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## **Report Addendum**

Following the submission of RDI's preliminary report in December, 2020, BCTS responded with suggestions for WTRAs and distributed retention in the cutblocks to reduce visual apparency and percent alteration. RDI tested the WTRAs and distributed retention scenarios of 75 sph, 125 sph and 250 sph, each with tree heights ranging from 20m to 25m. BCTS has suggested 15% and 25% retention. RDI's model did not consider actual sph in the stands but assigned arbitrary density, so percentages were not meaningful. RDI has not determined what level of retention would be operationally appropriate at the time of report write-up. The WTRAs were rendered in each scenario. They were found to provide only modest visual benefit relative to the benefits of distributed retention and may be considered optional.

The retention scenarios were rendered in VNS depicting summer and winter conditions (snow on the ground). RDI cannot accurately determine what number of stems would be appropriate due to the nature of simulation using tree images that may or may not be representative of actual tree profiles of the retained trees. We consider that 125 sph may provide the balance between the effects of visual mitigation afforded by the retained trees and operational imperatives beyond RDI's present knowledge.

The snow cover renderings were profoundly beneficial to the understanding the effects of retention, enabling the cutblocks to blend with the surrounding landscape. Photos taken by Christian Shears revealed less openness and less snow cover than the VNS models, even with tree density upped to 2000, 20m to 25m trees per hectare.

In the December 2020 assessment, of the 7 viewpoints tested, four viewpoints were over the Percent Alteration limit for Partial Retention in Landform 1 (8, 10, 15, and 18), and two were significantly over in Landform 2 (15, 18), plus 2 were very close to the limit in that landform (6, 8). A summary is presented below. The critical cutblocks that will benefit from dispersed retention in Landform 1 are the FTEN proposed A18695, NH1283 and NH1284. In Landform 2, the critical cutblocks are NH1242 and NH1243 (east opening). NH1281 is also significant from VP7. All other cutblocks have small scale and good form, and are not reliant on retention.

## Tree Height (Meters)

Volume (Stems)
Removed in %

Ü	5	10	15	20	25	30	35	40	45	50
10	R	R	R	R	R	R	R	R	PR	PF
20	R	R	R	R	R	R	PR	PR	PR	PF
30	R	R	R	R	PR	PR	PR	PR	PR	PF
40	R	R	PR	M						
50	PR	M	M	M						
60	PR	PR	PR	PR	PR	M	M	M	М	M
70	PR	PR	PR	M	M	M	M	М	M	M
80	PR	PR	M	M	M	M	M	М	M	M
90	M	M	M	M	M	M	M	M	M	M

Note: There is a 90% or better chance of achieving the VQO shown, within 10-40 m tree height.

The "Visual Impacts of Partial Cutting" study, Ministry of Forests, 1997, page 35, determined that the Partial Retention VQO requires 40% stems to be retained across the entire landform with trees 20m to 25m heights. The table does not directly infer that small openings in the landform cannot meet the PR VQO with less stems. Individual openings that already meet the VQO individually without tree retention therefor cannot fail with added retention as apparency is reduced, not increased. The retention as seen from lower level viewpoints such as VP 9 shown on page 8 will have more screening (less apparency).

It is my considered opinion that the North Midday proposal will have the capacity to meet the Partial Retention VQO in both Landforms 1 and 2, dependant on the actual dispersed tree retention density in the identified cutblocks achieving the visual results as simulated at 125sph.

Ken B. Fairhurst, PhD, RPF. RDI Resource Design Inc

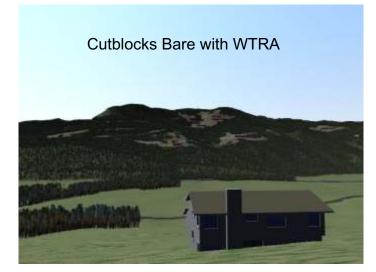
March 4, 2021

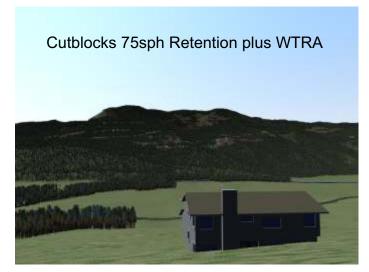
## **Percent Alteration without Distributed Retention**

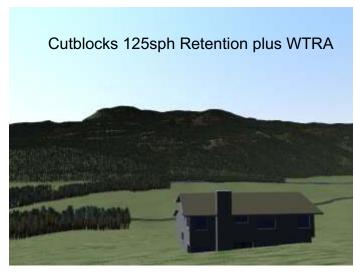
Percent Alteration Landform 1						Percent Alteration Landform 2										
VΡ	View Dist. to NH1284 (m)	Total L1	FTEN_Prop	NH1283	NH1284	NH1241	VP	View Dist. to NH1243 (m)	Total L2	NH1238	NH1240	NH1242	NH1243	NH1281	NH1282	FTEN-E*
6	6000	2.17%	0.55%	0.73%	0.26%	0.62%	6	3700	4.99%		0.21%		4.79%			
7	4500	1.58%	0.47%	0.64%	0.41%		7	3000	5.24%	0.08%		0.35%	2.82%	0.96%		1.04%
8	4300	7.18%	4.28%	1.59%	1.30%		8	5600	6.28%	0.15%		2.51%	2.38%		0.17%	1.06%
9	3900	5.71%	2.86%	1.43%	1.42%		9	5000	4.03%	0.05%		0.92%	2.38%		0.03%	0.64%
10	4400	8.07%	4.08%	1.85%	2.14%		10	5800	4.80%				4.80%			
15	7500	12.66%	5.94%	2.43%	4.29%		15	9000	12.15%			12.15%				
18	10300	13.26%	6.48%	2.75%	4.04%		18	12000	15.52%	0.19%		9.93%	4.32%		0.35%	0.72%

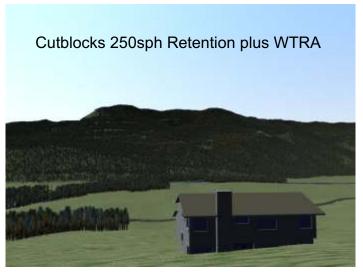
- VP 1. Pullout on Highway280K: NH1243, NH1238
- VP 2At Recreation Site 2 PictL2r@Ks NH1241, NH1243, NH1238 mainly screened
- VP 3From Campsit €2 OK: NH1241, NH1243, NH1238 open view; L1 OK: Some NH1283, NH1284
- V P4. H ig h w a yL2 OK: NH1241, NH1243, NH1281
- VP5. Picturers m JuncticofnShackles Ranadd Petit Creek R L2 OK: NH1243 caution; L1 OK: Some NH1283, NH1284
- VP6. Mailboxes Sunshine Valley RoladoK: NH1243 caution; L1 OK: Some NH1283, NH1284
- VP7. Picturfrom Highway 8 Side VL2 OK: NH1243, NH1281 caution; L1 OK: Some NH1283, NH1284
- VP8. Cuble Saat Miller EstatesL1 Caution: NH1283, NH1284, A18695; L2 OK: NH1242 caution
- VP9. Picturefsom Mailboxate Stottoroff Miller Estate \$1 Caution: NH1283, NH1284, A18695; L2 OK
- VP10. Junction of Highwayan Woodward Road TNLR Caution: NH1283, NH1284, A18695; L2 OK
- VP1 1. Leaving Lower Nich Pull Gaution: NH1283, NH1284, A18695; L2 OK
- VP12 PlaygroundLower Nich Screened View
- VP 1.3Junction of Yap Skim Remand Aberdeen L1 Caution: NH1283, NH1284, A18695; L2: caution with NH1242
- VP14. Junctioof Saskatoon land Aberdeen Roald Caution: NH1283, NH1284, A18695; L2: caution with NH1242
- VP 15. Good Viermom Aberdeen Roald Caution: NH1283, NH1284, A18695; L2: caution with NH1242
- VP16 From Canco Gas Station Lowel: 1NC action: NH1283, NH1284, A18695; L2 OK
- VP17. Highway 9from Logan Lakel Caution: NH1283, NH1284, A18695; L2: caution with NH1242
- VP18 From Highway 97L4 Caution: NH1283, NH1284, A18695; L2: caution with NH1242, NH1243
- V P19. H ig h w a y 97 c L1 Caution: NH1283, NH1284, A18695; L2: caution with NH1242, NH1243
- VP20. Highway 97 cR@ad JunctionL1 Caution: NH1283, NH1284, A18695; L2: caution with NH1242, NH1243
- VP2 1. H w 97c L1 Ok: NH1283, NH1284, A18695; L2 OK: NH1242

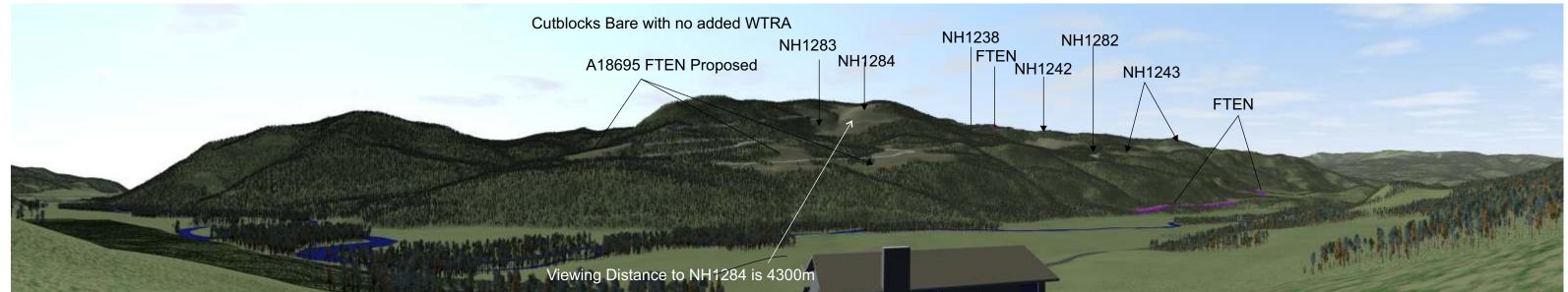


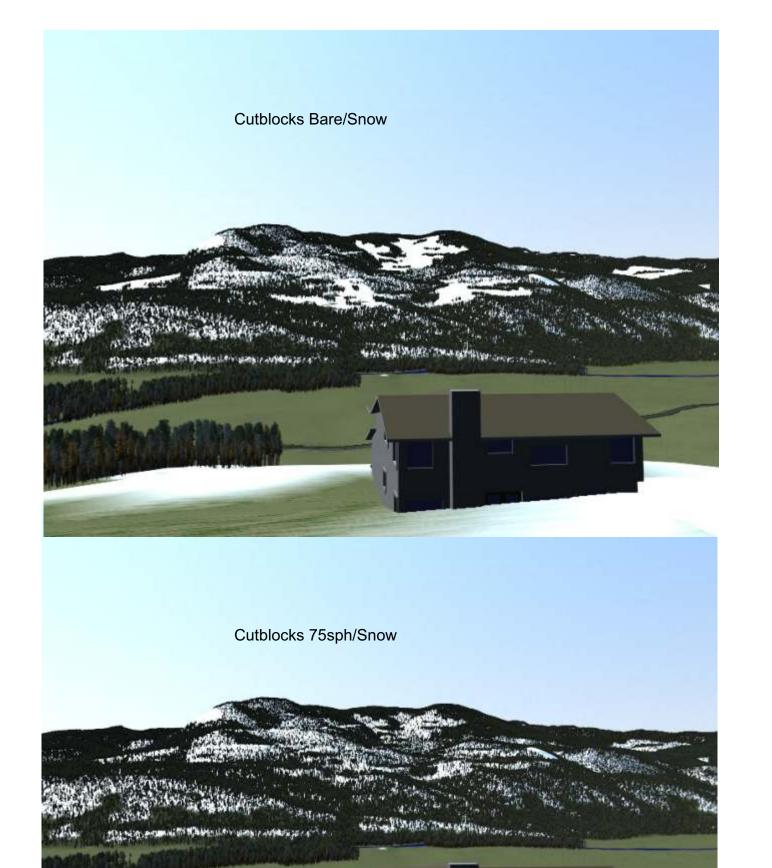


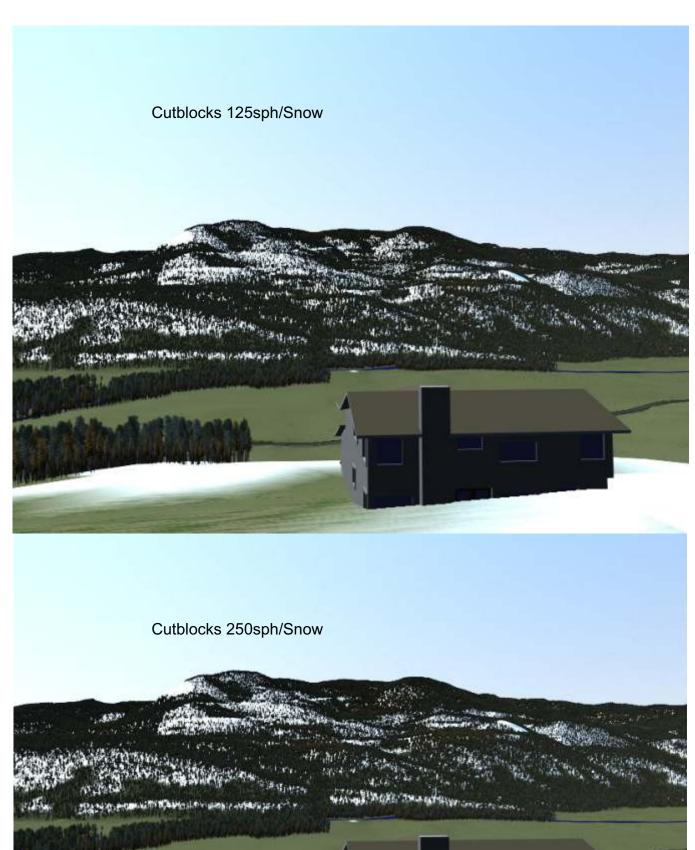










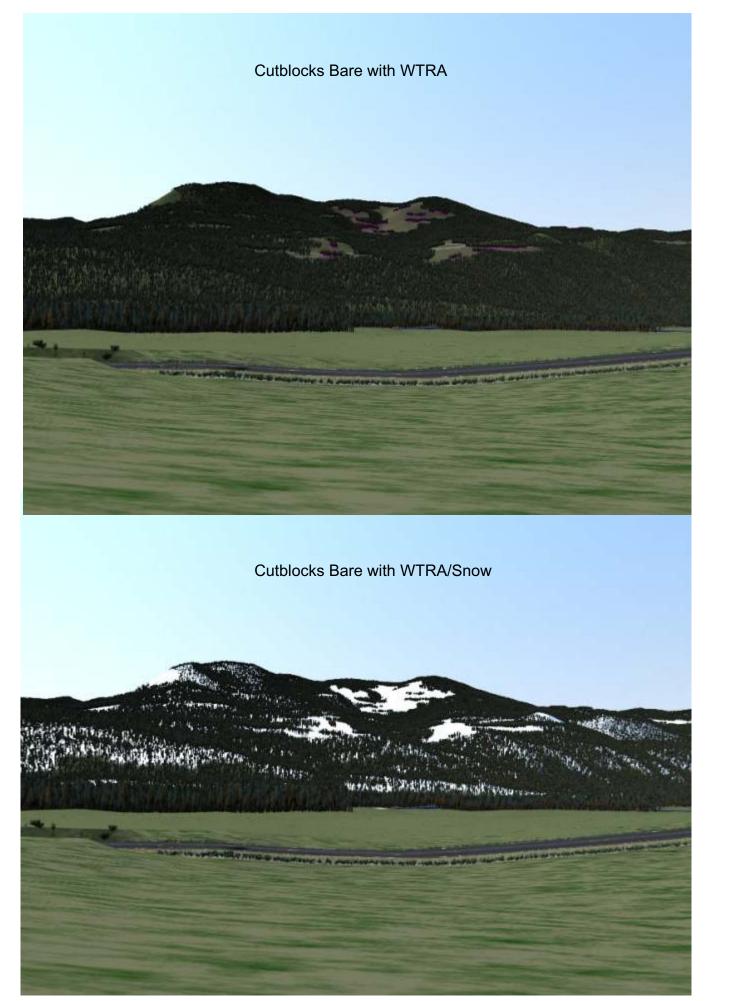


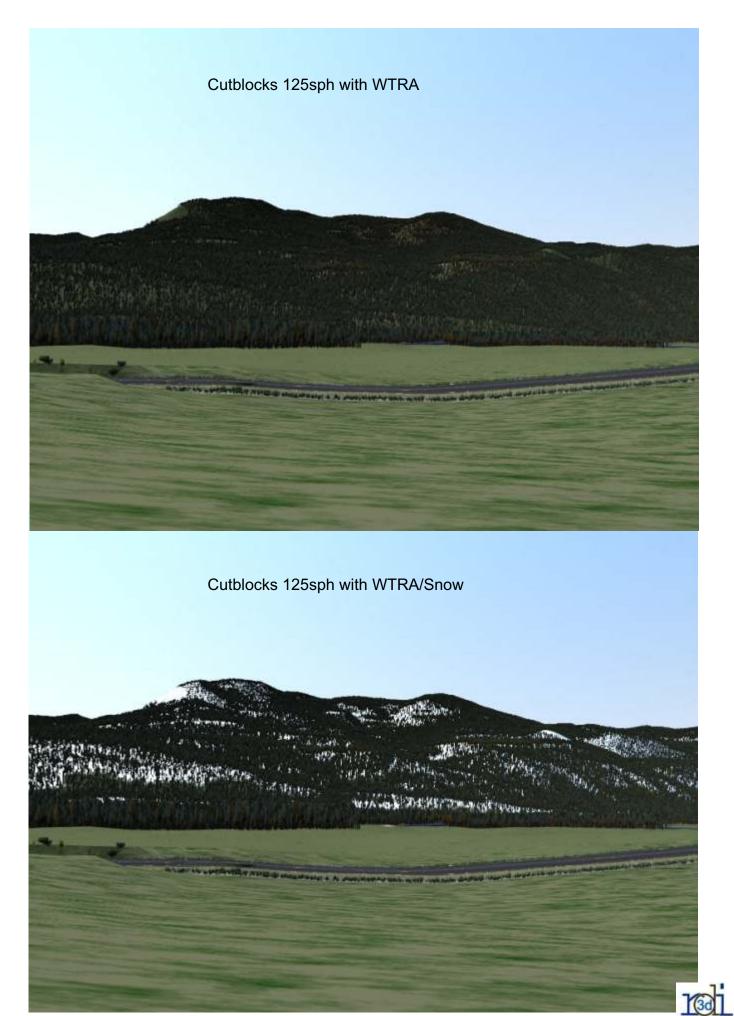






North Midday Photos with Snow - Christian Shears





North Midday Cutblocks with Snow and without Snow - Viewpoint 9