

| Contents | | | | |
|----------|---|--|--|--|
| Page | Description | | | |
| 1 | Key Map | | | |
| 2 | Contents | | | |
| 3 | Summary Report | | | |
| 4 | CC9 Viewpoint Simulations / Photography | | | |
| 5 | CC9 Percent Alteration | | | |
| 6 | CC8 Simulations / Visual Force Analysis / Photography | | | |
| 7 | CC7 Simulations / Visual Force Analysis / Photography | | | |
| 8 | CC6 Simulations / Photography | | | |
| 9 | CC5 Simulations / Photography | | | |
| 10 | CC4 Simulations / Photography | | | |
| 11 | CC4 Percent Alteration | | | |
| 12 | CC3 Simulations / Photography | | | |
| 13 | CC2 Simulations / Photography | | | |
| 14 | CC1 Simulations / Photography | | | |

Peddie 2022 Visual Assessment Summary - Interim Report

RDI was provided a data link and go-ahead under contract # PD23TEB097 for the Peddie 2022 visual project by Ches Clem, Project Administrator, BC Timber Sales Kamloops Business Area on June 12, 2022. The data included shapefiles for 13 newly proposed cutblocks, Existing recent cutblocks, WTRA's, new roads (see Table 1). As well, Ches provided recent photography from nine photopoints selected by him along Highway 5 in and around Blue River, numbered consecutively from south to north along an 18 km segment of the highway, plus a view from Eleanor Lake dock. The photopoints were GPS'd by Ches (lower Table 1) and formed the sum of points analysed by RDI when producing the Visual Nature Studio simulations. The cutblocks, Visual Sensitivity Units, Viewpoints and other relevant information are shown on the key map on page 1 of this document. RDI had previously provided a Visual Impact Assessment for the area in 2017. We updated the archived ArcGIS and VNS projects, and commenced our analyses. Ches was soon to depart from BCTS to assume a new position in the Inventory Branch, so administrative responsibilities were passed on, in the interim, to his Supervisor, Jenn Gibson, BCTS Planning Officer.

Renderings were produced from each photopoint utilizing stand heights from the updated 2022 Forest VRI. The northern viewpoints CC6 through CC9 required only single-frame renderings for adequate coverage, while mid viewpoints CC2 through CC6 required multiple images to produce the panoramas. Viewpoint CC1 required just a single image. In addition to fully treed simulations depicting the visual results of the cutblocks, RDI also prepared a full set of bare-land renderings depicting the various Visual Sensitivity Units relating to the cutblocks in each view for ease of tracking and labelling in the final CorelDraw document. Percent alteration was calculated from two viewpoints - CC9 in the north at the junction with the Mud FSR. and CC4 midway along the highway. The two viewpoints provided the most open viewing opportunities towards the cutblocks. The percent alteration calculations were performed on the relevant viewpoint simulation exported into ArcGIS for digitizing and measurement, and tabulated in Excel spreadsheets by landform (VSU). The final CorelDraw document was fully labelled for ease of tracking of each cutblock and VSU.

Results

The Cutblock Visibility (Table 2) indicates that of the 13 proposed cutblocks, all but 4 will have at least some predicted visibility, though intervening trees may obscure some portions in reality. Visibility ranges from very small to very large. PE 2018 14 (a recce block only) and PEAML were considered to be very large from their respective viewpoints. PE 2018 14 traverses two VSUs with different VQOs. The southern (left side in the renderings) is in VSU 847 with a Partial Retention VQO. The total percent alteration from CC9, including existing recent openings in VSU 847-PR, is predicted to be 20.97% in perspective view, triple the upper limit of 7% for PR. The large northern portion (right side in the renderings) of PE 2018 14 is in VSUs 846 and 852 which have Modification VQOs. RDI merged the Modification VSUs on the hillside while excluding VSU 824 which is a separate low hill. The results indicate Percent Alteration for that portion to be 13.68%, within the upper limit of Modification of 18%. The linework for each of these scenarios is presented on page 5.

We also provided a combination crossing all the VSUs and unclassified visible terrain for comparison if all were considered to be PR (Table 3). The Blended VQO would also be exceeded at 16.46%, more than double the limit for PR. The recce block will require substantial adjustment to bring it within the VQO limits, whether split (PR and M) or combined (PR).

Percent Alteration from CC4 indicates that the presence of one large cutblock (PEAML) and three small cutblocks as revealed on page 11 will create 3.30% alteration, well within the Modification VQO limit of 18% for VSU 855. Limited visual force analyses (CC8, page 6) indicates good conformity with visual force lines. Thge VSU linework further defines the visual forces. Further analysis and design suggestions were deemed premature by RDI given the recce status of PE 2018 14.

KB Fairhurst, PhD, RPF RDI Resource Design Inc June 26, 2022

Table 1 - Ches Clem's Notes to RDI

| BCTS Proposed Block | Gross Area | Block State | | |
|------------------------|------------|-------------------------------------|--|--|
| PE8ME | 9.1 | Preliminary layout completed | | |
| PEAML | 27.9 | Preliminary layout completed | | |
| PEABR | 9.7 | Preliminary layout completed | | |
| PEAMN | 5.7 | Preliminary layout completed | | |
| PE_2022_02 | 16.3 | Recce block, no layout completed | | |
| PEA9R | 41.5 | Preliminary layout completed | | |
| PEA9M | 26.0 | Preliminary layout completed | | |
| PEAB6 | 32.9 | Preliminary layout completed | | |
| PE_2021_02 | 26.6 | Recce block, no layout completed | | |
| PEAM2 | 3.6 | Preliminary layout completed | | |
| PEAMO | 6.2 | Preliminary layout completed | | |
| PEABW | 23.2 | Preliminary layout completed | | |
| PE_2018_14 | 58.8 | Recce block, no layout completed | | |

Viewpoints: from south to north

- 51 59'05.0"N 119 20'21.5"W
- 51 59'41.9"N 119 20'05.5"W
- 52 00'17.9"N 119 20'06.8"W
- 52 00'34.0"N 119 20'10.8"W
- 52 01'09.8"N 119 20'24.9"W (bridge crossing the North Thompson River)
- 52 06'34.0"N 119 18'34.4"W (Blue River Petro Can gas station)
- 52 06'43.5"N 119 17'56.0"W (Eleanor Lake dock)
- 52 07'29.1"N 119 17'41.6"W (Hwy 5 pullout)
- 52 07'57.6"N 119 17'13.7"W (Mud FSR junction with Hwy 5, aka River Safari turnoff)

Table 2

| CLITPLOCK | 2022 Ches Clem Photopoints - Cutblock Visibility Table | | | | | | | | |
|------------|--|-------------|--------------|------------|---------------|-----------|------------|--------------|-------|
| CUTBLOCK | CC9 | CC8 | CC7 | CC6 | CC5 | CC4 | CC3 | CC2 | CC1 |
| PE_2018_14 | VL | VL | VL | VL | | | | | |
| PEABW | | | | | | | | | |
| PEAM0 | | | | | | | | | |
| PEAM2 | | | | | VS (POT) | VS (POT) | VS (POT) | VS (POT) | |
| PE_2021_02 | | | | | | | | | |
| PE_2022_02 | | | | | VS | | | | |
| PEAB6 | | | | | | | | | |
| PEAML | VS | | | | VL | VL | VL | VS | |
| PE8ME | | | | | | VS | V | VS | |
| PEA9M | | | | | | VS | | | |
| PEA9R | VS | | | | | VS | VS | | |
| PEAMN | | | | | | | VS | | |
| PEABR | VS | | | | | | | | |
| | Visible: VI | L=Very Larg | ge; V=Visibl | e; VS=Very | / Small; VS (| POT)=Very | Small (Pot | entially Vis | ible) |

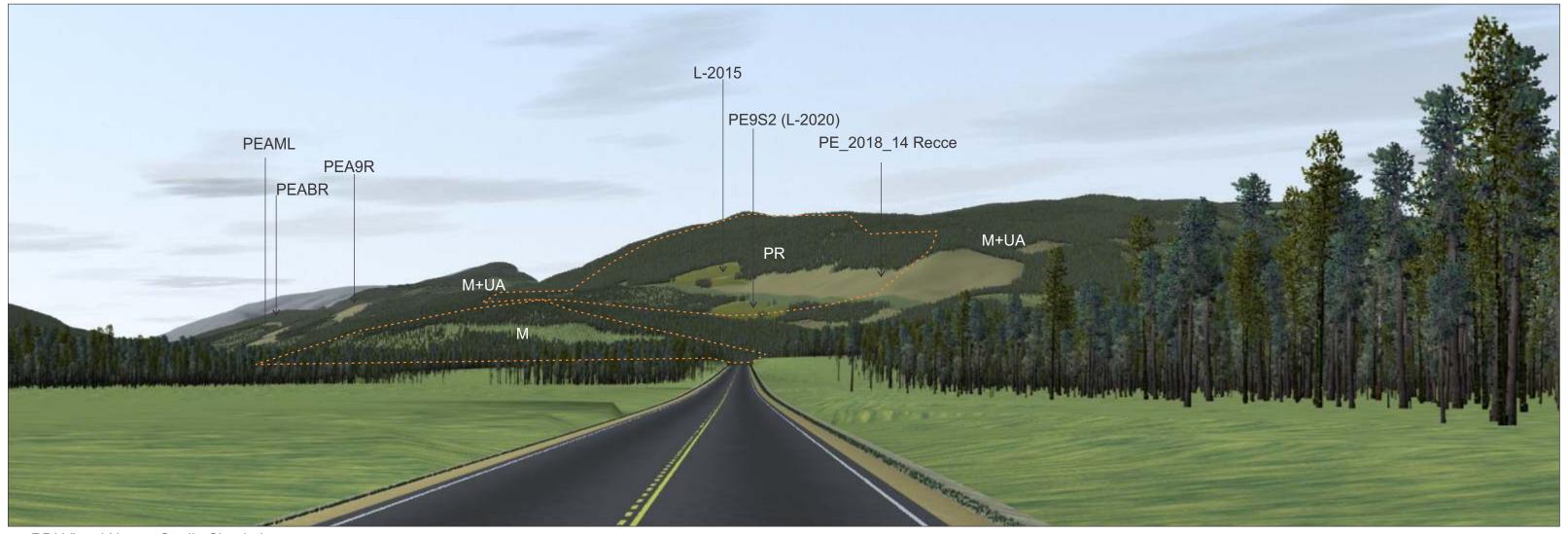
★ PE_2018_14 is Recce only and will be field-modified

Table 3

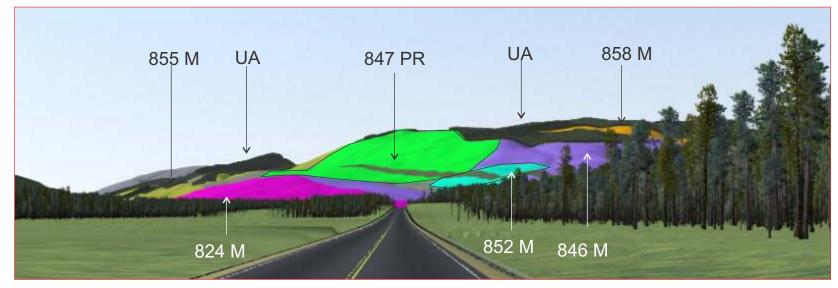
| | Percent Alteration Peddie 2022 from Viewpoint CC9 - Turnoff | | | | |
|---|---|------------|--------|--|--|
| | NAME | AREA2 | % Alt | | |
| | VSU 847-PR | 276960.89 | | | |
| * | PE_2018_14_Recce_PR | 34651.39 | 12.51% | | |
| | L-2020 | 9335.45 | 3.37% | | |
| | L-2015 | 14092.80 | 5.09% | | |
| | Sum Alt 847-PR | 58079.64 | 20.97% | | |
| | | | | | |
| | VSU 855-1-M | 15471.72 | | | |
| | No Change / Sum Alt | 0.00 | 0.00% | | |
| | | | | | |
| | VSU 846-852-858-M & UA | 359080.75 | | | |
| * | PE_2018_14_Recce_M | 49135.20 | 13.68% | | |
| | Sum Alt 846-852-858-UA | 49135.20 | 13.68% | | |
| | | | | | |
| | VSU 824-M | 150619.54 | | | |
| | No Change / Sum Alt | 0.00 | 0.00% | | |
| | | | | | |
| | VSU 855-2-M | 107681.00 | | | |
| | PEA9R | 2515.26 | 2.34% | | |
| | PEAML | 2055.64 | 1.91% | | |
| | PEABR | 291.65 | 0.27% | | |
| | Sum Alt 855-M | 4862.55 | 4.52% | | |
| | Landform Exceeding VQO - VSU 847-PR Above PR Limit of 7.0% | | | | |
| | Alternate Strategy if VSUs combined with PR VQO | | | | |
| | Sum Alt 846+847+852+855-1+858+UA | 651513.35 | | | |
| | Sum alteration in combined PR | 107214.84 | 16.46% | | |
| | 4 DE 0040 444 1144 1144 1144 | 0.4= (0.0) | | | |

* PE_2018_14 is split between VSU 847 (PR) and 847-852-858-M & UA

| lable 4 | | | | | |
|---|------------|-------|--|--|--|
| Percent Alteration Peddie 2022 from Viewpoint CC4 | | | | | |
| NAME | AREA2 | % Alt | | | |
| VSU 855-2 M | 1447771.06 | | | | |
| PEAML | 42277.13 | 2.92% | | | |
| PEAML | 689.31 | 0.05% | | | |
| PEA9R | 628.96 | 0.04% | | | |
| PEAMN | 790.68 | 0.05% | | | |
| PEAMN | 55.95 | 0.00% | | | |
| PEAMN | 29.86 | 0.00% | | | |
| PEAME | 3263.93 | 0.23% | | | |
| Sum Alt VSU 855-2 (M) | 47735.83 | 3.30% | | | |



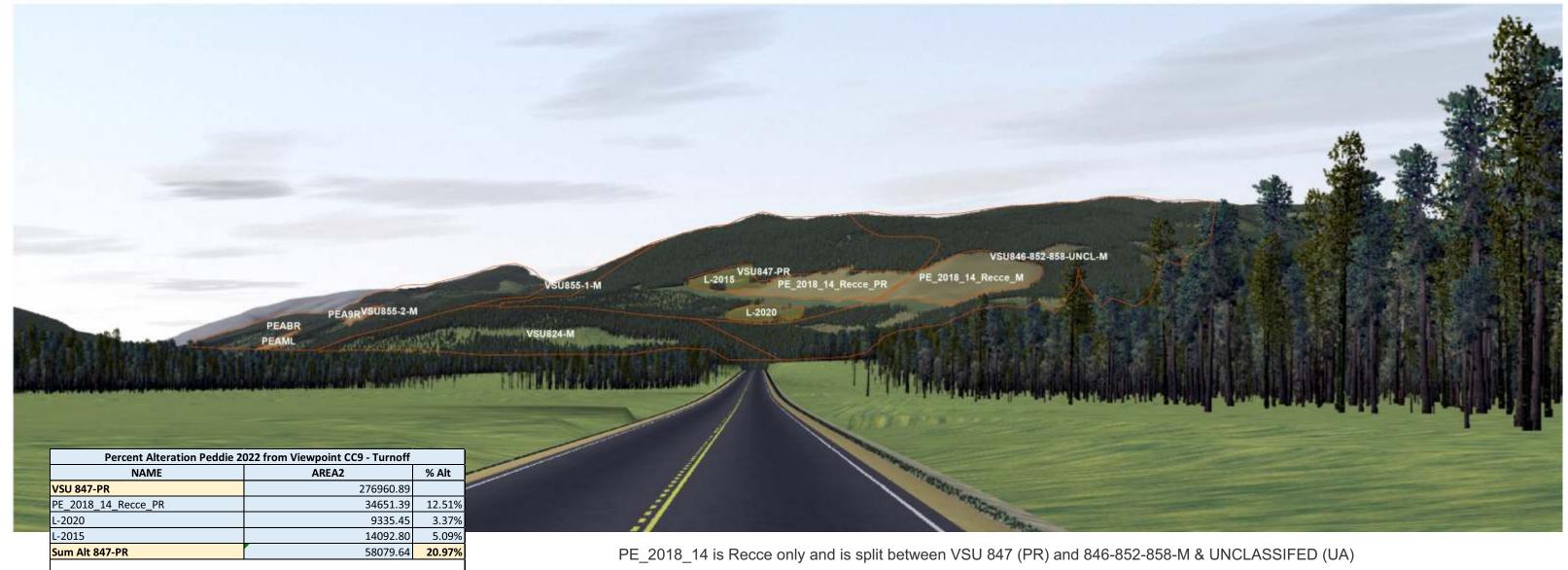
RDI Visual Nature Studio Simulation



RDI Visual Nature Studio Bare Ground VQO Simulation



Ches Clem Photos 2022; RDI Panorama





Ches Clem Photos 2022; RDI Panorama



15471.72

359080.75

49135.20

49135.20

150619.54

107681.00

2515.26

2055.64

291.65

4862.55

651513.35

107214.84 **16.46**%

0.00

0.00

0.00%

13.68%

13.68%

0.00%

2.34%

1.91%

0.27%

4.52%

20.97%

VSU 855-1-M No Change / Sum Alt

VSU 824-M

VSU 855-2-M

Sum Alt 855-M

Landform Exceeding VQO - VSU 847-PR Above PR Limit of 7.0%

Alternate Strategy if VSUs combined with PR VQO

Sum Alt 846+847+852+855-1+858+UA

Sum alteration in combined PR

PEA9R

PEAML

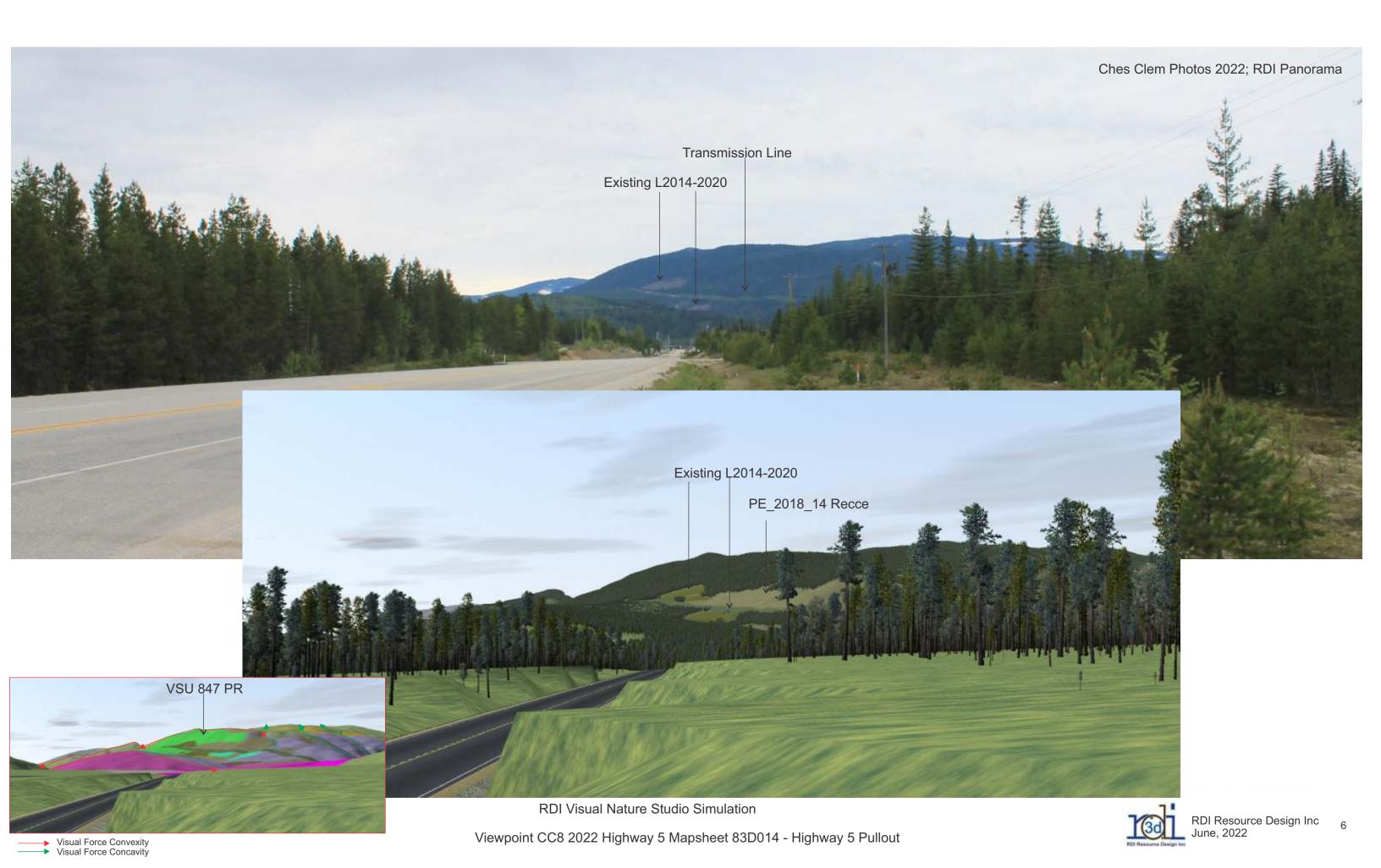
PEABR

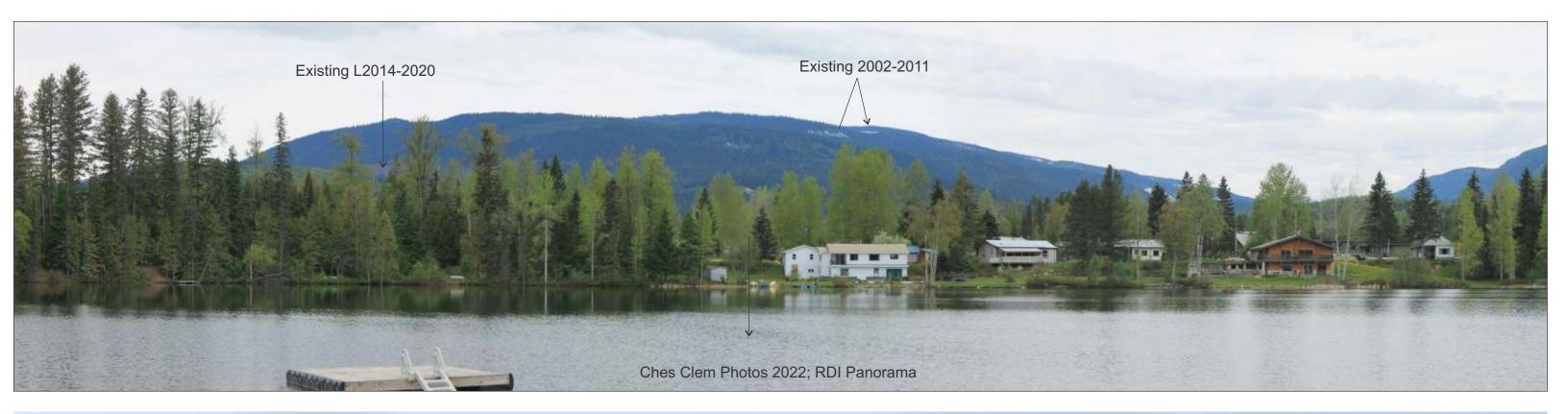
VSU 846-852-858-M & UA

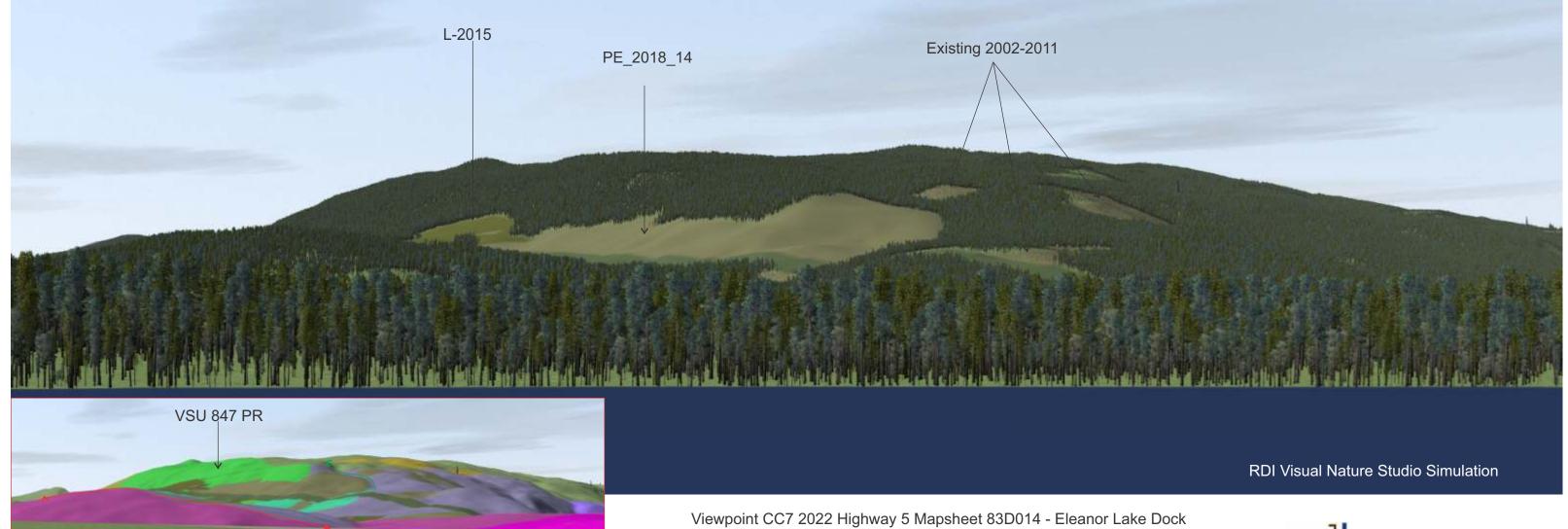
PE_2018_14_Recce_M

No Change / Sum Alt

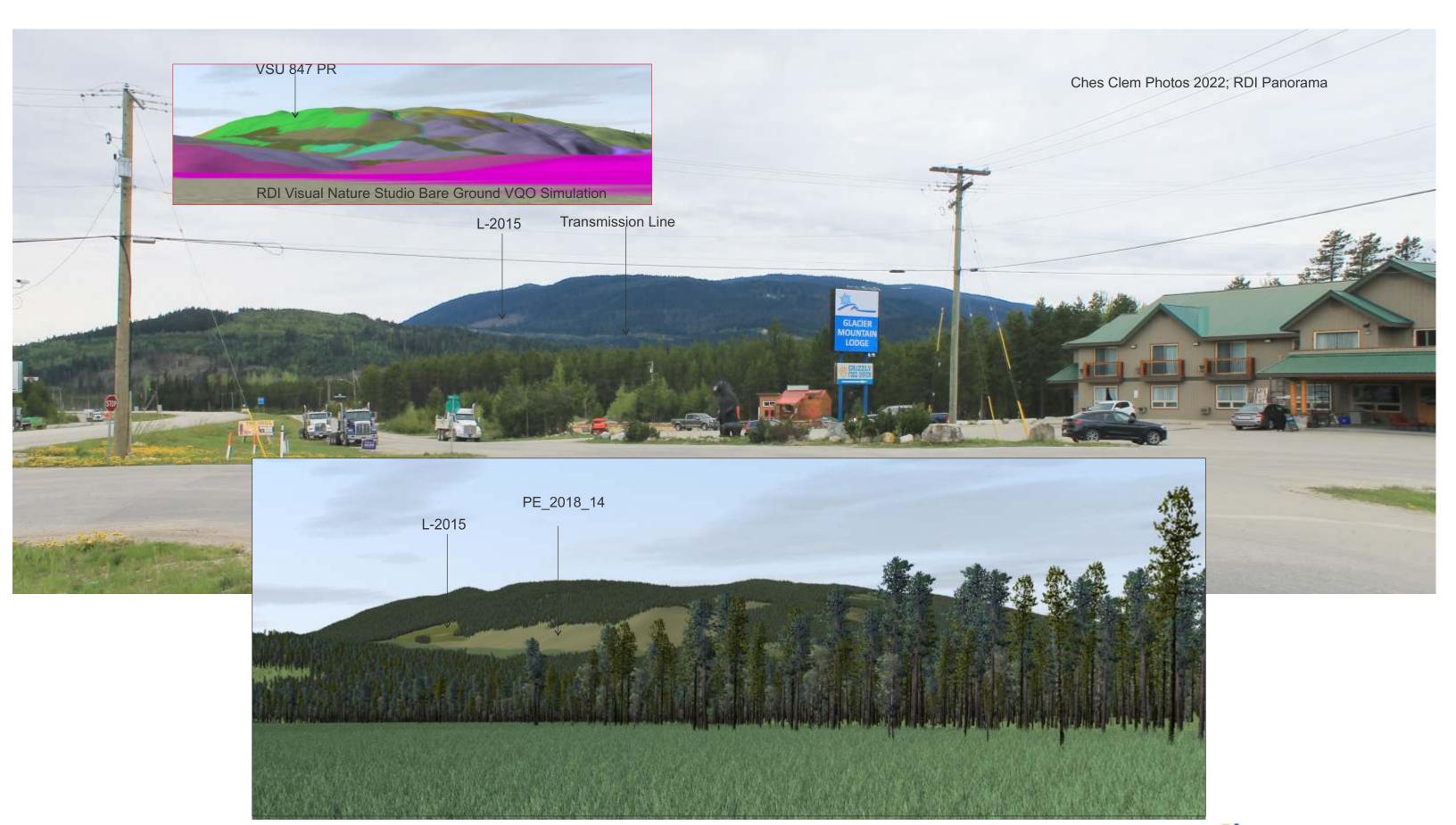
Sum Alt 846-852-858-UA







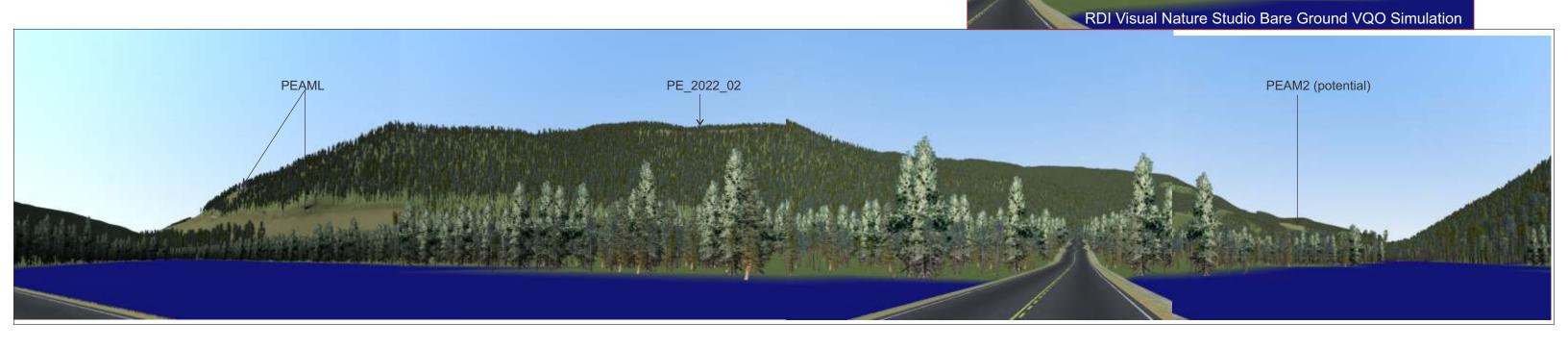
Visual Force Convexity Visual Force Concavity



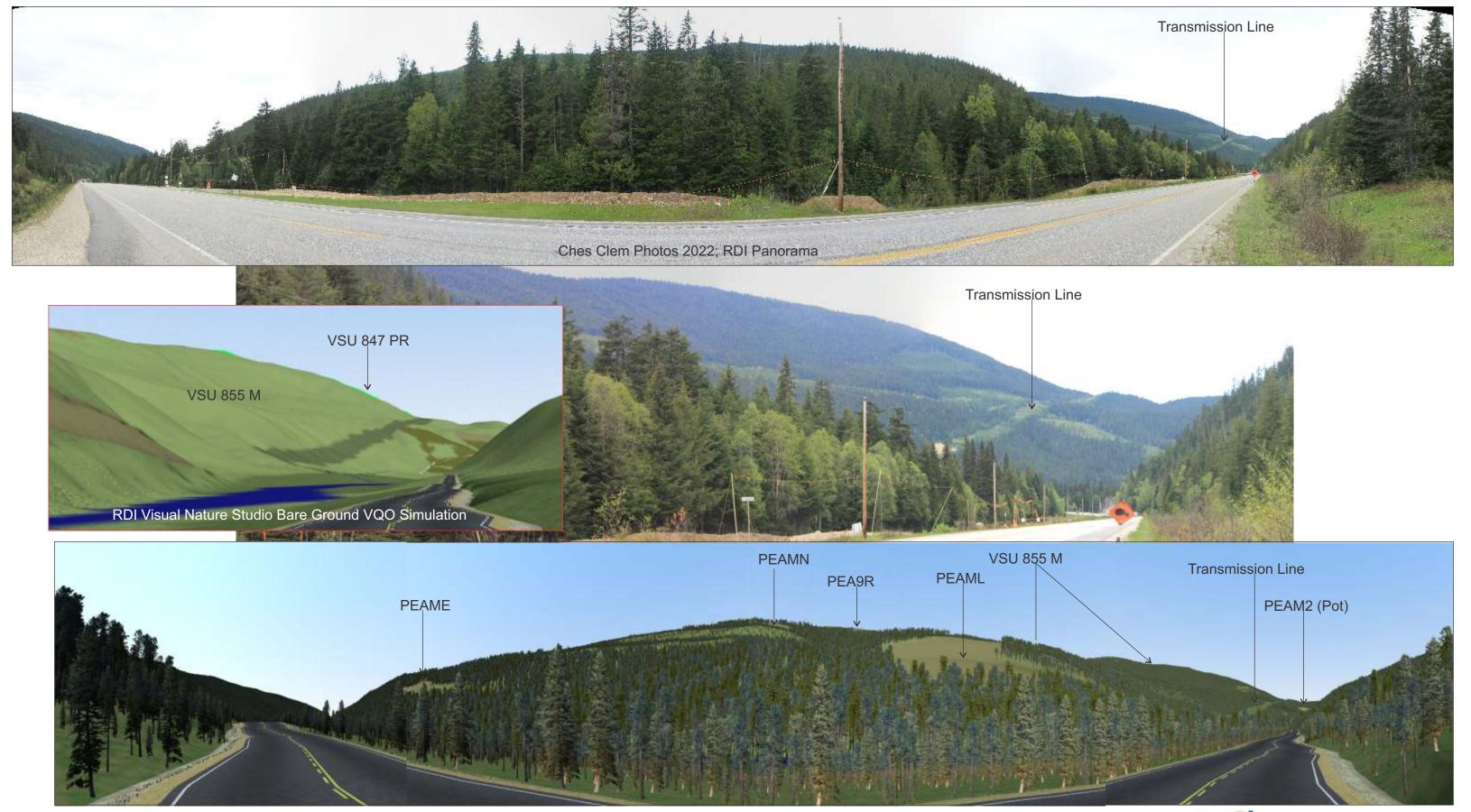
RDI Visual Nature Studio Simulation

Viewpoint CC6 2022 Highway 5 Mapsheet 83D014 - PetroCanada Station





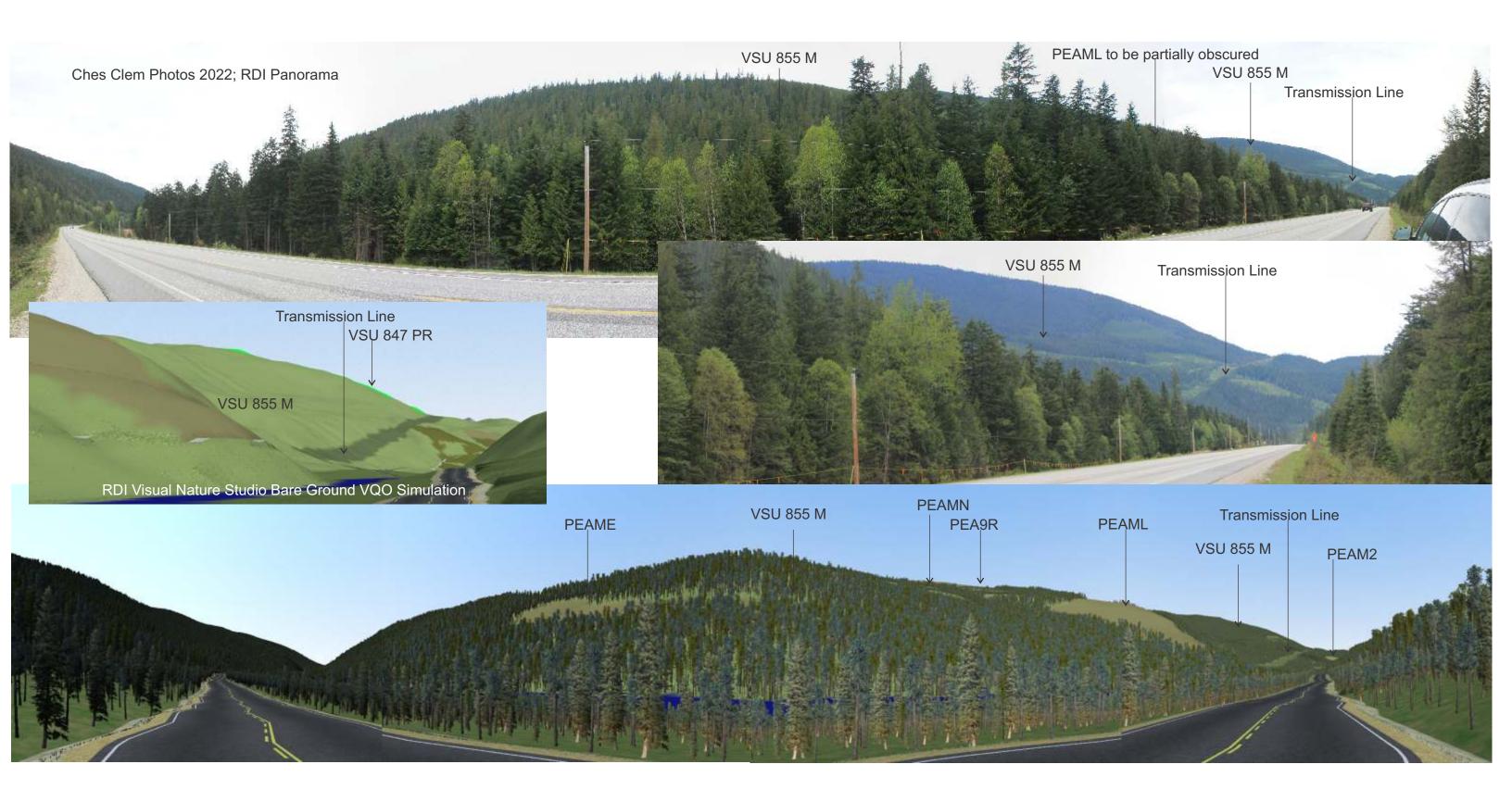
RDI Visual Nature Studio Simulation



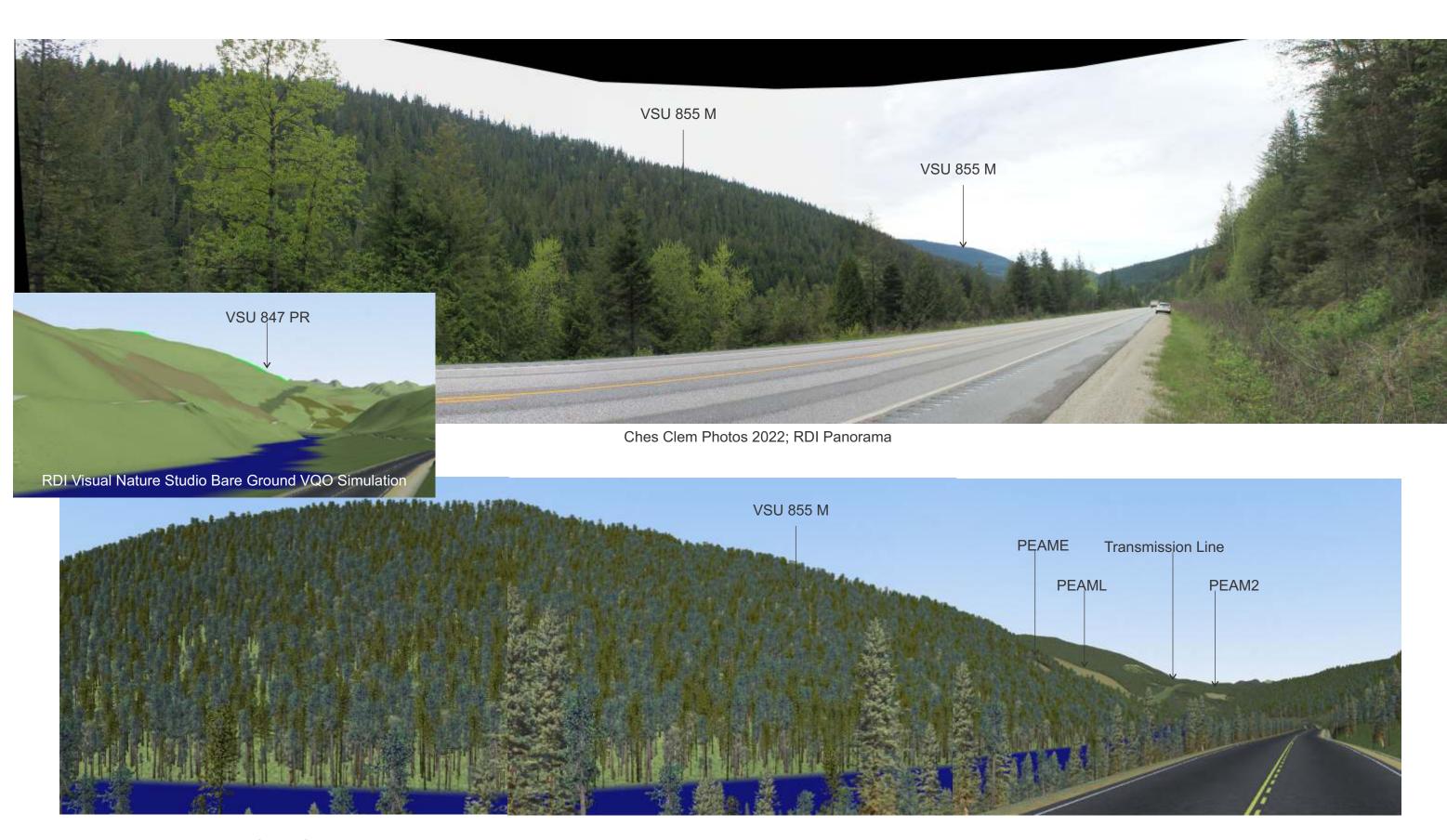
RDI Resource Design Inc June, 2022



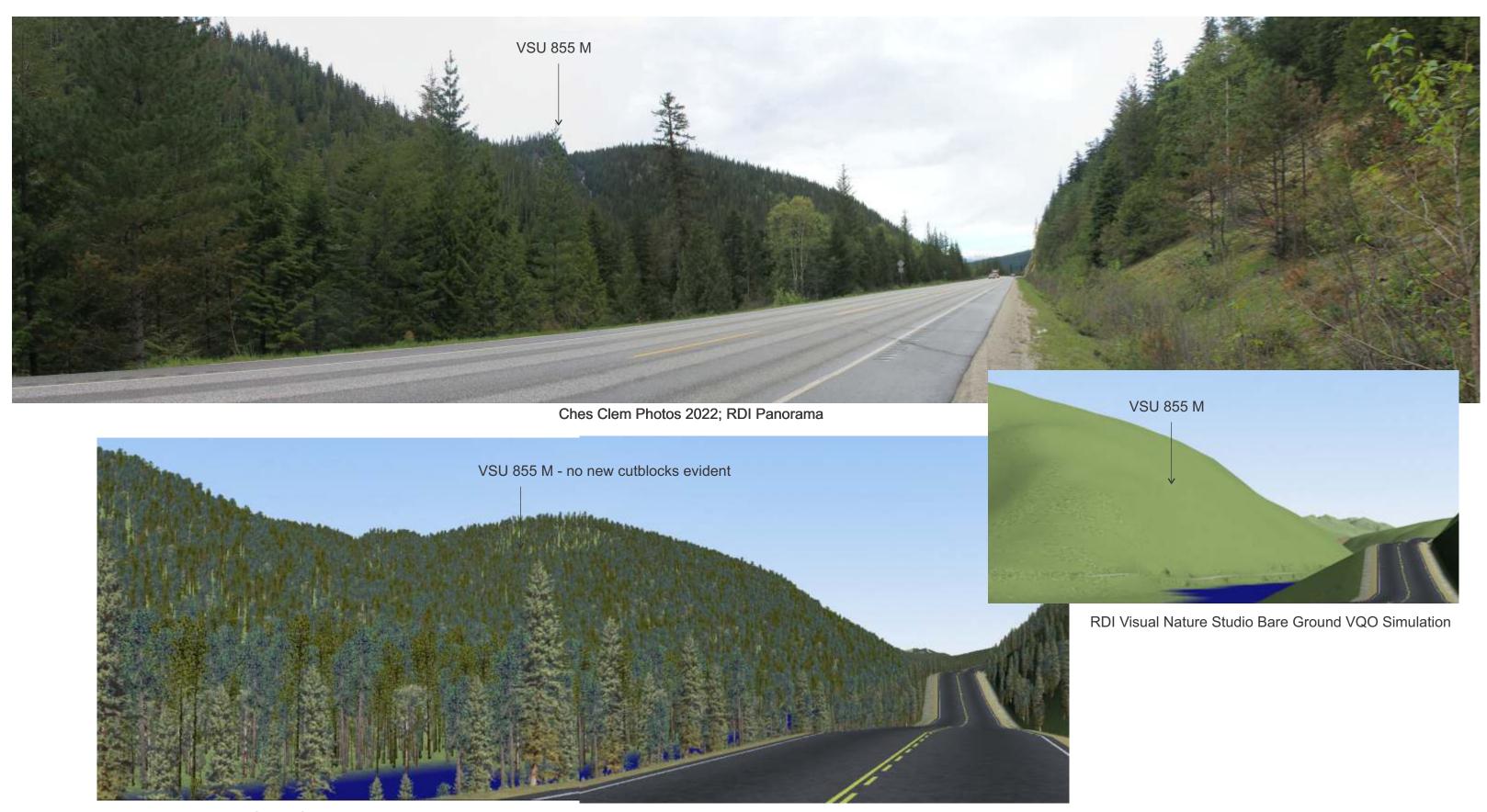
| Percent Alteration Peddie 2022 from Viewpoint CC4 | | | | |
|---|------------|-------|--|--|
| NAME | AREA2 | % Alt | | |
| VSU 855-2 M | 1447771.06 | | | |
| PEAML | 42277.13 | 2.92% | | |
| PEAML | 689.31 | 0.05% | | |
| PEA9R | 628.96 | 0.04% | | |
| PEAMN | 790.68 | 0.05% | | |
| PEAMN | 55.95 | 0.00% | | |
| PEAMN | 29.86 | 0.00% | | |
| PEAME | 3263.93 | 0.23% | | |
| Sum Alt VSU 855-2 (M) | 47735.83 | 3.30% | | |



RDI Visual Nature Studio Simulation



RDI Visual Nature Studio Simulation



RDI Visual Nature Studio Simulation