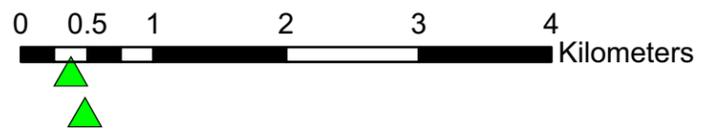


Key Map

**BCTS Mackenzie Operating Area
Visual Impact Assessment
MZAAC and MZAAX Block Shapes
Produced by
RDI Resource Design Inc
May 18, 2021**

- Quesnel-BCTS
 - April_9,_2021_MZAAC,MZAAX_Roads
 - DL7AX_E
 - April_9,_2021_MZAAC,MZAAX_WTRA's
 - April_9,_2021_MZAAC,MZAAX_Block_Shapes
 - Dec_15_Existing_WTRA
 - Dec_15_Proposed_Roads
 - A95985_Roads
 - 14-DL7SM_Roads
 - DL7UJ_2012
 - Dec_15_Existing_Cutblocks
 - A95985_MZ9FA_WTRA
 - 14-DL7SM_WTRA_NP
 - 14-DL7SM_Block
 - Not Visible
 - Visible
- VSU_NUMBER**
- 157
 - 166
 - 174
 - 176
 - 184
 - 206
 - 208



Contents

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3	Viewpoint 21 Photography and Simulation
4	Viewpoint 21 Percent Alteration
5	Viewpoint 24 Photography and Simulations
6	Viewpoint 24 Percent Alteration and Visual Force Analysis

RDI was requested to conduct a new assessment of Mackenzie cutblocks MZAAC and MZAAX on April 9, 2021. The request, under contract PD18TEB007, was made by Ches Clem, RPF, Contract Administrator. A data link was provided which included the cutblocks and WTRAs. RDI previously assessed the cutblocks as MZ_2020_03 and MZ_2020_06 on December 29, 2020. For the 2020 assessment, RDI received adjacent nonVEG, existing WTRAs proposed roads, and photography from three viewpoints, one of which was obscured by roadside vegetation. RDI made recommendations to observe the visual force lines by strengthening visual forces travelling through and between the cutblocks by adding and broadening leave strips. RDI was concerned that the cutblock concentration, size, and shapes together would have become a focal point of considerable visual impact that needed reduction, separation, or dispersal in the landform.

RDI received the new cutblock and WTRA data and entered them into the existing ArcMap and Visual Nature Studio models. Full panoramic simulations were produced from 2 open viewpoints (VP's 21 and 24), and also in bare land format to observe the structure of the terrain to assist visual force analysis. The new cutblocks will sit within VLU 931 which has a Modification VQO. This is called Landform 2A. A portion of VLU 1169 sits at the bottom southeast (lower left) portion of the landform, termed Landform 2B for distinction as it has a Partial Retention VQO and must be considered separately.

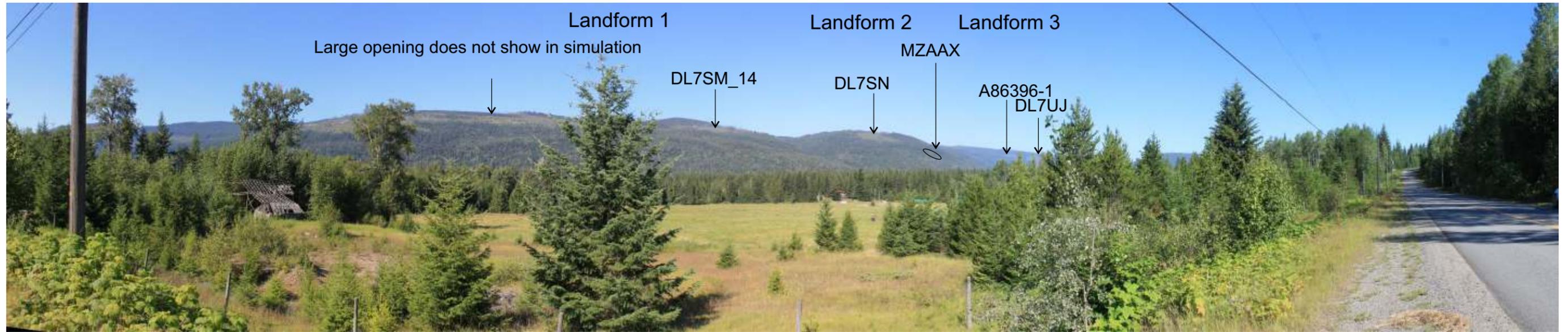
In the 2020 report, VLU 1169 and VLU 931 were joined together to create the most southerly landform, Landform 1, as both units have the Partial Retention VQO. An un-recorded gap in the VLI between L1 and L2 was added to the landforms, mainly to L2 as seen from Viewpoint 21. Beyond L2 to its north is a broad unrecorded area in the VLI which was termed Landform 3. Beyond that is a Modification polygon, VLU 913. As the un-recorded L3 sits between two Modification polygons, it seemed reasonable to assign the same VQO to that un-assigned polygon.

Percent Alteration calculations were produced from VP 21 and VP 24. Both VP 21 (10.99%) and VP 24 (10.32%) are soundly within the Modification VQO range of allowed percent alteration (7.1% - 18.0%). The revised layout with WTRAs provided to RDI by BCTS on April 9, 2021 reduced perspective percent alteration as seen from VP 24 from 18.62% to 10.32% - a 44% reduction. The cutblocks and WTRAs together provide a very satisfactory enhancement through strengthened visual force lines through and between the cutblocks, thereby providing good shape and pattern, and thereby fully allaying RDI's previous concerns. The calculation tables are provided on the viewpoint analysis sheets. Viewpoint 21 has not been re-calculated due to the minor contribution of MZAAX (now even smaller than the original 1% in perspective view).

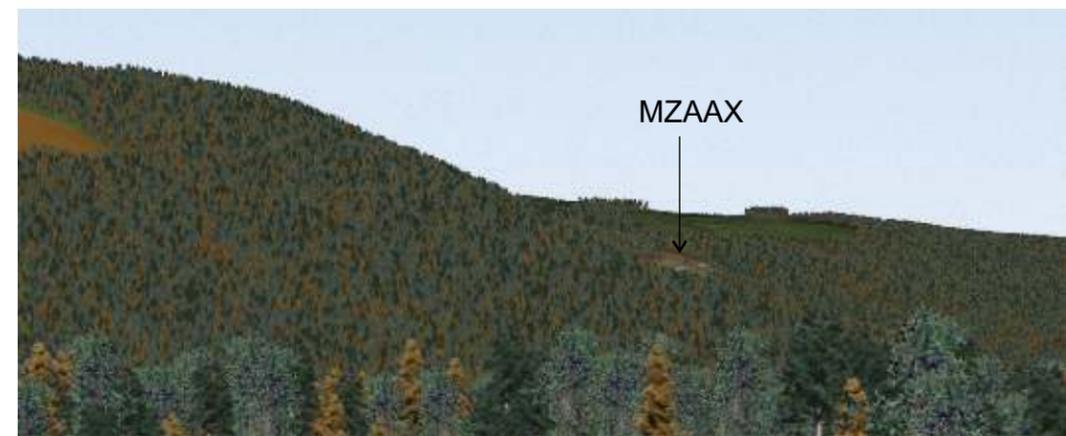
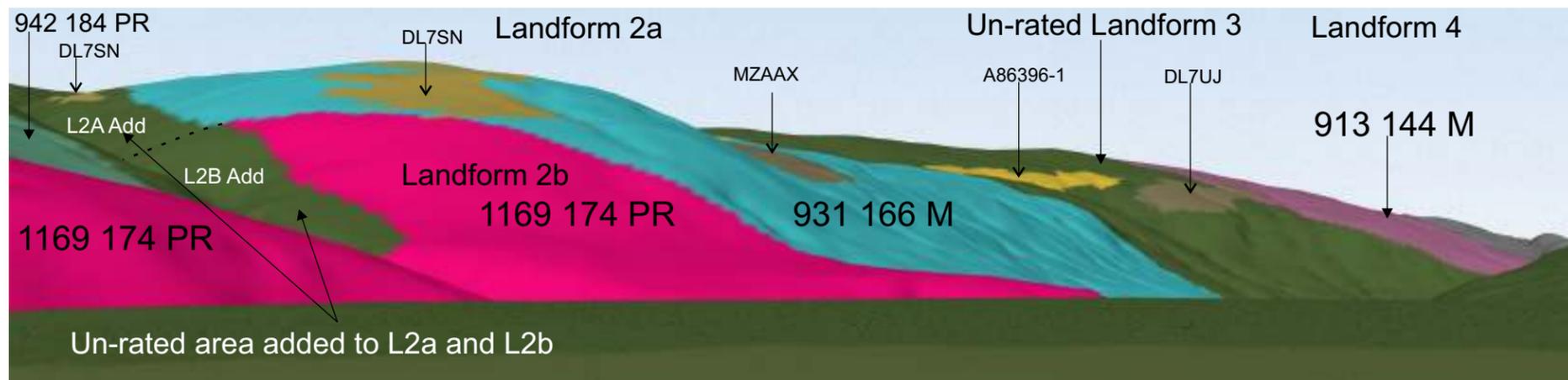
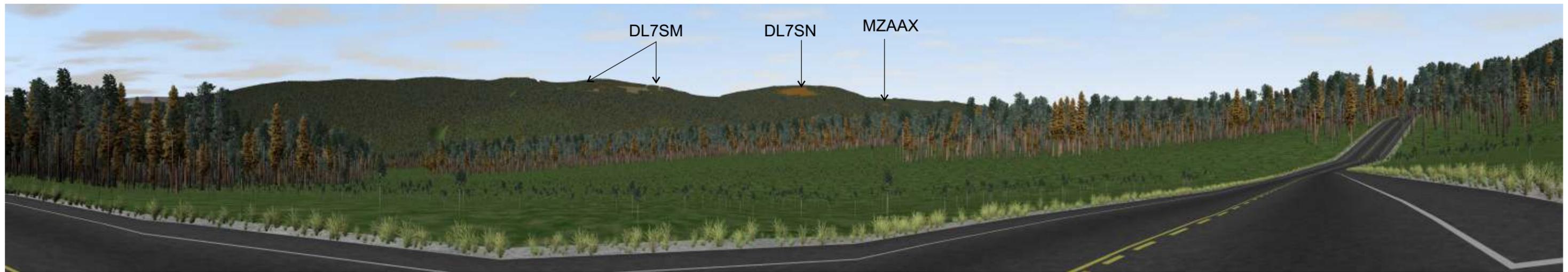
BCTS is to be applauded for their diligence in ensuring the Visual Quality Objectives are met from these important viewpoints along the Clearwater - Wells Gray Provincial Park Road.



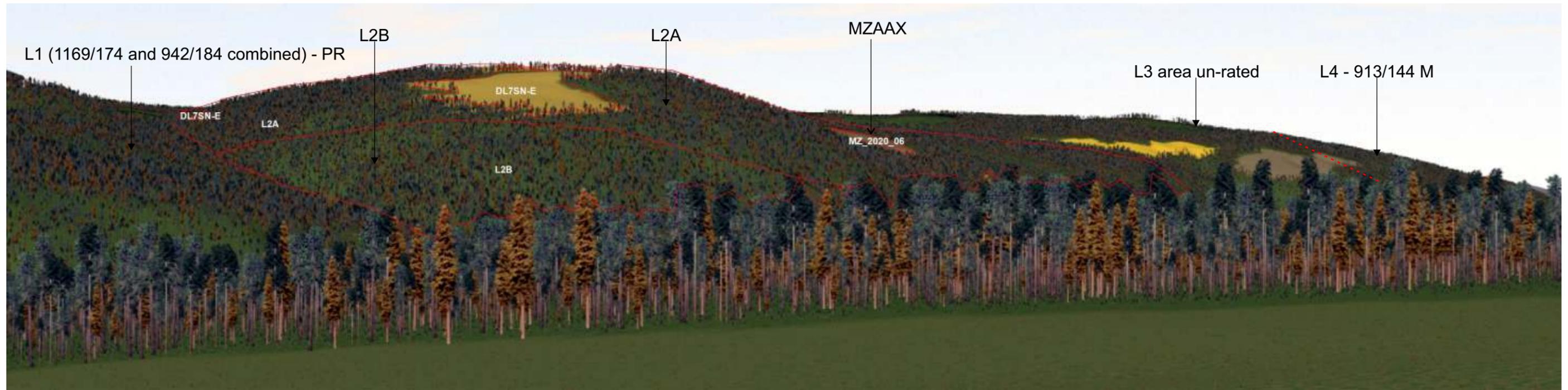
Ken B. Fairhurst, PhD, RPF
 RDI Resource Design Inc
 May 18, 2020



Photos by Ches Clem; Panorama by RDI



Viewpoint 21: 51 48 53.5, 120 01 32.4



Landform 2B is part of VLI Polygon 1169 / VSU 174 which has a Partial Retention VQO and is kept separate from Landform 2A (VLI Polygon 931 / VSU 166) which has a VQO of Modification. Area to right (north) of L2 is un-rated in VLI and is called L3 by RDI. L3 is between Modification polygons L2 and L4 and therefore should receive the same recommended VQO.

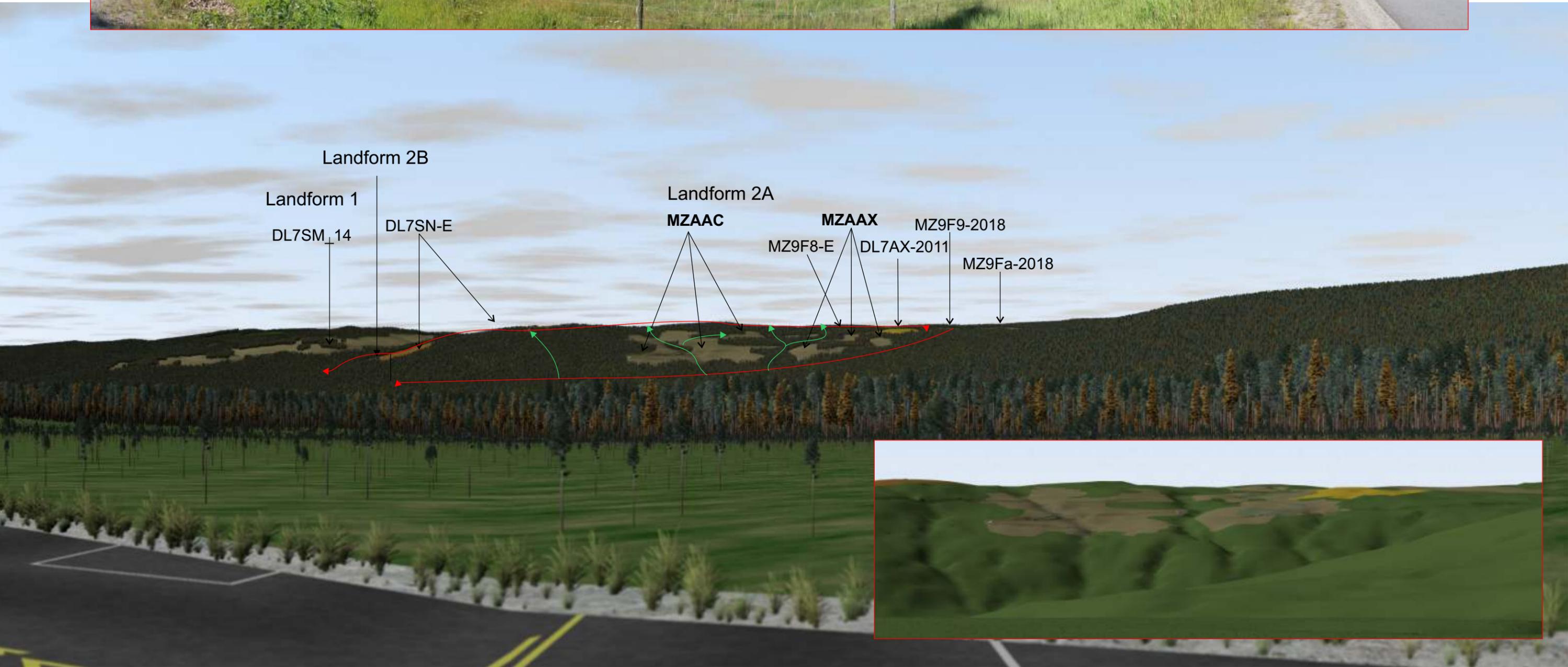
Percent Alteration Landform 2A from VP 21		
Name	AREA2	% Alt
L2A	114252.48	
DL7SN-E	11446.63	10.02%
DL7SN-E	155.76	0.14%
MZAAX	959.06	0.84%
Sum Alt L1A	12561.45	10.99%
L2B	83518.07	
Sum Alt L2	0.00	0.00%

Percent Alteration for MZAAX not re-calculated from previous report due to minor extent.
 Total percent alteration meets Modification Visual Quality Class (7.1% - 18%)



Photos by Ches Clem; Panorama by RDI

Area of Interest



Landform 2B

Landform 1

DL7SM_14

DL7SN-E

Landform 2A

MZAAC

MZAAX

MZ9F9-2018

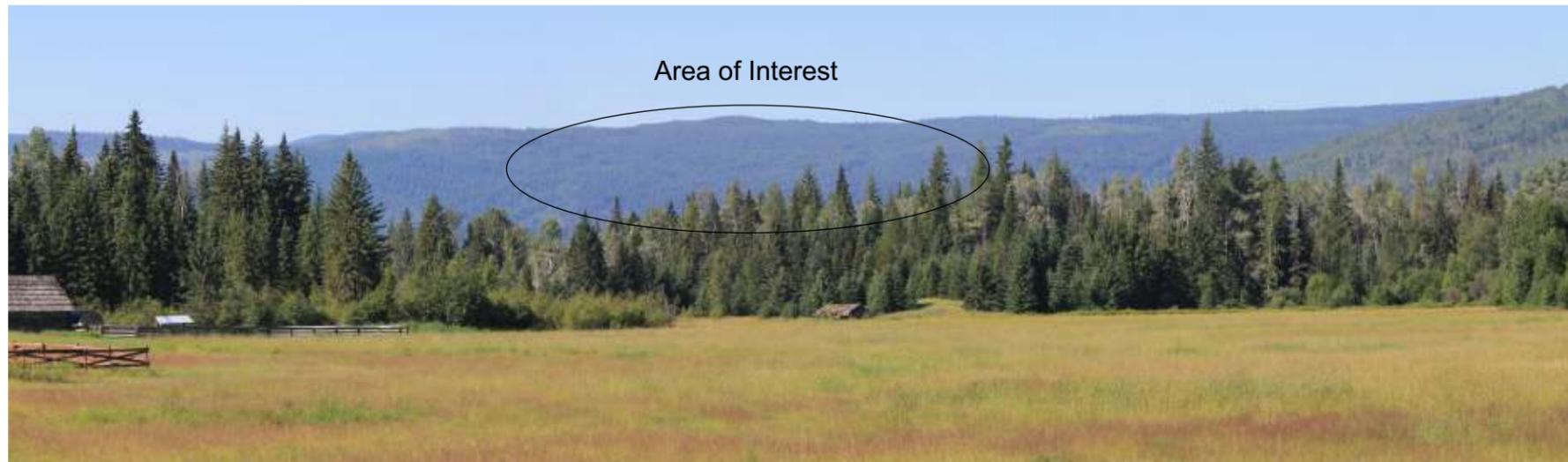
MZ9F8-E

DL7AX-2011

MZ9Fa-2018

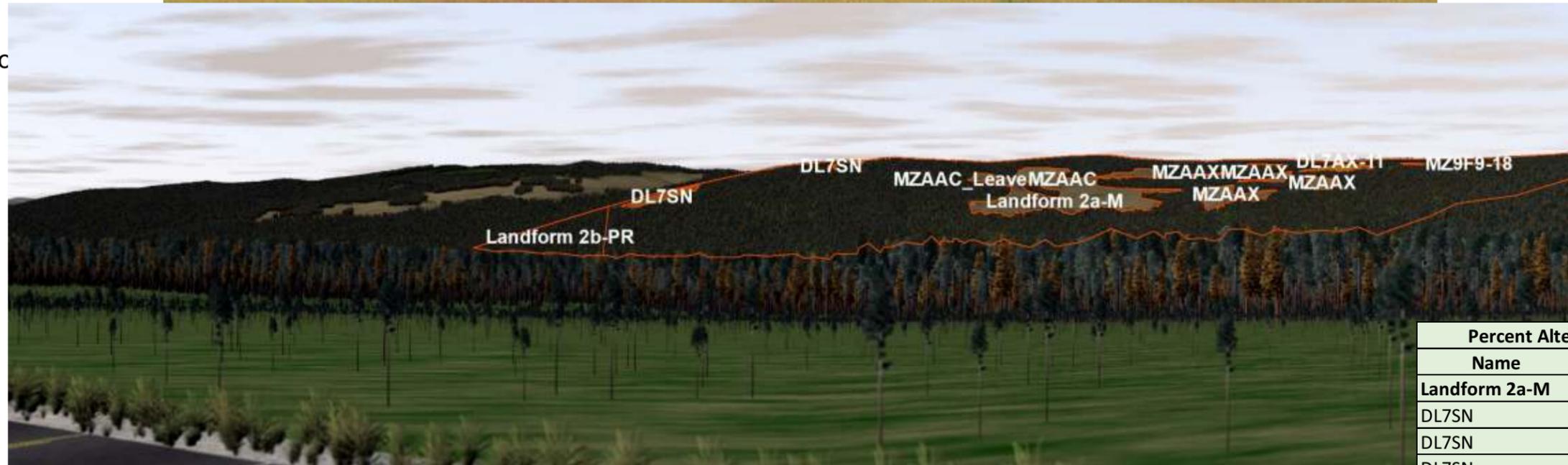
- Visual Force Convexity
- Visual Force Concavity

Viewpoint 24: 51 52 49.8, 120 01 13.4

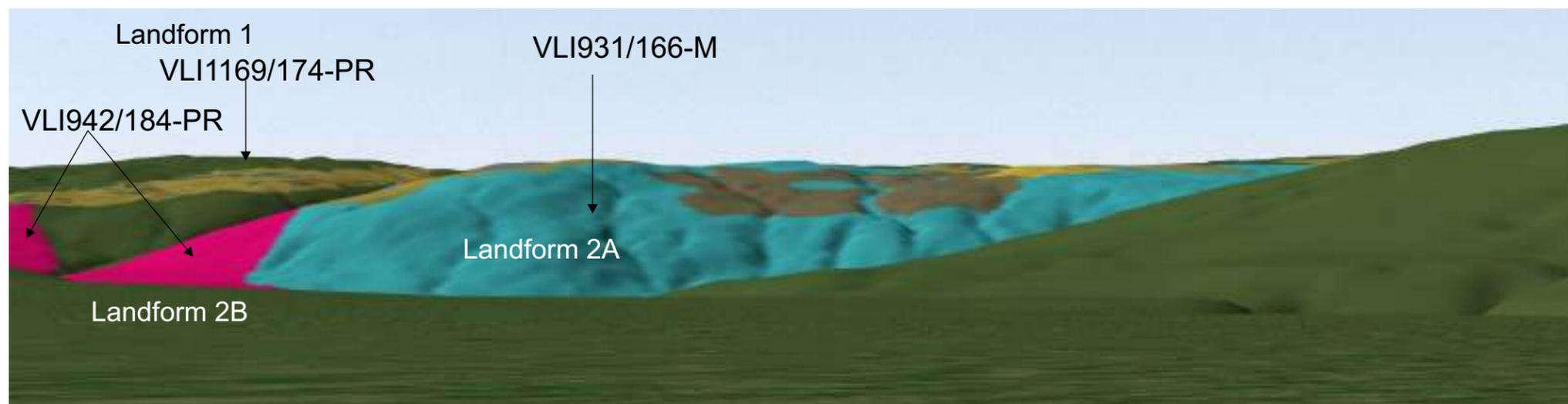


Photos by Ches Clem; Panorama by RDI

Landfc



Percent Alteration VP24 Mackenzie 2021		
Name	AREA2	%Alt
Landform 2a-M	360729.14	
DL7SN	1934.75	0.54%
DL7SN	113.76	0.03%
DL7SN	63.88	0.02%
MZAAC	28284.70	7.84%
MZAAC_Leave	-1722.06	-0.48%
MZAAX	160.61	0.04%
MZAAX	237.57	0.07%
MZAAX	4197.47	1.16%
MZAAX	851.19	0.24%
MZAAX	1367.36	0.38%
MZ9F8	117.56	0.03%
MZAAX	68.04	0.02%
DL7AX-11	1175.61	0.33%
MZ9F9-18	120.32	0.03%
MZ9F9-18	140.55	0.04%
MZ9FA-18	117.33	0.03%
Sum Alt 2a-M	37228.63	10.32%
Landform 2b-PR	17418.69	0.00%



Viewpoint 24 Percent Alteration