12	0	10	0	5	3	18	Potential	Streambed Simulation		Low habitat value - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
Yes	0.00	0.85	0.5	No	No	Deep Fill	Medium	1.42	0	10	0	0	6	16	Potential	Streambed Simulation	0.85	Culvert is passable, no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	0.00	0.70	0.5	No	No	Deep Fill	Low	1.00	0	10	10	0	3	23	Barrier	Streambed Simulation		No fish habitat present - no action required
Yes	5.00	0.76	2.5	No	No	Deep Fill	Medium	0.76	0	10	0	10	0	20	Barrier	Streambed Simulation		Culvert is passable, no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	8.00	0.73	5	No	No	Deep Fill	Medium	0.73	0	10	0	10	0	20	Barrier	Streambed Simulation	0.73	Install a properly embedded culvert or OBS if fish present
Yes	3.00	2.37	2	No	No	Deep Fill	High	1.32	3	10	5	10	6	34	Barrier	Open Bottom Structure	2.37	Install a properly embedded culvert or OBS if fish present
No	2.00	1.20	1	Yes	Yes	Deep Fill	Medium	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		Passable - no action required
Yes	1.00	1.02	6	No	No	Shallow Fil	Low	2.13	0	10	0	5	6	21	Barrier	Removal		Remove culvert and deactivate road
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	18.00	1.30	32	No	No	Shallow Fil	Low	1.44	0	10	10	10	6	36	Barrier	Streambed Simulation		No fish habitat - no action required
Yes	9.50	1.93	14	No	No	Shallow Fil	High	1.93	3	10	10	10	6	39	Barrier	Removal		Remove culvert and deactivate road
No	12.00	0.40	24	No	No	Shallow Fil	Low	1.00	0	10	0	10	3	23	Barrier	Streambed Simulation		No fish habitat - no action required
No	6.50	1.20	6	No	No	Shallow Fil	Medium	0.20	0	10	0	10	0	20	Barrier	Removal		Remove culvert and deactivate road
Yes	15.00	1.02	22	No	No	Shallow Fil	Low	1.70	3	10	10	10	6	39	Barrier	Streambed Simulation		No fish habitat - no action required
No	15.00	0.68	24	No	No	Shallow Fil	Low	0.68	0	10	0	10	0	20	Barrier	Streambed Simulation		No fish habitat - no action required
Yes	12.00	1.98	6	No	Yes	Deep Fill	High	2.08	0	10	10	10	6	36	Barrier	Removal		Remove culvert and deactivate road
Yes	9.00	1.84	6	No	Yes	Deep Fill	High	0.20	3	10	10	10	0	33	Barrier	Removal		Remove culvert and deactivate road
Yes	6.50	2.30	4	No	No	Deep Fill	High	2.56	0	10	0	10	6	26	Barrier	Removal		Remove culvert and deactivate road
Yes	10.00	1.93	4	No	No	Deep Fill	High	2.14	3	10	10	10	6	39	Barrier	Removal		Remove culvert and deactivate road

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
Yes	8.00	2.05	8	No	No	Deep Fill	High	2.28	0	10	10	10	6	36	Barrier	Removal		Remove culvert and deactivate road
No	11.00	2.05	8	No	No	Deep Fill	High	3.42	0	10	10	10	6	36	Barrier	Removal		Remove culvert and deactivate road
Yes	5.00	2.06	4	No	Yes	Deep Fill	High	2.06	3	10	0	10	6	29	Barrier	Removal		Remove culvert and deactivate road
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
No	1.16	1.16	7	No	No	Deep Fill	Medium	1.93	0	10	10	5	6	31	Barrier	Removal		Remove culvert and deactivate road
Yes	6.00	1.36	4	No	No	Deep Fill	Medium	2.83	0	10	10	10	6	36	Barrier	Removal		Remove culvert and deactivate road
Yes	7.00	1.38	5	No	No	Deep Fill	Low	2.88	0	10	0	10	6	26	Barrier	Removal		Remove culvert and deactivate road
Yes	4.00	0.73	3	No	No	Deep Fill	Low	1.22	0	10	0	10	3	23	Barrier	Removal		Remove culvert and deactivate road
No	5.50	1.72	5	No	No	Deep Fill	High	3.58	0	10	0	10	6	26	Barrier	Removal		Remove culvert and deactivate road
No	6.00	0.96	6	No	No	Deep Fill	High	2.00	0	10	0	10	6	26	Barrier	Removal		Remove culvert and deactivate road
No	6.00	2.94	4	No	No	Deep Fill	High	6.13	0	10	0	10	6	26	Barrier	Removal		Remove culvert and deactivate road
Yes	6.00	2.94	8	No	No	Deep Fill	High	4.90	0	10	10	10	6	36	Barrier	Removal		Remove culvert and deactivate road
Yes	4.50	1.28	5	No	No	Shallow Fil	Low	2.13	0	10	0	10	6	26	Barrier	Streambed Simulation		Low habitat value, culvert should be passable if fish present - no action required
No	4.50	1.56	16	No	No	Shallow Fil	Medium	1.95	0	10	10	10	6	36	Barrier	Streambed Simulation		Culvert should be passable if fish present - no action required
No	4.50	1.56	16	No	No	Shallow Fil	Medium	1.95	0	10	0	10	6	26	Barrier	Streambed Simulation		Culvert should be passable if fish present - no action required
Yes	6.00	1.30	6	No	No	Shallow Fil	Low	1.73	0	5	10	10	6	31	Barrier	Streambed Simulation		No fish habitat - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Add substrate material, and channelize the crossing area
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
No	4.00	1.80	3	No	No	Deep Fill	High	3.00	0	10	10	10	6	36	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	3.00	1.47	3	No	No	Deep Fill	Medium	1.96	3	10	0	10	6	29	Barrier	Streambed Simulation		No fish passage or access concerns, no action required
Yes	1.00	0.60	0	No	No	Deep Fill	Low	1.00	3	10	0	5	3	21	Barrier	Streambed Simulation		No action required
No	1.00	1.40	2	No	No	Deep Fill	Medium	2.00	0	10	5	5	6	26	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	1.50	1.91	1	No	No	Deep Fill	Medium	2.55	0	10	0	5	6	21	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
Yes	1.50	1.36	3	No	No	Deep Fill	High	2.27	3	10	0	5	6	24	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	1.00	0.72	2	No	No	Deep Fill	Low	1.20	0	10	5	5	3	23	Barrier	Streambed Simulation		No habitat - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
No	2.00	2.62	3	Yes	No	Deep Fill	Medium	1.31	6	10	10	5	6	37	Barrier	Backwater		Backwater or install weirs and baffles
No	1.00	2.84	1	Yes	No	Deep Fill	Medium	0.63	3	0	0	5	0	8	Passable			No fish passage or access concerns, no action required
No	2.00	3.24	1	No	No	Deep Fill	Medium	1.80	6	10	5	5	6	32	Barrier	Streambed Simulation		Install shorter CV's
No	1.00	2.79	2	No	No	Deep Fill	Medium	1.74	3	10	0	5	6	24	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
Yes	1.50	2.76	1.5	No	No	Deep Fill	High	15.33	0	10	0	5	6	21	Barrier	Open Bottom Structure		No fish passage or access concerns, no action required
Yes	2.00	2.05	3	No	No	Deep Fill	High	1.71	3	10	0	5	6	24	Barrier	Backwater		Backwater or install weirs and baffles
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
Yes	2.00	1.90	4	No	No	Deep Fill	High	1.90	3	10	10	5	6	34	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	3.00	1.40	3	No	No	Deep Fill	High	0.70	3	10	0	10	0	23	Barrier	Streambed Simulation		No fish passage or access concerns, no action required
No	4.00	1.46	4.5	No	No	Deep Fill	Medium	1.46	0	10	0	10	6	26	Barrier	Streambed Simulation		Seasonal channel - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
No	1.00	1.20	0.5	No	No	Deep Fill	Low	1.20	0	10	0	5	3	18	Potential	Streambed Simulation		No habitat - drainage
No	2.00	0.82	3	No	No	Deep Fill	Low	1.37	0	10	0	5	6	21	Barrier	Streambed Simulation		No action required
No	1.50	1.67	3	No	No	Deep Fill	Low	3.71	0	10	0	5	6	21	Barrier	Streambed Simulation		No action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
No	4.00	0.89	7.5	No	No	Deep Fill	Medium	0.89	0	10	5	10	0	25	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
Yes	7.00	1.21	7	No	No	Deep Fill	Medium	0.71	3	10	0	10	0	23	Barrier	Removal		Remove
Yes	4.00	1.51	5	No	No	Deep Fill	High	0.97	3	10	0	10	0	23	Barrier	Streambed Simulation		No fish passage or access concerns, no action required
Yes	4.00	1.74	4	No	No	Deep Fill	Medium	1.16	3	10	0	10	3	26	Barrier	Removal		Remove
No	1.00	1.28	0	No	No	Deep Fill	Low	2.13	0	10	0	5	6	21	Barrier	Removal		Remove
No	1.00	1.12	0.5	No	No	Deep Fill	Low	1.60	0	5	0	5	6	16	Potential	Streambed Simulation		Seasonal channel - unplug CV
				No	No			0.00	3	0	0	0	0	3	Passable			Replace if drainage a concern
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
Yes	5.00	2.63	4.5	No	No	Shallow Fil	High	4.38	0	10	5	10	6	31	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
Yes	1.50	1.75	2	No	No	Shallow Fil	Medium	2.92	0	10	0	5	6	21	Barrier	Backwater		Backwater
No	2.00	1.77	1	No	No	Shallow Fil	Low	3.54	0	5	0	5	6	16	Potential	Streambed Simulation		Unplug CV
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
Yes	2.50	0.64	18	No	No	Shallow Fil	Low	1.42	0	10	10	5	6	31	Barrier	Streambed Simulation		No action required
Yes	6.00	1.93	10	No	No	Shallow Fil	High	1.93	0	10	10	10	6	36	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns, no action required
No	2.00	0.60	2	No	No	Deep Fill	Low	1.00	0	10	5	5	3	23	Barrier	Removal		Remove CV if road is no longer in use
Yes	2.00	1.55	1.5	No	No	Deep Fill	Low	1.94	0	10	0	5	6	21	Barrier	Streambed Simulation		No action required - no habitat
No	2.00	0.45	0.5	No	No	Deep Fill	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		No action required - no habitat
Yes	1.00	1.32	0.5	No	No	Deep Fill	Medium	1.20	0	10	5	5	3	23	Barrier	Streambed Simulation		No action required
No	3.00	0.82	2	No	No	Deep Fill	Low	1.82	0	10	10	10	6	36	Barrier	Streambed Simulation		No action required - no habitat
No	2.00	1.14	3	No	No	Deep Fill	Low	1.90	0	10	10	5	6	31	Barrier	Streambed Simulation		No action required - no habitat
Yes	1.00	1.40	3	No	No	Shallow Fil	Low	2.33	0	10	10	5	6	31	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	2.00	1.58	0.25	No	No	Shallow Fil	High	1.44	0	10	5	5	6	26	Barrier	Backwater		Backwater if fish present
No	2.50	1.24	2	No	No	Deep Fill	Low	2.07	0	10	0	5	6	21	Barrier	Streambed Simulation		No action required
				No	No			0.00	0	0	0	0	0	0	Passable			No action required
No	3.00	3.00	4	No	No	Deep Fill	High	2.14	0	10	10	10	6	36	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	2.00	2.17	2	No	No	Deep Fill	High	2.41	0	10	0	5	6	21	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
Yes	2.00	1.70	1	No	No	Deep Fill	Low	1.89	0	10	5	5	6	26	Barrier	Streambed Simulation		No action required - no habitat
No	1.50	1.30	1.5	No	No	Deep Fill	Low	2.17	0	5	0	5	6	16	Potential	Streambed Simulation		No action required - no habitat
No	1.50	1.30	4	No	No	Deep Fill	High	2.17	0	10	0	5	6	21	Barrier	Streambed Simulation		Replace due to rot
Yes	1.50	1.96	4	No	No	Deep Fill	High	2.18	0	10	10	5	6	31	Barrier	Streambed Simulation		No fish passage or access concerns, no action required
No	6.00	1.16	3	No	No	Deep Fill	Low	1.93	0	10	0	10	6	26	Barrier	Streambed Simulation		Backwater if fish present
No	1.50	1.38	2	No	No	Deep Fill	Low	1.84	0	10	5	5	6	26	Barrier	Streambed Simulation		Replace and embed if fish present
No	7.00	3.08	6	No	No	Deep Fill	High	2.37	6	10	10	10	6	42	Barrier	Open Bottom Structure		Replace with OBS
No	1.50	1.53	5	No	No	Deep Fill	Low	2.04	0	10	5	5	6	26	Barrier	Streambed Simulation		Backwater if fish present
Yes	3.00	3.16	3	No	No	Deep Fill	Medium	5.27	0	10	10	10	6	36	Barrier	Open Bottom Structure		Replace with properly embedded CV, or OBS if fish present
No	3.00	0.45	3	No	No	Deep Fill	Low	1.00	0	10	0	10	3	23	Barrier	Streambed Simulation		No action required - no habitat
No	2.00	1.55	5	No	No	Deep Fill	High	1.55	0	10	0	5	6	21	Barrier	Backwater		Backwater if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
No	0.00	5.15	14	No	No	Deep Fill	High	3.22	0	10	10	0	6	26	Barrier	Removal		Remove CV/deactivate road
No	2.00	2.23	5	No	No	Deep Fill	High	1.24	0	5	5	5	3	18	Potential	Streambed Simulation		No fish passage or access concerns, no action required
No	3.00	1.25	3	No	No	Deep Fill	Low	2.08	0	10	0	10	6	26	Barrier	Streambed Simulation		No action required - drainage
Yes	3.00	0.71	3	No	No	Deep Fill	Low	0.71	0	10	0	10	0	20	Barrier	Streambed Simulation		No action required - drainage
No	12.00	1.36	18	No	No	Deep Fill	Low	1.30	0	10	10	10	3	33	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No action required
Yes	0.00	1.02	3	No	No	Shallow Fil	Medium	1.70	0	10	0	0	6	16	Potential	Removal		Remove CV/deactivate road
No	11.00	1.67	10	No	No	Shallow Fil	Medium	2.78	0	10	10	10	6	36	Barrier	Removal		Remove CV/deactivate road
No	11.00	0.33	10	No	No	Shallow Fil	Low	0.83	0	10	5	10	0	25	Barrier	Removal		Remove CV/deactivate road
No	4.00	0.65	5	No	No	Shallow Fil	Low	1.08	0	10	0	10	3	23	Barrier	Removal		No action required - seasonal
Yes	1.50	1.55	2	No	No	Deep Fill	Medium	3.44	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish passage or access concerns, no action required
Yes	4.00	4.60	4	No	No	Deep Fill	High	5.11	0	10	0	10	6	26	Barrier	Open Bottom Structure		Replace with properly embedded CV, or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns, no action required
No	3.00	5.30	3	No	No	Deep Fill	High	2.65	3	10	10	10	6	39	Barrier	Open Bottom Structure		Replace with OBS
No	1.50	1.65	1	No	No	Deep Fill	Low	3.30	0	10	0	5	6	21	Barrier	Streambed Simulation		No action required - no habitat
No	2.00	2.26	1	No	No	Deep Fill	Low	2.26	3	10	10	5	6	34	Barrier	Streambed Simulation		No action required - no habitat
No	0.05	1.64	2	No	No	Shallow Fil	Medium	2.73	0	10	10	0	6	26	Barrier	Streambed Simulation		Replace with properly embedded CV, or OBS if fish present
No	2.00	1.56	2.5	No	No	Shallow Fil	Medium	2.60	0	10	0	5	6	21	Barrier	Streambed Simulation		Replace with larger, embedded CV
Yes	2.00	2.90	3	No	No	Deep Fill	High	3.22	0	10	0	5	6	21	Barrier	Streambed Simulation	2.90	Embed larger culvert if fish present

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	4.00	0.99	3	No	No	Deep Fill	High	0.55	3	10	5	10	0	28	Barrier	Streambed Simulation	1.00	Embed larger culvert if fish present
No	2.00	0.63	2.5	No	No	Shallow Fil	Low	1.40	0	10	0	5	6	21	Barrier	Streambed Simulation		No fish habitat present - no action required
No	1.00	0.45	0.05	No	No	Shallow Fil	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		No habitat or access - no action required
No	5.00	0.59	4	No	No	Shallow Fil	Medium	0.98	0	10	10	10	0	30	Barrier	Streambed Simulation		Access very unlikely - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
No	4.00	0.67	7	No	No	Shallow Fil	Medium	1.12	0	10	10	10	3	33	Barrier	Removal		Remove culvert and deactivate road
No	12.00	0.97	10	No	No	Shallow Fil	Low	1.62	0	10	10	10	6	36	Barrier	Streambed Simulation	1	Embed larger culvert if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
No	5.00	0.50	7	No	No	Shallow Fil	Low	0.83	0	10	0	10	0	20	Barrier	Streambed Simulation	0.6	Embed culvert if fish present
No	5.00	11.30	5.5	No	No	Shallow Fil	High	1.41	6	10	10	10	6	42	Barrier	Backwater		Culverts likely seasonally passable, install baffles to improve passage
No	2.00	0.89	4	No	No	Shallow Fil	Low	1.78	0	10	0	5	6	21	Barrier	Streambed Simulation	0.90	Embed larger culvert if fish present
Yes	3.00	1.91	4	No	No	Shallow Fil	Medium	3.18	0	10	5	10	6	31	Barrier	Streambed Simulation	2.00	Embed larger culvert if fish present
No	6.00	2.35	4	No	No	Shallow Fil	High	2.35	0	10	10	10	6	36	Barrier	Removal		Remove culvert and deactivate road
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Passable, no concerns
No	2.00	3.70	2	No	No	Deep Fill	Low	6.17	3	10	0	5	6	24	Barrier	Streambed Simulation		Road has slumped over both inlet and outlet - material needs to be removed
No	5.00	21.80	8	No	No	Deep Fill	High	5.45	6	10	0	10	6	32	Barrier	Backwater		Install baffles if culvert is a fish barrier
No	2.00	2.67	6	No	No	Deep Fill	Medium	2.67	0	10	0	5	6	21	Barrier	Streambed Simulation	2.70	Embed larger culvert if fish present
No	2.00	1.41	5	No	No	Deep Fill	High	1.13	3	10	0	5	3	21	Barrier	Streambed Simulation	1.50	Culvert likely passable, if barrier install larger, embedded culvert
No	27.00	0.70	9	No	No	Shallow Fil	Low	1.17	0	10	10	10	3	33	Barrier	Removal		Remove culvert and deactivate road
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns. However, creosote from bridge ties is dripping into water.
No	8.50	1.65	7	No	No	Deep Fill	High	1.83	3	10	5	10	6	34	Barrier	Removal		Remove culvert and deactivate road
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Passable, no concerns
No	4.00	0.94	3	No	No	Deep Fill	High	1.04	0	10	5	10	3	28	Barrier	Streambed Simulation	1.00	Embed larger culvert if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Passable, no concerns
No	12.50	2.77	7.5	No	No	Deep Fill	High	2.77	0	10	5	10	6	31	Barrier	Removal		Remove culvert and deactivate road
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
No	12.00	2.23	3	No	No	Deep Fill	High	3.72	0	10	0	10	6	26	Barrier	Removal		Embed larger culvert if fish present
No	0.50	1.15	4	No	No	Deep Fill	Medium	2.56	0	10	10	0	6	26	Barrier	Removal		Replace with larger, embedded culvert - severe erosion occurring at outlet
Yes	1.00	2.39	3	No	No	Deep Fill	Medium	3.98	0	10	5	5	6	26	Barrier	Streambed Simulation	2.40	Embed larger culvert if fish present
Yes	4.00	1.20	3	No	No	Deep Fill	Medium	1.33	0	10	0	10	6	26	Barrier	Streambed Simulation		Passable if fish present - no action required
Yes	3.00	5.70	4	No	No	Deep Fill	High	4.75	0	10	0	10	6	26	Barrier	Open Bottom Structure		Passable if fish present - no action required
No	5.00	2.63	4	No	No	Deep Fill	High	2.92	0	10	5	10	6	31	Barrier	Open Bottom Structure	2.70	Replace with larger, embedded culvert or OBS if fish present
No	3.50	2.07	4	No	No	Deep Fill	High	2.30	0	10	5	10	6	31	Barrier	Open Bottom Structure	2.10	Replace with larger, embedded culvert or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Passable, no concerns
No	5.00	0.45	3	No	No	Deep Fill	Low	1.00	0	10	5	10	3	28	Barrier	Streambed Simulation		Passable if fish present - no action required
No	2.00	1.06	2	No	No	Deep Fill	Low	1.77	0	10	5	5	6	26	Barrier	Streambed Simulation		No habitat or access - no action required
No	4.00	1.57	5.5	No	No	Deep Fill	High	1.31	0	10	5	10	6	31	Barrier	Backwater		Backwater and install baffles if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
				No	No			0.00	0	0	0	0	0	0	Passable			Remove - bridge is falling apart and very dangerous (looks like still used for ATV access), and will likely create a barrier if it falls into the channel
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
Yes	3.00	1.50	3	Yes	No	Deep Fill	High	1.00	6	10	0	10	3	29	Barrier	Streambed Simulation		Passable if fish present - no action required
No	2.00	0.90	1.5	No	No	Deep Fill	Low	1.00	0	5	0	5	3	13	Passable			No habitat or access - no action required
Yes	2.00	1.68	4	Yes	No	Deep Fill	High	1.05	6	10	0	5	3	24	Barrier	Streambed Simulation		Beaver cage needs to be cleaned
Yes	4.00	0.82	6	No	No	Deep Fill	High	1.37	0	10	10	10	6	36	Barrier	Removal		Remove crossing and deactivate road
				No	Yes			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Current crossing downstream of old bridge - should remove old timbers as they may create a barrier
				No	No			0.00	0	0	0	0	0	0	Passable			Crossing dry at assessment, passable if fish present - no action required
				No	No			0.00	3	0	0	0	0	3	Passable			Old railcar bridge on private land, no concerns
No	1.50	2.11	1.5	No	No	Deep Fill	Low	2.34	0	10	0	5	6	21	Barrier	Streambed Simulation		Fish access unlikely - no action required
No	1.00	1.12	2	No	No	Deep Fill	Low	1.24	0	10	0	5	3	18	Potential	Streambed Simulation		No fish habitat present - no action required
No	1.00	1.11	1.5	No	No	Deep Fill	Low	1.17	0	10	0	5	3	18	Potential	Streambed Simulation		No fish habitat present - no action required
No	1.00	3.76	1.5	No	No	Deep Fill	Low	26.86	0	10	0	5	6	21	Barrier	Streambed Simulation		2 culverts present, crossing dry at assessment. Left culvert blocked, seasonal access only.

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	3.00	1.13	2.5	No	No	Deep Fill	Low	2.51	0	10	0	10	6	26	Barrier	Streambed Simulation	1.2	Small channel with lots of fines - embed larger culvert if fish present
No	2.00	1.02	3	No	No	Deep Fill	Low	0.34	3	10	0	5	0	18	Potential	Streambed Simulation		Culvert under railway, passable if water/fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Shallow seasonal channel, access unlikely - passable is fish present
No	0.50	1.73	1	No	No	Deep Fill	Medium	1.73	0	10	0	0	6	16	Potential	Streambed Simulation		Seasonal channel with no residual pools, passable if fish present
No	4.00	1.96	5	No	No	Deep Fill	Medium	3.27	0	10	0	10	6	26	Barrier	Streambed Simulation		Dry at assessment, no residual pools - passable if fish present
No	1.00	2.48	3	No	No	Deep Fill	Medium	2.48	0	10	0	5	6	21	Barrier	Streambed Simulation	2.50	Mapped/unnumbered site, good seasonal habitat but no residual pools - embed culvert if fish present
No	2.50	1.25	3.5	No	No	Deep Fill	Low	3.13	0	10	0	5	6	21	Barrier	Streambed Simulation		Mapped/unnumbered site, upstream channel poorly defined - no action required
No	-3.00	2.52	1	No	No	Deep Fill	Medium	1.33	0	10	0	0	6	16	Potential	Streambed Simulation	2.50	Right culvert badly damaged, rearing potential when water present - embed larger cv if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Shoring from old bridge still present, not likely to impact channel - passable if fish present
No	0.00	0.98	2	No	No	Deep Fill	Low	1.44	0	10	5	0	6	21	Barrier	Streambed Simulation		No fish habitat present - no action required
No	1.00	0.94	4.5	No	No	Deep Fill	Low	2.09	0	10	0	5	6	21	Barrier	Streambed Simulation		Majority of flow is ditch runoff - no action required
No	4.00	1.87	2	No	No	Deep Fill	High	1.56	0	10	5	10	6	31	Barrier	Streambed Simulation	1.90	Excellent habitat, culvert washing out, landowner intends to replace with bridge - OBS if fish present
No	18.00	0.40	35	No	No	Deep Fill	Low	0.80	0	10	5	10	0	25	Barrier	Streambed Simulation		Natural barrier of 35% gradient downstream - no action required
Yes	11.00	0.84	38	No	No	Deep Fill	Low	0.93	0	10	10	10	0	30	Barrier	Streambed Simulation		Natural barrier of 38% gradient downstream - no action required
No	6.50	1.04	33	No	No	Deep Fill	Low	1.16	0	10	10	10	3	33	Barrier	Streambed Simulation		Natural barrier of 33% gradient downstream - no action required
No	8.00	0.57	16	No	No	Deep Fill	Low	1.14	0	10	0	10	3	23	Barrier	Streambed Simulation		No fish habitat present - no action required
No	4.00	0.28	8	No	No	Deep Fill	Low	0.56	0	5	5	10	0	20	Barrier	Streambed Simulation		Intermittent channel, no habitat or access - no action required
No	8.00	0.25	42	No	No	Deep Fill	Low	0.50	0	10	10	10	0	30	Barrier	Streambed Simulation		Natural barrier of >40% channel slope - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Seasonal narrow channel, no habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Natural barrier of >40% channel slope, old crossing has been blown out - no action required
No	4.50	2.35	8	No	No	Deep Fill	Low	3.62	0	10	5	10	6	31	Barrier	Removal		Culvert too small for peak flow, but likely not a barrier to fish at normal flows.
				No	Yes			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	Yes			0.00	0	0	0	0	0	0	Passable			Old bridge deck removed, abutments are rotting. No fish passage or access concerns.
Yes	5.00	0.50	2	No	No	Deep Fill	Low	1.00	0	10	5	10	3	28	Barrier	Removal		No fish habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			No fish habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Abundant woody debris present, barrier to fish at low flow - remove debris.
				No	No			0.00	0	0	0	0	0	0	Passable			Bridge has collapsed and created a barrier - should be removed
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish access or habitat - no action required
No	3.00	6.30	4	No	No	Deep Fill	Medium	12.60	0	10	0	10	6	26	Barrier	Removal		Culvert is blocked, and too small for channel - should be removed.
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Fish access unlikely due to narrow channel and 28% slope - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Channel flows on road for ~100m during peak flows, no fish habitat - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Natural barrier of >50% slope - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Natural barrier of >50% slope - no action required
Yes	12.00	1.35	42	No	No	Deep Fill	Low	1.35	0	10	10	10	6	36	Barrier	Streambed Simulation		Natural barrier of 38-45% slope - no actin required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Channel has been logged across ~15 years ago, no habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Ford for trail access to Mt Seaton, has been logged across. No habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		LWD creating a barrier at downstream end of crossing - should be removed to restore fish access if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Access very unlikely, no fish passage concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Upstream primarily ditch drainage, no habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Wetland both upstream and downstream with no defined channel - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish habitat present - no action required

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
				Yes	No			0.00	0	0	0	0	0	0	Passable			No fish passage or access concerns - no action required
				Yes	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Pallets in stream at crossing as well as 50m downstream - creating barrier and should all be removed
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Trail crossing, no fish habitat present - no action required
Yes	12.00	2.23	22	No	No	Deep Fill	Medium	3.72	0	10	10	10	6	36	Barrier	Removal		Culvert too small for peak flow, water has been 1.5m deep over inlet - remove if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish passage or access concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			New ATV bridge, old timbers are along toe of each stream bank - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Ford just upstream of bridge, regularly used - some silt/erosion concerns - new bridge now in place
				No	No			0.00	0	0	0	0	0	0	Passable			Barrier. Log/fill crossing is blocking channel and causing road to sink - remove and replace with 1m culvert if fish present
				No	No			0.00	0	0	0	0	0	0	Passable			Barrier. Log/fill crossing is blocking channel and causing road to sink - remove and install 1.6m culvert or OBS if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish habitat present - no action required
No	6.00	1.44	6	No	No	Deep Fill	Low	1.44	0	10	10	10	6	36	Barrier	Removal		Remove culvert and fully deactivate road
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Removal		Remove rocks that are blocking channel
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No action required
Yes	5.00	1.13	6	No	No	Deep Fill	Low	1.88	0	10	0	10	6	26	Barrier	Streambed Simulation		No action required, should be passable is fish present
Yes	2.50	0.69	4	No	No	Deep Fill	Low	1.15	0	10	5	5	3	23	Barrier	Streambed Simulation		No action required, limited habitat present
No	13.00	0.33	12	No	No	Deep Fill	Low	0.72	0	10	10	10	0	30	Barrier	Streambed Simulation		No fish habitat or access, no action required
Yes	12.00	1.62	23	No	No	Deep Fill	Medium	1.62	3	10	0	10	6	29	Barrier	Removal		Remove culvert if fish present
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No fish habitat or access, no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		No concerns, no action required
No	2.50	0.39	6	No	No	Deep Fill	Low	0.07	0	10	10	5	0	25	Barrier	Streambed Simulation		No fish habitat or access, no action required
Yes	5.00	0.62	4	No	No	Deep Fill	Low	1.24	0	10	0	10	3	23	Barrier	Streambed Simulation		No fish habitat or access, no action required
Yes	3.00	5.10	4	No	No	Deep Fill	High	3.40	6	10	10	10	6	42	Barrier	Open Bottom Structure	5.10	Replace with properly embedded culvert or OBS
No	2.00	5.20	0	Yes	No	Deep Fill	Medium	2.48	0	10	0	5	6	21	Barrier	Streambed Simulation	5.20	Beaver dam in left culvert should be removed
Yes	3.00	5.20	1	Yes	No	Deep Fill	Medium	2.36	6	10	0	10	6	32	Barrier	Streambed Simulation	5.2	Beaver debris building up, should be removed
No	2.00	2.00	0.5	Yes	No	Deep Fill	Medium	1.00	3	10	0	5	3	21	Barrier	Streambed Simulation	2.00	Beaver dam in right culvert should be removed
Yes	2.00	3.77	1	Yes	No	Deep Fill	Medium	1.71	3	10	0	5	6	24	Barrier	Streambed Simulation	3.8	Inlet grate needs to be cleaned
Yes	3.00	1.11	3	No	No	Deep Fill	Low	1.11	3	10	0	10	3	26	Barrier	Streambed Simulation	1.2	Replace with properly embedded culvert if fish present
Yes	3.00	0.17	3	No	No	Deep Fill	Low	0.57	0	10	0	10	0	20	Barrier	Streambed Simulation		No habitat present - no action required
No	1.50	2.57	2	No	No	Deep Fill	High	1.29	6	5	0	5	3	19	Potential	Streambed Simulation		Passable, no concerns - no action required
No	1.00	2.57	1	No	No	Deep Fill	High	1.29	0	5	0	5	3	13	Passable			Passable, no concerns - no action required
No	2.00	1.57	3	No	No	Deep Fill	High	0.79	0	5	0	5	0	10	Passable			Passable, no concerns - no action required
Yes	0.00	2.68	1	No	No	Deep Fill	High	2.44	3	10	5	0	6	24	Barrier	Streambed Simulation	2.70	Inlet grate needs to be cleaned
Yes	0.00	2.68	1	No	No	Deep Fill	High	2.23	0	10	10	0	6	26	Barrier	Streambed Simulation	2.70	Replace with properly embedded culvert if fish present
				Yes	No			0.00	0	0	0	0	0	0	Passable			Remove - blocking channel
No	3.00	0.58	4	No	No	Deep Fill	Low	1.93	0	10	0	10	6	26	Barrier	Removal		Remove and replace with ford
Yes	2.00	3.39	3	No	No	Deep Fill	High	4.24	0	10	10	5	6	31	Barrier	Open Bottom Structure	3.40	Replace with properly embedded culvert or OBS
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
Yes	2.00	0.50	1.5	Yes	No	Deep Fill	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		No habitat present - no action required
Yes	5.00	1.07	6	No	No	Deep Fill	Low	1.78	0	10	0	10	6	26	Barrier	Streambed Simulation	1.10	Replace with properly embedded culvert if fish present
No	0.00	1.80	3	No	No	Deep Fill	High	1.50	0	10	10	0	6	26	Barrier	Streambed Simulation	1.80	Replace with properly embedded culvert or OBS
Yes	6.00	1.38	7	No	No	Deep Fill	Medium	0.99	3	10	10	10	0	33	Barrier	Streambed Simulation	1.40	Replace with properly embedded culvert or OBS
Yes	1.00	3.13	12	No	No	Deep Fill	High	2.24	0	10	10	5	6	31	Barrier	Open Bottom Structure	3.20	Replace with OBS
				No	No			0.00	0	0	0	0	0	0	Passable			Remove
				No	No			0.00	0	0	0	0	0	0	Passable			Poorly defined channel - no action required
No	4.00	1.91	5	No	No	Deep Fill	Low	3.18	0	10	10	10	6	36	Barrier	Streambed Simulation	2.00	Embed culvert if fish present
Yes	5.00	1.18	4	No	No	Deep Fill	High	0.98	6	10	10	10	0	36	Barrier	Open Bottom Structure	1.20	Replace culvert with OBS
No	1.00	2.49	3	No	No	Deep Fill	High	1.42	0	10	10	5	6	31	Barrier	Streambed Simulation		~100m falls upstream - no action required
No	0.00	1.66	13	No	No	Deep Fill	Low	1.66	6	10	0	0	6	22	Barrier	Streambed Simulation		No habitat present - no action required
No	7.00	6.77	7	No	No	Deep Fill	High	3.76	6	10	10	10	6	42	Barrier	Open Bottom Structure	7.00	Replace with OBS, outlet is washing out badly - Could become a major issue for the highway
Yes	8.00	2.21	11	No	No	Deep Fill	Low	4.42	6	10	10	10	6	42	Barrier	Open Bottom Structure	2.30	Replace with OBS if fish present
No	3.00	1.16	3	No	No	Deep Fill	Low	2.32	3	10	10	10	6	39	Barrier	Streambed Simulation		No habitat present - no action required

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	12.00	5.47	12	No	No	Deep Fill	High	5.47	6	10	10	10	6	42	Barrier	Open Bottom Structure	5.50	Replace with OBS if fish present
Yes	7.00	0.51	36	No	No	Deep Fill	Low	0.43	6	10	10	10	0	36	Barrier	Streambed Simulation		No habitat present - no action required
No	2.00	0.80	1	No	No	Deep Fill	Low	1.00	6	10	0	5	3	24	Barrier	Streambed Simulation		Access unlikely - no action required
No	4.00	1.44	4	No	No	Deep Fill	Low	1.80	0	10	5	10	6	31	Barrier	Streambed Simulation		Access unlikely - no action required
Yes	7.00	1.41	4	No	No	Deep Fill	Low	1.48	6	10	10	10	6	42	Barrier	Streambed Simulation		No habitat present - no action required
No	5.00	1.04	5	No	No	Deep Fill	Low	2.08	0	10	5	10	6	31	Barrier	Streambed Simulation	1.10	Hole in bottom of culvert outlet - replace
No	1.00	0.50	2	No	No	Deep Fill	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation	0.50	Replace with properly embedded culvert if fish present
No	0.00	1.31	2	No	No	Deep Fill	Low	1.46	0	10	5	0	6	21	Barrier	Streambed Simulation		Passable if fish present - no action required
No	3.00	1.52	3	No	No	Deep Fill	Low	3.04	3	10	0	10	6	29	Barrier	Streambed Simulation	1.60	Embed culvert if fish present
No	0.50	1.55	1	No	No	Deep Fill	Medium	1.72	0	10	0	0	6	16	Potential	Streambed Simulation		Passable, no concerns - no action required
Yes	5.50	1.21	3	No	No	Deep Fill	High	2.02	0	10	5	10	6	31	Barrier	Streambed Simulation		Passable, no concerns - no action required
No	4.00	0.60	3	No	No	Deep Fill	Low	1.00	0	10	0	10	3	23	Barrier	Streambed Simulation		No habitat present - no action required
No	2.50	0.40	1.5	No	No	Deep Fill	Low	1.00	0	10	0	5	3	18	Potential	Streambed Simulation		No habitat present - no action required
Yes	0.00	1.50	2	No	No	Deep Fill	High	1.00	3	10	0	0	3	16	Potential	Streambed Simulation		Passable if fish present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
				Yes	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
Yes	3.00	2.61	4	No	No	Deep Fill	High	2.90	0	10	10	10	6	36	Barrier	Open Bottom Structure	2.70	Replace with OBS
No	2.00	0.53	8	No	No	Deep Fill	Low	1.06	0	10	5	5	3	23	Barrier	Streambed Simulation		Passable if fish present - no action required
Yes	2.50	2.63	7	No	No	Deep Fill	High	2.63	0	10	0	5	6	21	Barrier	Streambed Simulation		Passable if fish present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
Yes	0.00	4.95	2	Yes	No	Deep Fill	Medium	3.30	6	10	0	0	6	22	Barrier	Streambed Simulation		Passable if fish present - no action required
Yes	4.50	1.90	3	No	No	Deep Fill	Low	1.90	0	10	10	10	6	36	Barrier	Streambed Simulation	1.90	Embed culvert if fish present
Yes	3.00	1.04	5	No	No	Deep Fill	Low	1.30	3	10	5	10	6	34	Barrier	Streambed Simulation	1.10	Embed culvert if fish present
				Yes	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Passable, no concerns - no action required
				Yes	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
Yes	2.00	1.09	4	No	No	Deep Fill	Low	2.18	0	10	0	5	6	21	Barrier	Removal		Remove
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
No	2.00	0.90	0	Yes	No	Deep Fill	Low	1.00	0	0	0	5	3	8	Passable			Passable if fish present - no action required
No	0.00	1.52	3.5	No	No	Deep Fill	Low	1.90	0	10	0	0	6	16	Potential	Streambed Simulation		Passable if fish present - no action required
No	1.00	0.77	4	No	No	Deep Fill	Low	1.54	0	10	5	5	6	26	Barrier	Streambed Simulation		No habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Unknown	Additional Substrate Material		Passable, no concerns - no action required
No	6.00	2.28	3	No	No	Deep Fill	Medium	1.90	0	10	10	10	6	36	Barrier	Streambed Simulation	2.30	Embed culvert if fish present
Yes	1.50	1.23	7	No	No	Deep Fill	Low	2.05	0	10	5	5	6	26	Barrier	Streambed Simulation		No habitat present - no action required
No	6.00	0.75	6.5	No	No	Deep Fill	Low	2.34	0	10	0	10	6	26	Barrier	Streambed Simulation		No habitat present - no action required
Yes	9.00	4.03	7	No	No	Deep Fill	High	1.75	6	10	10	10	6	42	Barrier	Open Bottom Structure	4.10	Replace culverts with OBS
Yes	4.00	7.07	4	No	No	Deep Fill	High	1.18	6	10	10	10	3	39	Barrier	Open Bottom Structure	7.10	Replace culverts with OBS
No	3.00	0.92	11	No	No	Deep Fill	Low	1.53	0	10	10	10	6	36	Barrier	Streambed Simulation		No habitat present - no action required
No	3.50	0.70	11	No	No	Deep Fill	Low	2.33	0	10	0	10	6	26	Barrier	Streambed Simulation		No habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
No	2.00	3.50	4	Yes	No	Deep Fill	Low	4.38	3	10	5	5	6	29	Barrier	Streambed Simulation		No upstream habitat present - no action required
No	2.00	1.33	2	No	No	Deep Fill	Low	1.48	0	10	5	5	6	26	Barrier	Streambed Simulation		No habitat present - no action required
No	2.00	1.25	20	No	No	Deep Fill	Low	2.08	0	10	10	5	6	31	Barrier	Streambed Simulation	1.30	Embed culvert if fish present
Yes	4.00	1.30	4	Yes	No	Deep Fill	Low	2.89	0	10	0	10	6	26	Barrier	Streambed Simulation		Culvert is plugged, should be cleared
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
No	4.00	0.54	25	No	No	Deep Fill	Low	1.35	3	10	10	10	6	39	Barrier	Streambed Simulation		No habitat present - no action required
No	1.00	1.45	1	No	No	Deep Fill	Low	2.07	0	10	0	5	6	21	Barrier	Streambed Simulation		Outlet plugged, should be cleaned
Yes	1.00	3.67	1	Yes	No	Deep Fill	Medium	2.45	0	10	10	5	6	31	Barrier	Streambed Simulation		Beaver debris building up, should be removed
No	4.00	3.77	2.5	No	No	Deep Fill	High	2.01	3	10	10	10	6	39	Barrier	Open Bottom Structure		PASSABLE - Excellent habitat, baffles in culvert, no concerns
Yes	5.00	2.31	7	No	No	Deep Fill	Medium	1.65	3	10	10	10	6	39	Barrier	Open Bottom Structure	2.40	Replace culverts with OBS, right culvert is completely plugged
No	3.00	0.88	1	No	No	Deep Fill	Low	1.47	0	10	0	10	6	26	Barrier	Streambed Simulation		No habitat present - no action required
No	1.00	4.20	2	No	No	Deep Fill	High	1.40	0	5	0	5	6	16	Potential	Streambed Simulation		Passable, no concerns - no action required

Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
No	4.00	2.53	2.5	No	No	Deep Fill	High	2.02	0	10	10	10	6	36	Barrier	Open Bottom Structure	2.60	Replace with embedded culvert or OBS
Yes	1.00	1.47	3	No	No	Deep Fill	Low	1.84	0	10	0	5	6	21	Barrier	Streambed Simulation		Passable if fish present - no action required
Yes	2.00	1.34	5	No	No	Deep Fill	Low	1.22	0	10	5	5	3	23	Barrier	Streambed Simulation		No habitat present - no action required
				No	No			0.00	0	0	0	0	0	0	Passable			Passable, no concerns - no action required
No	1.00	2.21	4	No	No	Deep Fill	High	1.23	0	0	0	5	3	8	Passable			Passable, no concerns - no action required
No	2.00	1.35	2	No	No	Deep Fill	High	1.50	0	10	10	5	6	31	Barrier	Streambed Simulation		Passable, no concerns - no action required
No	2.00	1.35	2	No	No	Deep Fill	High	2.25	0	10	0	5	6	21	Barrier	Streambed Simulation		Passable, no concerns - no action required

APPENDIX VI

REASONING FOR SITES NOT ASSESSED

Watershed #	Mapsheet #	Site #	Reason Not Assessed
1267	93M.022	285763	Downstream site does not exist - no channel present
		285769	Downstream site does not exist - no channel present
		285774	Downstream site does not exist - no channel present
		285775	Downstream site does not exist - no channel present
1268	93M.022	285792	Downstream site does not exist - no channel present
	93M.023	285804	Access road does not exist as mapped, hiking trail only
1269	93M.033	285701	Downstream site does not exist - no channel present
1285	93M.005	284232	Road not built
		284233	Road not built
		284234	Road not built
	93M.015	286011	Access road does not exist
		286019	Double-numbered site, only 1 crossing exists
1303	93M.014	285853	Only 1 site present - double mapped
1306	93M.014	285977	Downstream site does not exist - no channel present
		285999	Road ends before mapped site
1307	93M.014	284160	Access road does not exist
1309	93M.004	286061	Access denied by landowner
		286063	Access denied by landowner
		286067	Access denied by landowner
		286092	Access road does not exist
		286093	No access, too overgrown
		286095	Downstream site does not exist
		286098	Downstream site does not exist
		286100	Access road does not exist
		286110	No access, too overgrown
		286118	No access, too overgrown
1321	93L.095	286387	Road does not connect to anything
		286396	Road does not connect to anything
		286398	Road does not connect to anything
		286433	Road does not connect to anything
1323	93L.085	286499	Access road does not exist
		286519	Access road does not exist
		286521	Double-numbered site, only 1 crossing exists
		286532	Downstream site does not exist
		286558	Downstream site does not exist
		286580	Downstream site does not exist
		286582	Downstream site does not exist
	93L.086	286450	Road no longer exists, trail only on east side of river, no crossings
		286451	Road no longer exists, trail only on east side of river, no crossings
		286456	Road no longer exists, trail only on east side of river, no crossings
		286461	Road no longer exists, trail only on east side of river, no crossings
		286463	Road no longer exists, trail only on east side of river, no crossings
		286465	Road no longer exists, trail only on east side of river, no crossings
		286469	Road no longer exists, trail only on east side of river, no crossings
		286470	Road no longer exists, trail only on east side of river, no crossings
		286483	Access road does not exist
1329	93L.076	286717	Access road does not exist
		286733	Access road does not exist
		286745	Double-numbered site, only 1 crossing exists
	93L.086	286630	Access road does not exist

Watershed #	Mapsheet #	Site #	Reason Not Assessed
1330	93L.085	286529	Downstream site does not exist
		286531	Airport land, no access (Site is where runway currently exists)
1331	93L.075	284479	Channels join upstream of road, only 1 crossing present
		284487	Channel runs parallel to road, does not cross it
		284488	Channel runs parallel to road, does not cross it
		284490	Channel runs parallel to road, does not cross it
		284491	Channel runs parallel to road, does not cross it
		286786	Channel does not flow as mapped
		286787	Channel does not flow as mapped
		286792	Channel does not flow as mapped
		286833	Double-numbered site, only 1 crossing exists
		286852	Access road does not exist
		286857	Downstream site does not exist/Access road does not exist
		286859	Downstream site does not exist/Access road does not exist
1333	93L.075	284504	Double-numbered site, only 1 crossing exists
		284517	Double-numbered site, only 1 crossing exists
		284522	Double-numbered site, only 1 crossing exists
		286871	Downstream site does not exist
		286874	Downstream site does not exist
		286876	Private land, denied access by owner (says no CV present)
1340	93L.074	284463	Access road does not exist
		286807	Access road does not exist
		286811	Access road does not exist
		286842	Access road does not exist
		286864	Access road does not exist
1341	93L.064	287030	Downstream site does not exist
		287125	Access road does not exist
1355	93L.053	287402	Access road does not exist
		287427	Access road does not exist
	93L.054	287498	Access road does not exist
	93L.063	287259	Downstream site does not exist
		287282	Downstream site does not exist
		287288	Downstream site does not exist
		287294	Downstream site does not exist
		287304	Downstream site does not exist
	93L.064	284622	Road ends ~300m before mapped site
		287301	Downstream site does not exist
		287322	Downstream site does not exist
		287343	Downstream site does not exist
1359	93L.075	286834	Access road does not exist
		286835	Access road does not exist
		286845	Road ends before mapped site
	93L.076	286904	Downstream site does not exist
1361	93L.065	287127	Road too brushed in for access
		287136	Road too brushed in for access
		287217	Road too brushed in for access
		287324	Road too brushed in for access
1362	93L.066	286905	Access road does not exist
		286964	Private land, access denied by landowner
		286971	Private land, access denied by landowner
		287045	Downstream site does not exist

Watershed #	Mapsheet #	Site #	Reason Not Assessed
1362	93L.066	287054	Landowner says access road does not exist
		287056	Landowner says access road does not exist
		287058	Landowner says access road does not exist
		287172	Unable to determine who the landowner is
		287177	Unable to determine who the landowner is
		287196	Double-numbered site, only 1 crossing exists
		287252	Downstream site does not exist
		287274	Downstream site does not exist
	93L.076	286873	Access road does not exist
1364	93L.066	287073	Access road does not exist
		287155	Downstream site does not exist
		287156	Downstream site does not exist
		287204	Downstream site does not exist
		287220	Downstream site does not exist
		287255	Downstream site does not exist
		287256	Downstream site does not exist
		287300	Unable to determine who the landowner is
		287303	Access road does not exist
		287320	Downstream site does not exist
		287328	Downstream site does not exist
		287379	Downstream site does not exist
	93L.067	287185	Downstream site does not exist
1365	93L.066	287115	Road too brushed in for access
	93L.067	284590	Double-numbered site, only 1 crossing exists
		284594	Double-numbered site, only 1 crossing exists
		284599	Double-numbered site, only 1 crossing exists
		284603	Double-numbered site, only 1 crossing exists
		287029	Road does not connect to anything
1368	93L.056	287568	Beaver dam has flooded out access road
	93L.057	287534	Private land, denied access by owner
		287547	Private land, denied access by owner
		287559	Private land, denied access by owner
		287562	Road does not connect to anything
		287564	Private land, denied access by owner
		287565	Private land, denied access by owner
		287571	Private land, denied access by owner
		287583	Private land, denied access by owner
		287585	Private land, denied access by owner
		287709	Road no longer accessible
1413	93M.014	285904	Downstream site does not exist - no channel present
	93M.023	285767	Access road does not exist
		285772	Downstream site does not exist - no channel present
1415	93M.004	286046	Access denied by landowner
		286048	Access denied by landowner
		286049	Access denied by landowner
		286053	Access denied by landowner
		286054	Access denied by landowner
		286060	No access over railway
		286080	Access road does not exist
	93M.014	285998	Access road does not exist
		286002	Access road does not exist

Watershed #	Mapsheet #	Site #	Reason Not Assessed
1416	93M.004	286135	Access road does not exist
1418	93L.094	284319	Downstream site does not exist
		286230	No access road
		286235	Double-numbered site, only 1 crossing exists
		286259	Access road does not exist
		286260	Channels join upstream of road, only 1 crossing present
		286283	Double-numbered site, only 1 crossing exists
		286307	Downstream site does not exist
		286312	Downstream site does not exist
		286313	Downstream site does not exist
		286344	Downstream site does not exist
	93L.095	286229	Access road does not exist
		286246	Access road does not exist
		286263	Access road does not exist
1419	93L.084	286464	Road too brushed in for access
	93L.094	286268	Road ends before mapped site
		286298	Road ends before mapped site
		286314	Road ends before mapped site
		286321	Road does not connect to anything
1420	93L.085	286466	Access road does not exist
		286475	Road ends before mapped site
		286476	Road ends before mapped site
		286490	Landowner lives in states, gate locked
		286491	Landowner lives in states, gate locked
	93L.095	284324	Downstream site does not exist
		286367	Access road does not exist (Landowner says it was never put in)
		286374	Access road does not exist (Landowner says it was never put in)
		286377	Access road does not exist (Landowner says it was never put in)
		286379	Access road does not exist (Landowner says it was never put in)
		286391	Access road does not exist (Landowner says it was never put in)
		286402	Access road does not exist (Landowner says it was never put in)
		286403	Access road does not exist (Landowner says it was never put in)
		286404	Access road does not exist (Landowner says it was never put in)
		286413	Access road does not exist (Landowner says it was never put in)
		286415	Access road does not exist (Landowner says it was never put in)
1422	93L.065	286958	Downstream site does not exist
		286959	Downstream site does not exist
	93L.075	286741	Only 1 crossing present, culverts go under both roads
		286801	Downstream site does not exist
		286802	Downstream site does not exist
1423	93L.066	286923	Access road does not exist
		286942	Private land, access denied by landowner
		287006	Downstream site does not exist
		287010	Downstream site does not exist
		287108	Downstream site does not exist
	93L.076	286894	Private land, access denied by landowner
1425	93L.046	284977	Double-numbered site, only 1 crossing exists
		284978	Double-numbered site, only 1 crossing exists
		284981	Double-numbered site, only 1 crossing exists
		288130	Private land, denied access by owner
		288135	Access road does not exist

Watershed #	Mapsheet #	Site #	Reason Not Assessed
1425	93L.046	288153	Private land, denied access by owner
	93L.056	287495	Road too brushed in for access
		287647	Downstream site has no upstream channel
		287673	Road too brushed in for access
		287675	Road too brushed in for access
		287676	Road too brushed in for access
		287689	Access road washed out
		287715	Double-numbered site, only 1 crossing exists

APPENDIX VII

DATA SUMMARY – HIGHWAY SITES

Date of Assessment (YYYY-MM-DD)	PSCIS ID	My Crossing Reference	Crew Members	UTM Zone	Easting	Northing	Stream Name	Road Name	Road KM Mark	Road Tenure	Crossing Type	Crossing Subtype	Diameter or Span (meters)	Length or Width (meters)	Continuous Embedded ment? Yes/No	Average Depth Embedded ment (meters)	Resemble Channel? Yes / No	Backwatered Yes / No	Percentage Backwatered	Fill Depth (meters)
2013-05-05		M13-47	RC, KR, NC	9	642497.00	6048191.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	0.60	26.88	No		No	No		2.10
2013-05-05		M13-48	RC, KR, NC	9	642073.00	6049009.00	Thompson Creek	Highway 16			Open Bottom Structure	Pipe Arch	7.10	24.10						
2013-05-06		M13-65	RC, KR, NC	9	639025.00	6053553.00	Tributary to Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.60	28.10	No		No	Yes	100.00	2.68
2013-05-06		M13-68	RC, KR, NC	9	638641.00	6054575.00	Tributary to Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.20	19.50	No		No	No		1.23
2013-05-06		M13-70	RC, KR, NC	9	638500.00	6054717.00	Lemieux Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.20	21.00	No		No	No		0.72
2013-05-07		M13-94	RC, KR, NC	9	638100.00	6055053.00	Tributary to Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.60	21.00	No		No	Yes	50.00	2.26
2013-05-07		M13-109	RC, KR, NC	9	636971.00	6056680.00	Robin Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.40	26.50	No		No	No		1.75
2013-05-08		M13-115	RC, KR, NC	9	635489.00	6057497.00	Tributary to Lacroix Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.50	23.21	No		No	No		2.15
2013-05-08		M13-116	RC, KR, NC	9	633422.00	6057445.00	Lacroix Creek	Highway 16			Closed Bottom Structure	Round Culvert	2.00	25.70	No		No	No		2.40
2013-05-09		M13-137	RC, KR, NC	9	627238.00	6061456.00	Tyhee Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.80	40.00	No		No	No		5.04
2013-06-12		M13-349	RC/RO	9	618978.00	6071197.00	Dahlie Creek	Hwy 16			Closed Bottom Structure	Round Culvert	2.00	40.00	No		No	No		1.42
2013-06-24		M13-445	RC/RO	9	621248.00	6066654.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.8	27.00	No		No	No		0.73
2013-06-25		M13-457	RC/RO	9	606630.00	6097190.00	John Brown Creek	Highway 16			Closed Bottom Structure	Round Culvert	8.00	30.00	No		No	No		2.00
2013-06-25		M13-463	RC/RO	9	606436.00	6099733.00	Tributary to Corya Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.60	16.00	No		No	No		1.88
2013-06-25		M13-464	RC/RO	9	606463.00	6100147.00	Tributary to Corya Creek	Highway 16			Closed Bottom Structure	Round Culvert	4.00	30.00	No		No	No		1.60
2013-06-25		M13-467	RC/RO	9	605391.00	6103204.00	Graphite Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.25	17.00	No		No	No		0.48
2013-06-27		M13-495	RC/RO	9	603277.00	6107704.00	East Boulder Creek	Highway 16			Open Bottom Structure	Bridge	28.00	12.00						
2013-06-27		M13-497	RC/RO	9	603162.00	6108700.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.50	30.00	No		No	No		2.50
2013-06-27		M13-500	RC/RO	9	605535.00	6105420.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.60	50.00	No		No	No		3.00
2013-10-30		M13-611	RC	9	586606.00	6122365.00	Station Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.50	99.00	No		No	No		9.99
2013-10-30		M13-615	RC	9	589497.00	6123163.00	Tributary to Waterfall Creek	Highway 16			Closed Bottom Structure	Round Culvert	2.20	30.00	No		No	No		3.60
2013-10-30		M13-623	RC	9	587346.00	6125073.00	Two Mile Creek	Highway 62	3.32		Closed Bottom Structure	Oval Culvert	2.00	32.00	Yes	0.10	Yes	Yes	100.00	1.65
2013-11-01		M13-652	RC	9	597427.00	6119279.00	Mudflat Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.80	45.00	No		No	No		9.99
2013-11-01		M13-653	RC	9	597756.00	6119239.00	Tributary to Mudflat Creek	Highway 16			Closed Bottom Structure	Round Culvert	0.50	60.00	No		No	No		9.99
2013-11-01		M13-654	RC	9	598778.00	6119329.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	0.50	27.00	No		No	No		1.70
2013-11-01		M13-655	RC	9	599689.00	6118948.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.00	40.00	No		No	No		7.00
2013-11-01		M13-658	RC	9	602639.00	6115844.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	1.20	30.00	No		No	No		5.00
2013-11-01		M13-659	RC	9	591609.00	6123085.00	Tributary to Bulkley River	Highway 16			Closed Bottom Structure	Round Culvert	0.80	30.00	No		No	Yes	100.00	3.60
2013-11-01		M13-672	RC	9	597191.00	6119846.00	Bunker Creek	Highway 16			Closed Bottom Structure	Round Culvert	1.50	24.00	No		No	No		1.70
2013-11-02		M13-696	RC	9	610814.00	6117190.00	China Creek	Highway 16			Closed Bottom Structure	Round Culvert	2.30	40.00	No		No	No		5.00
2013-11-09		M13-698	RC	9	603073.00	6113363.00	Porphyry Creek	Highway 16			Closed Bottom Structure	Round Culvert	6.00	80.00	No		No	No		9.99

Outlet Drop (meters)	Outlet Pool Depth (0.01m)	Inlet Drop? Yes / No	Culvert Slope (%)	Downstream Channel Width (meters)	Stream Slope	Beaver Activity? Yes / No	Fish Observed? Yes / No	Valley Fill	Habitat Value	Stream Width Ratio	Culvert Length Score	Embed Score	Outlet Drop Score	Culvert Slope Score	Stream Width Ratio Score	Final Score	Barrier Result	Crossing Fix	Recommended Diameter or Span (meters)	Assessment Comment
0.84	0.45	No	7.00	1.61	3.5	No	No	Deep Fill	Medium	2.68	3	10	10	10	6	39	Barrier	Streambed Simulation	1.61	Grate on CV inlet, embed larger CV if fish present
						Yes	No			0.00	3	0	0	0	0	3	Passable			No access or passage concerns - no action required
0	0.14	No	6.00	1.53	1.5	No	No	Deep Fill	Low	2.55	3	10	0	10	6	29	Barrier	Streambed Simulation		Stagnant channel with poor connectivity - no action required
0.35	0.42	No	3.50	1.52	2	No	No	Deep Fill	Medium	1.27	3	10	10	10	3	36	Barrier	Streambed Simulation	1.52	Embed larger CV if fish present - 2 culverts present
0.03	0.47	No	1.00	2.89	2	No	No	Deep Fill	High	2.41	3	10	0	5	6	24	Barrier	Streambed Simulation	2.89	Embed larger CV if fish present
0	0.00	No	1.00	0.00	1.5	No	No	Deep Fill	Low	0.00	3	10	0	5	0	18	Potential	Streambed Simulation		Channel is primarily drainage, no habitat present - no action required
0	0.53	No	2.50	3.17	3.5	Yes	No	Deep Fill	High	2.26	3	10	0	5	6	24	Barrier	Open Bottom Structure	3.17	Embed larger CV or install OBS if fish present - hole in CV inlet
0	0.25	No	2.50	0.87	3	No	No	Deep Fill	Low	1.74	3	10	0	5	6	24	Barrier	Streambed Simulation		No fish habitat or access - no action required
0	0.17	Yes	1.50	2.22	1.5	No	No	Deep Fill	High	1.11	3	10	0	5	3	21	Barrier	Open Bottom Structure	2.22	Some baffles present in CV - Install OBS if proven a barrier
0.71	0.22	Yes	3.00	2.06	2	Yes	Yes	Deep Fill	High	1.14	6	10	10	10	3	39	Barrier	Open Bottom Structure	2.06	Fish observed in d/s channel - replace with OBS, or backwater and install baffles in CVs if proven a barrier
0.35	0.25	No	2.00	2.62	3	Yes	No	Deep Fill	Medium	1.31	6	10	10	5	6	37	Barrier	Backwater		Backwater or install weirs and baffles
0.25	0.65	No	4.00	0.99	3	No	No	Deep Fill	High	0.55	3	10	5	10	0	28	Barrier	Streambed Simulation	1.00	Embed larger culvert if fish present
0.7	1.50	No	5.00	11.30	5.5	No	No	Shallow Fill	High	1.41	6	10	10	10	6	42	Barrier	Backwater		Culverts likely seasonally passable, install baffles to improve passage
0.12	0.25	No	2.00	3.70	2	No	No	Deep Fill	Low	6.17	3	10	0	5	6	24	Barrier	Streambed Simulation		Road has slumped over both inlet and outlet - material needs to be removed
0	1.50	No	5.00	21.80	8	No	No	Deep Fill	High	5.45	6	10	0	10	6	32	Barrier	Backwater		Install baffles if culvert is a fish barrier
0	0.06	No	2.00	1.41	5	No	No	Deep Fill	High	1.13	3	10	0	5	3	21	Barrier	Streambed Simulation	1.50	Culvert likely passable, if barrier install larger, embedded culvert
						No	No			0.00	0	0	0	0	0	0	Passable			Bridge is in good condition, no passage or access concerns
0.12	0.63	Yes	3.00	1.50	3	Yes	No	Deep Fill	High	1.00	6	10	0	10	3	29	Barrier	Streambed Simulation		Passable if fish present - no action required
0	0.28	Yes	2.00	1.68	4	Yes	No	Deep Fill	High	1.05	6	10	0	5	3	24	Barrier	Streambed Simulation		Beaver cage needs to be cleaned
1.4	1.30	Yes	3.00	5.10	4	No	No	Deep Fill	High	3.40	6	10	10	10	6	42	Barrier	Open Bottom Structure	5.10	Replace with properly embedded culvert or OBS
0	0.00	Yes	3.00	5.20	1	Yes	No	Deep Fill	Medium	2.36	6	10	0	10	6	32	Barrier	Streambed Simulation	5.2	Beaver debris building up, should be removed
0	0.00	No	1.50	2.57	2	No	No	Deep Fill	High	1.29	6	5	0	5	3	19	Potential	Streambed Simulation		Passable, no concerns - no action required
2.2	0.60	No	7.00	6.77	7	No	No	Deep Fill	High	3.76	6	10	10	10	6	42	Barrier	Open Bottom Structure	7.00	Replace with OBS, outlet is washing out badly - Could become a major issue for the highway
0.98	1.49	Yes	8.00	2.21	11	No	No	Deep Fill	Low	4.42	6	10	10	10	6	42	Barrier	Open Bottom Structure	2.30	Replace with OBS if fish present
0.47	0.63	No	3.00	1.16	3	No	No	Deep Fill	Low	2.32	3	10	10	10	6	39	Barrier	Streambed Simulation		No habitat present - no action required
0.9	0.63	No	12.00	5.47	12	No	No	Deep Fill	High	5.47	6	10	10	10	6	42	Barrier	Open Bottom Structure	5.50	Replace with OBS if fish present
3.53	0.14	Yes	7.00	0.51	36	No	No	Deep Fill	Low	0.43	6	10	10	10	0	36	Barrier	Streambed Simulation		No habitat present - no action required
0	0.00	No	2.00	0.80	1	No	No	Deep Fill	Low	1.00	6	10	0	5	3	24	Barrier	Streambed Simulation		Access unlikely - no action required
0	1.59	Yes	0.00	1.50	2	No	No	Deep Fill	High	1.00	3	10	0	0	3	16	Potential	Streambed Simulation		Passable if fish present - no action required
1.13	0.76	Yes	9.00	4.03	7	No	No	Deep Fill	High	1.75	6	10	10	10	6	42	Barrier	Open Bottom Structure	4.10	Replace culverts with OBS
2.75	1.75	Yes	4.00	7.07	4	No	No	Deep Fill	High	1.18	6	10	10	10	3	39	Barrier	Open Bottom Structure	7.10	Replace culverts with OBS

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