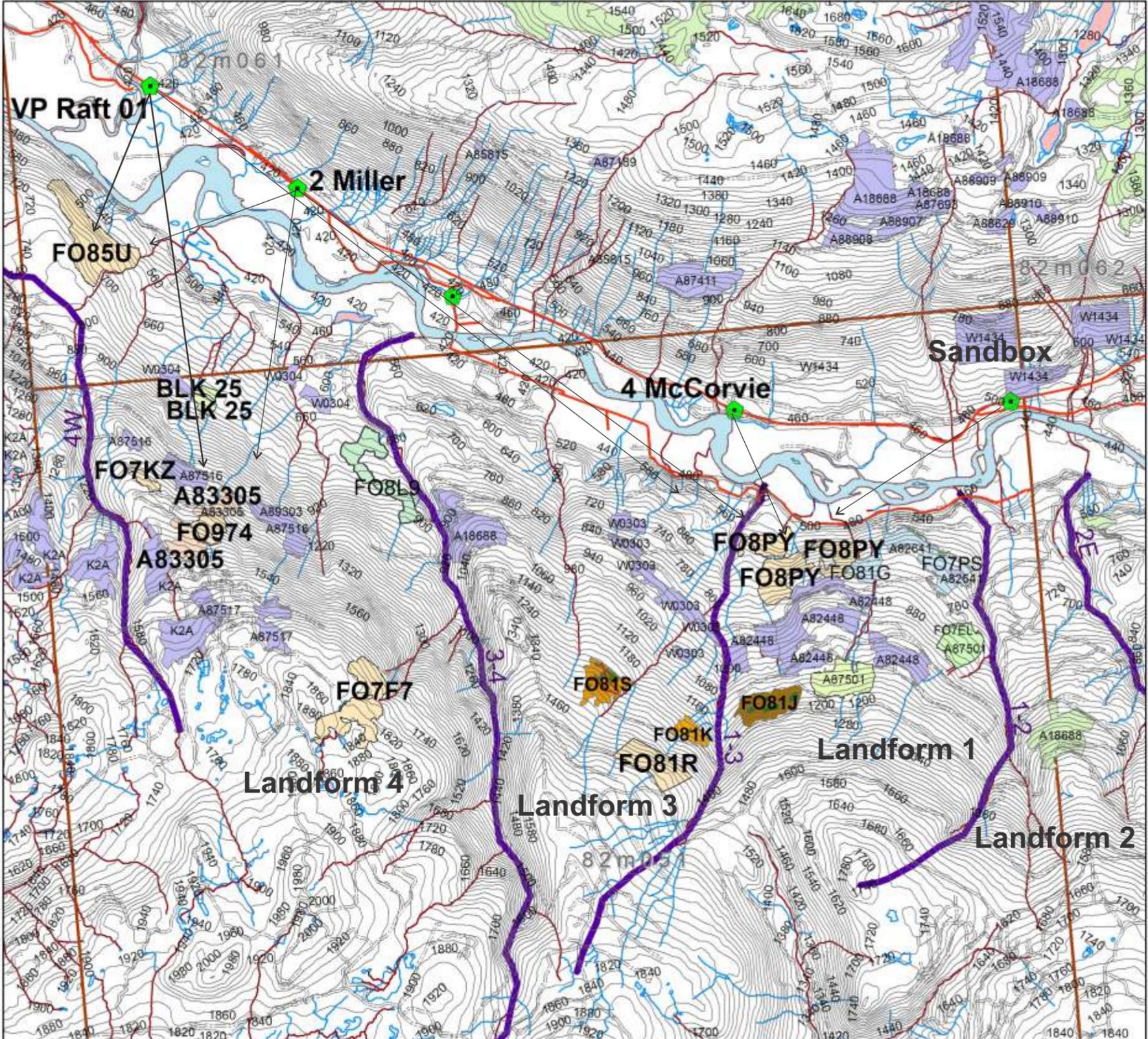
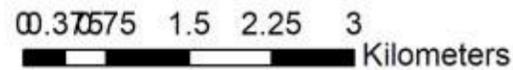
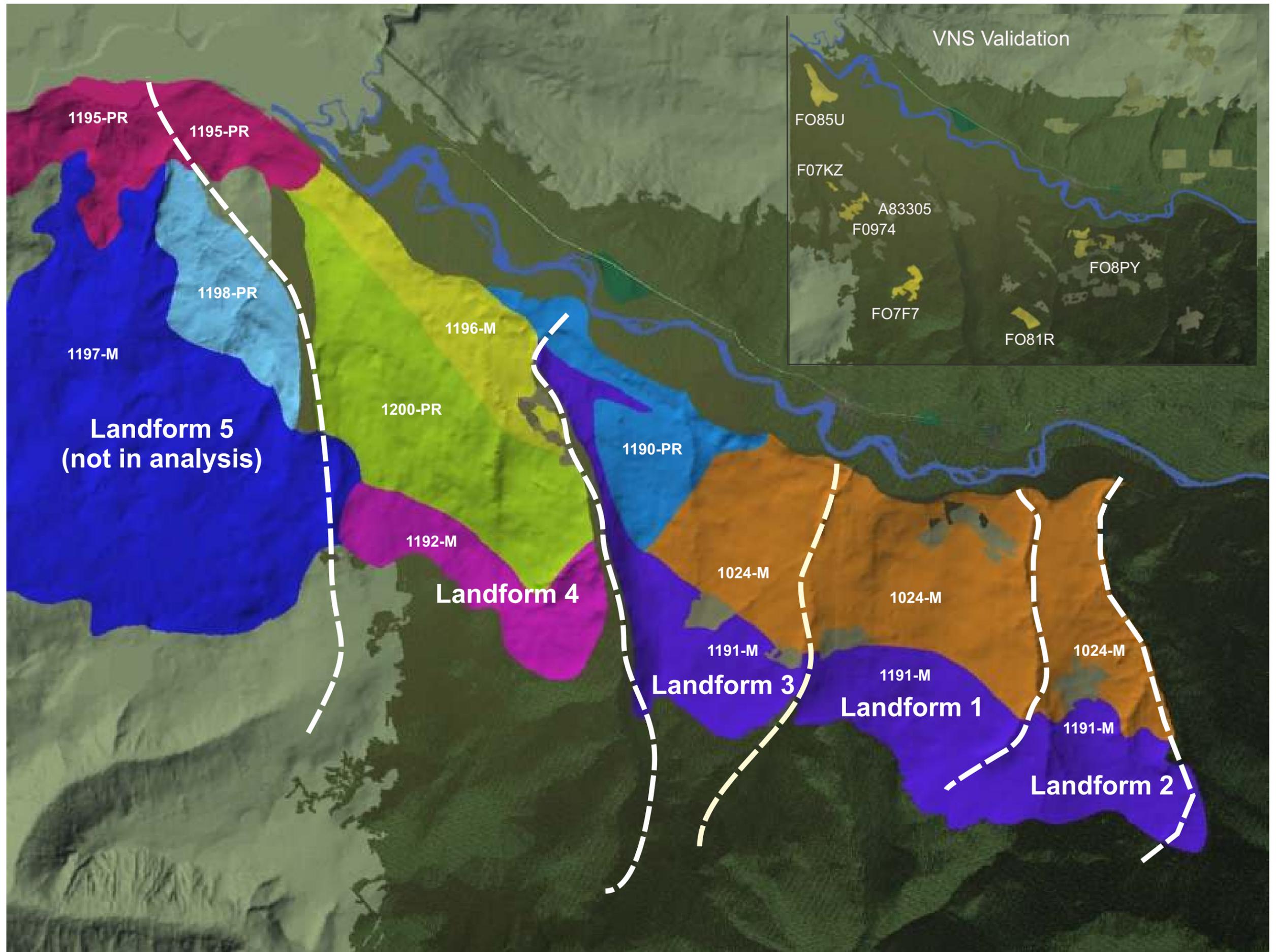


**BCTS Foghorn 2017 Visual Assessment**  
 prepared by  
**RDI Resource Design Inc**  
 November 4, 2017



- FO81S\_blk\_Mar\_15\_2016
- FO81J\_BLOCK\_BOUNDARY
- FO974
- B\_n\_A83305-1
- FO7KZ-17
- FO81R-17
- FO85U-17
- FO8PY-17
- New\_FO7F7\_Oct\_17\_2017
- FO81K\_BLOCK\_BOUNDARY
- Contours\_Clip
- Viewpoints
- FO81G\_WTRAS
- A92773\_KDC\_reserves\_Jan\_7-2015
- FO81J\_WTRA
- FO81S\_WTRA
- FO81K\_WTRA
- A92773\_wtra
- FO7EM\_H2014
- FO7EL-H2014
- Landform\_Lines
- A92773\_blk\_boundaries\_Jan7-2015
- Woodlot\_new\_blk\_for\_Ken
- 2008-2015completeclip
- Ften2008-2015completed
- FO8L9 Block shape
- MapGrid
- Highway5
- Harvested\_blks\_08-09
- CFP-2012-A18688
- N-Thompson





VNS Simulation of Landforms and Visual Sensitivity Units

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16	Raft Percent Alteration with Recommendations
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Foghorn Cutblocks - 2017 Visibility						
	Landform 1 Modification	Landform 3 Partial Retention	Landform 4 Partial Retention			
Viewpoint	FO8PY	FO81R	FO7F7	A83305-1 FO974	FO7KZ	FO85U
Sandbox	V	V	V	V	NVS	NVS
McCorvie	V	V	V	V	NVS	V?
Birch	V	V - sliver	NVS	V	V - sliver	V?
Miller	V	V	NVS	V	V - sliver	V
Raft	V	NVS	NVS	V	V	V
Mapsheet	82M051					82M061
<b>Viewpoint Importance - Major - Highway 5 near Clearwater</b>						
<b>See analyses for each viewpoint, including recommendations for adjustment of FO7PY and FO85U. Adjustments for FO85U depend on likely visibility.</b>						

All viewpoint simulations with Visual Nature Studio.  
 All viewpoint cameras except Miller set to 40° field of view, 48 mm lens.  
 Miller camera was set to 60° field of view, 30mm lens.  
 Individual images stitched together to form panoramas in VNS.

Prepared by:

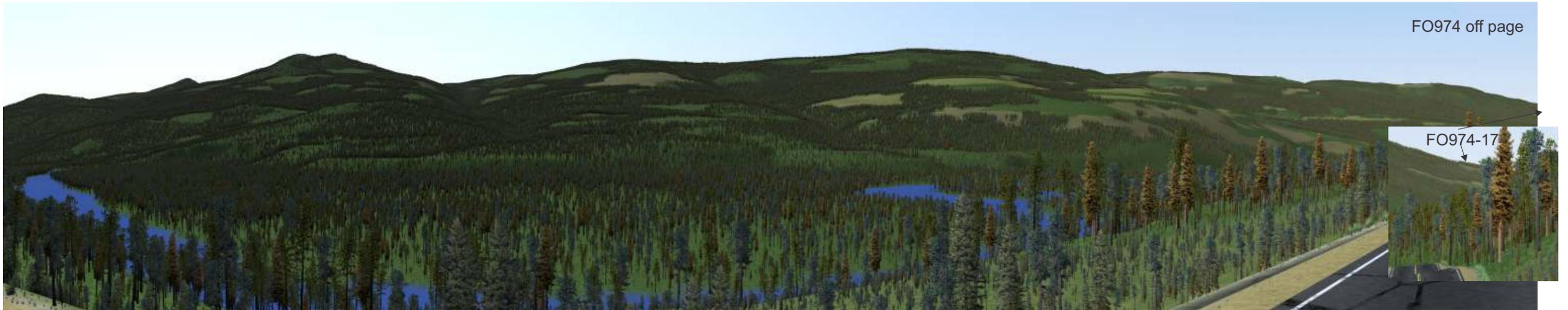


Ken B. Fairhurst, PhD, RPF  
 RDI Resource Design Inc  
 November 4, 2017

## Summary of Findings



Sandbox Viewpoint Photo by T. Luedke, May 2015



Sandbox Viewpoint VNS Simulation by RDI 171104

7167 Pixel VNS

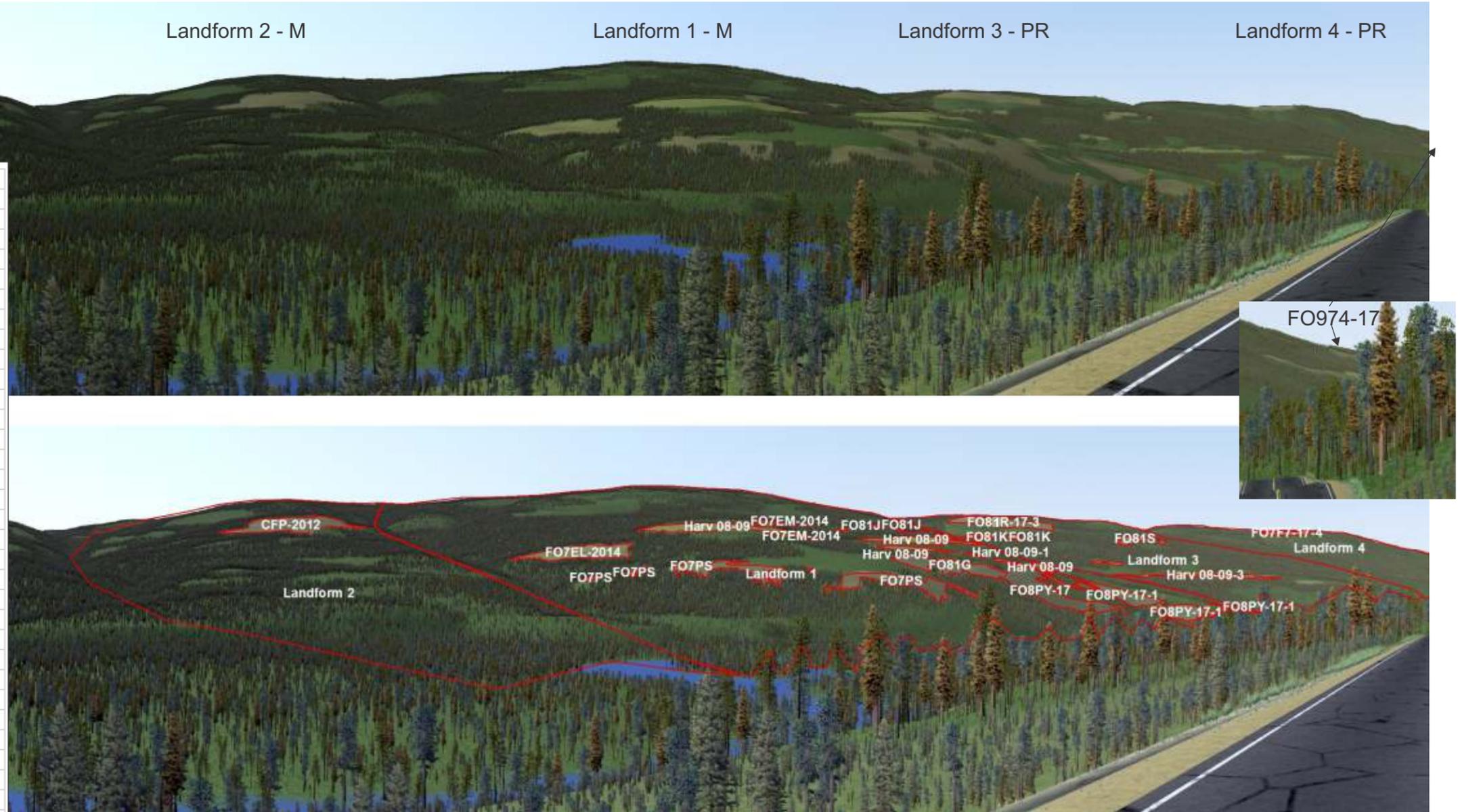
Landform 2 - M

Landform 1 - M

Landform 3 - PR

Landform 4 - PR

Item	Area2	% Alt
<b>Landform 2</b>	<b>346698.72</b>	
CFP-2012	7436.91	2.15%
<b>Landform 1 - M</b>	<b>505777.29</b>	
FO7EL-2014	6520.69	1.29%
FO7PS	205.96	0.04%
FO7PS	159.96	0.03%
FO7PS	41.87	0.01%
FO7PS	50.12	0.01%
FO7PS	7044.35	1.39%
FO7PS	6390.05	1.26%
FO7PS	58.95	0.01%
FO7EM-2014	417.08	0.08%
FO7EM-2014	36.14	0.01%
FO7EM-2014	8.35	0.00%
FO7EM-2014	102.40	0.02%
FO7EM-2014	16.62	0.00%
Harv 08-09	2835.28	0.56%
Harv 08-09	1166.83	0.23%
Harv 08-09	189.49	0.04%
Harv 08-09	712.78	0.14%
Harv 08-09	5296.44	1.05%
FO8PY-17	10543.21	2.08%
FO8PY-17-1	4093.49	0.81%
FO8PY-17-1	3405.41	0.67%
FO8PY-17-1	203.50	0.04%
Harv 08-09-1	358.49	0.07%
FO81G	6294.86	1.24%
Gross Sum	56152.31	11.10%
FO7PS-Leave	619.75	0.12%
<b>Net Sum / Percent Alt.</b>	<b>55532.56</b>	<b>10.98%</b> (meets M)
<b>Landform 3 - PR</b>	<b>112733.47</b>	
FO81J	72.31	0.06%
FO81J	152.65	0.14%
FO81J	5.18	0.00%
FO81J	210.75	0.19%
FO81K	371.41	0.33%
FO81K	288.17	0.26%
FO81S	1114.19	0.99%
Harv 08-09-3	372.98	0.33%
Harv 08-09-3	2118.20	1.88%
FO81R-17-3	4084.31	3.62%
<b>Net Sum / Percent Alt.</b>	<b>8790.17</b>	<b>7.80%</b> (exceeds PR by 0.8%)
<b>Landform 4 - PR</b>	<b>47132.84</b>	
FO7F7-17-4	919.65	1.95% (meets PR)
FO974-17		out of frame (minor)



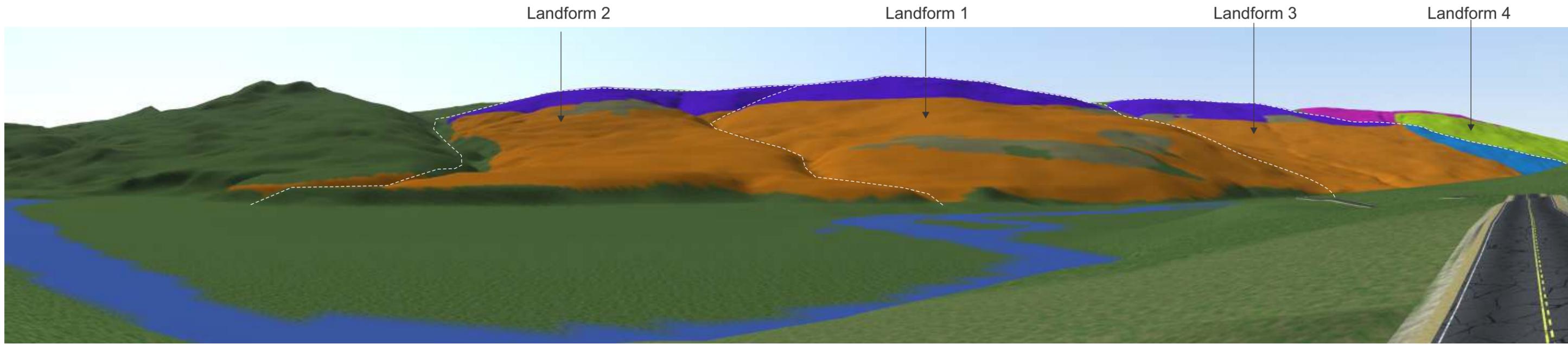
Landform 1 shows 11% alteration, within the VQO limit of 7%-18%, meeting the Modification VQO for the landform. The existing older alteration tagged Harv08-9 in Landform 1 may have reached Visually Effective Green-up (VEG). On-site inspection is required to determine status.

If VEG has been achieved, potentially 2% alteration could be reduced from the total, bringing Percent Alteration down. The verbal definition of the Modification Category of Altered Forest is:

very easy to see and (a) large in scale and natural in its appearance, or (b) small to medium in scale but with some angular characteristics.

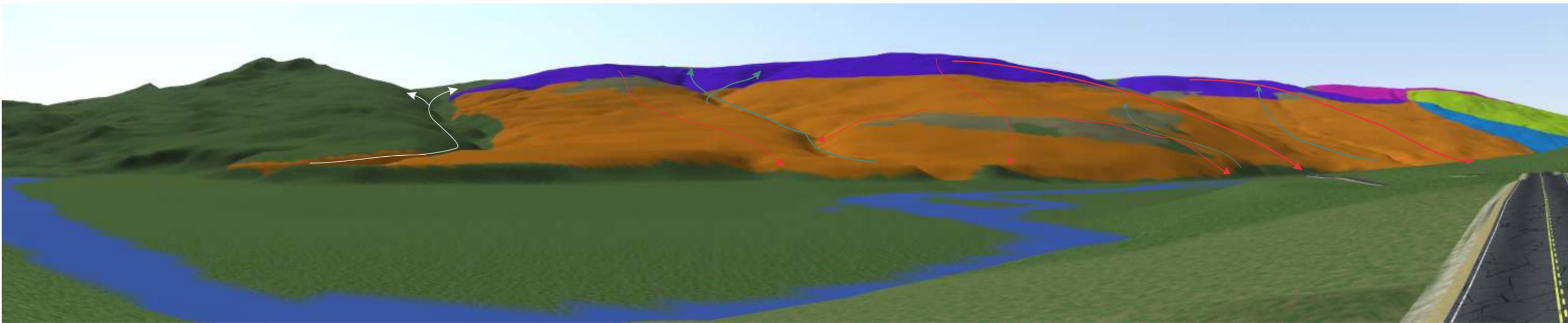
The alteration is somewhat large, given its position and concentration, although it benefits from a "natural" fit amongst the younger forest. The hillside has high Visual Absorption Capability given the variety of forest cover classes. The development appears to be a final pass.

See results and recommendations for the McCorvie viewpoint. FO7KZ and FO85U are NVS.

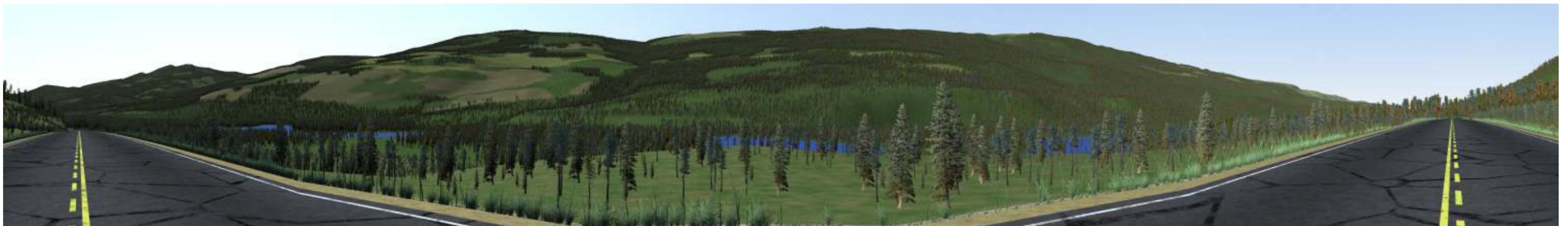
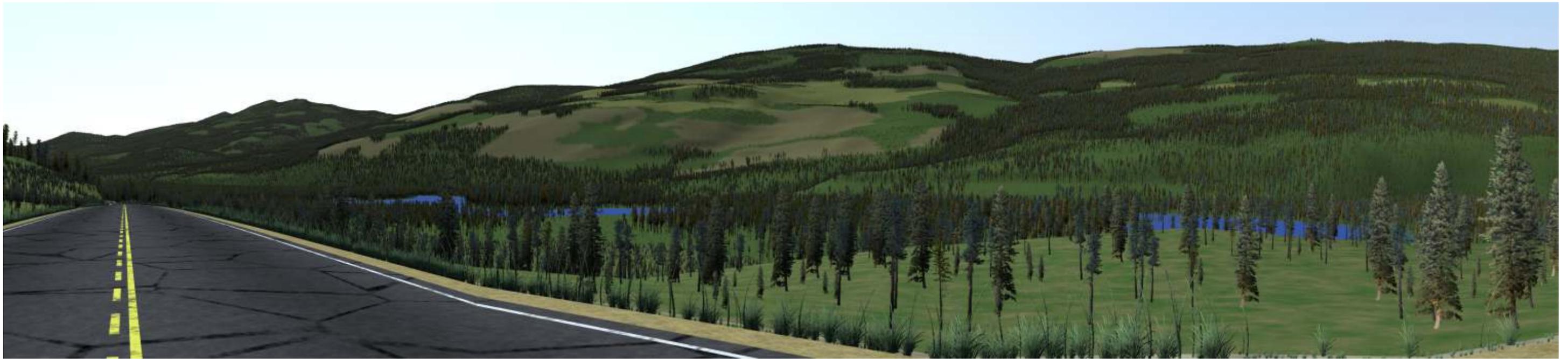


Only Pre-2017 Cutblocks shown

- VSU 1024 - Modification
- VSU 1191 - Modification

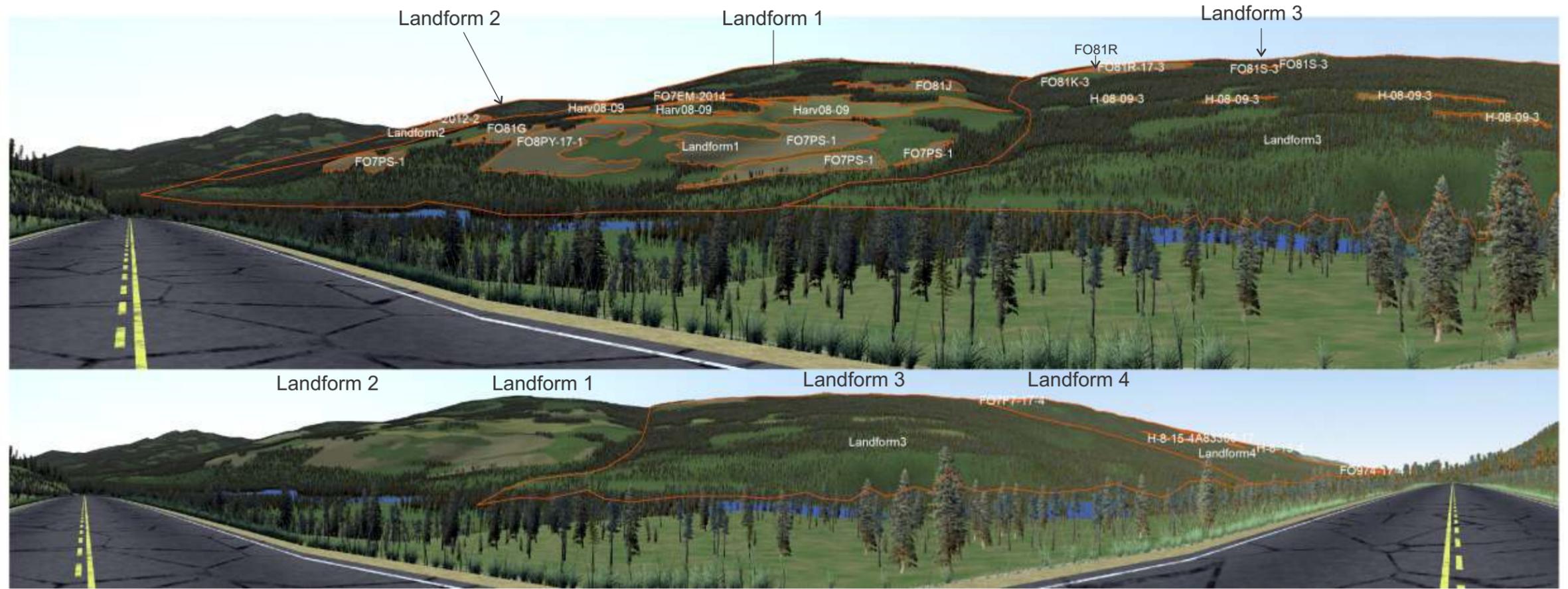


- Visual Force Convexity
- Visual Force Concavity



see next page for analysis  
McCorvie Viewpoint Photo and VNS Simulations 2017

Percent Alteration McCorvie Viewpoint		
Item	Area2	% Alt
Landform2	39755.62	
CFP-2012-2	4892.81	12.31%
Landform1	720959.10	
FO7PS-1	7984.11	1.11%
FO81G	6043.22	0.84%
FO8PY-17-1	44202.96	6.13%
FO7PS-1	47954.46	6.65%
FO7PS-1	24256.13	3.36%
FO7PS-1	4019.51	0.56%
FO7EM-2014	1947.13	0.27%
Harv08-09	1840.01	0.26%
Harv08-09	435.23	0.06%
Harv08-09	904.66	0.13%
Harv08-09	42799.70	5.94%
FO81J	5954.92	0.83%
Sum / % Alt	188342.05	26.12%
Landform3 - PR	840247.66	
FO81R-17-3	6172.30	0.73%
FO81K-3	51.17	0.01%
FO81K-3	26.08	0.00%
FO81S-3	409.94	0.05%
FO81S-3	27.36	0.00%
H-08-09-3	1172.26	0.14%
H-08-09-3	1114.99	0.13%
H-08-09-3	2847.64	0.34%
H-08-09-3	4195.22	0.50%
Sum / % Alt	16016.96	1.91%
Full width of L3	1170412.00	1.37%
Landform4-PR	78124.36	
FO7F7-17	569.69	0.73%
A83305-17	504.98	0.65%
Harv-8-15	608.76	0.78%
FO974-17	215.69	0.28%
Harv-8-15	66.24	0.08%
Harv-8-15	247.69	0.32%
Sum / % Alt	2213.05	2.83%



Landform 1 shows 26% alteration, exceeding the VQO limit of 18% by 8.12%, failing to meet the VQO for the landform.

Existing older alteration tagged Harv08-9 in Landform 1 may have reached Visually Effective Green-up (VEG).

On-site inspection is required to determine status.

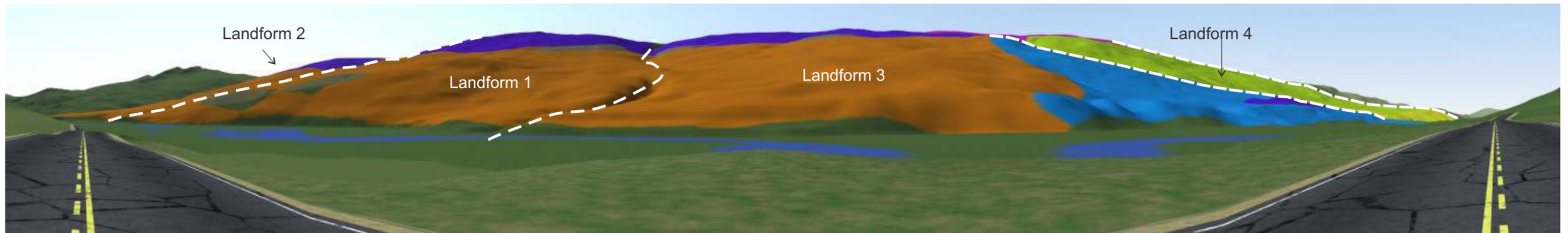
If VEG has been achieved, potentially 6.4% alteration could be reduced from the total, bringing Percent Alteration

down to 19.6% or 1.6% above the maximum required to meet the Modification VQO. The verbal definition of the Modification Category of Altered Forest is: very easy to see and (a) large in scale and natural in its appearance, or (b) small to medium in scale but with some angular characteristics.

The alteration is large, and tending to very large, given its position and concentration, although it benefits from a “natural” fit amongst the younger forest.

The hillside has high Visual Absorption Capability given the variety of forest cover classes. The development appears to be a final pass.

RDI recommends that BCTS seek additional leave patches to reduce the scale, even if recent alteration marked Harv 08-09 is VEG. FO7KZ is NVS.

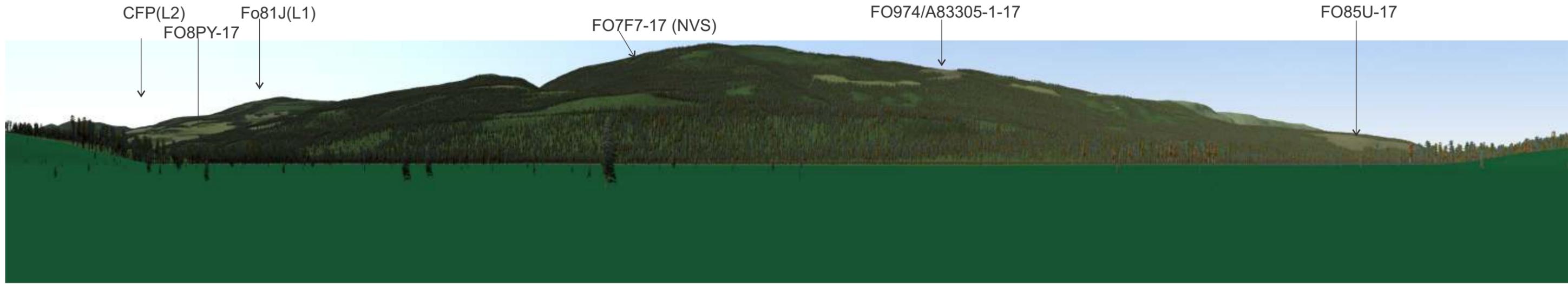


- VSU 1024 - Modification
- VSU 1191 - Modification
- VSU 1190 - Partial Retention
- VSU 1200 - Partial Retention

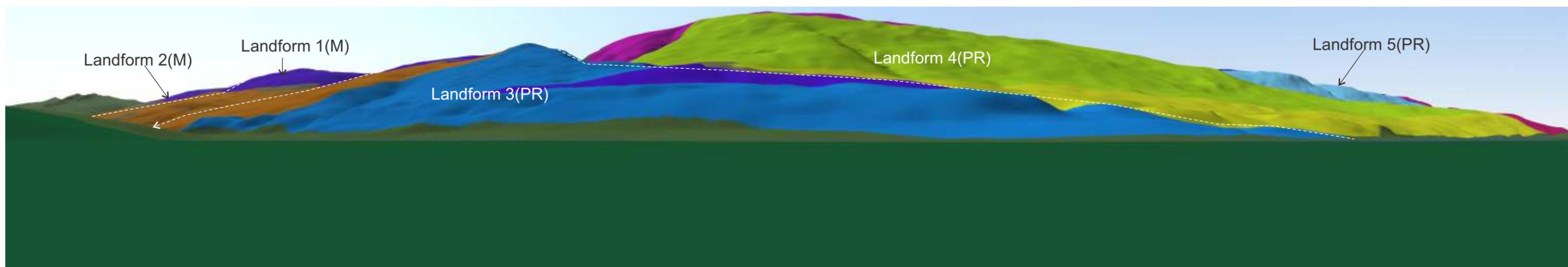


No Percent Alteration prepared for Landform 3 due small size of Fo8L9.

- Visual Force Convexity
- Visual Force Concavity

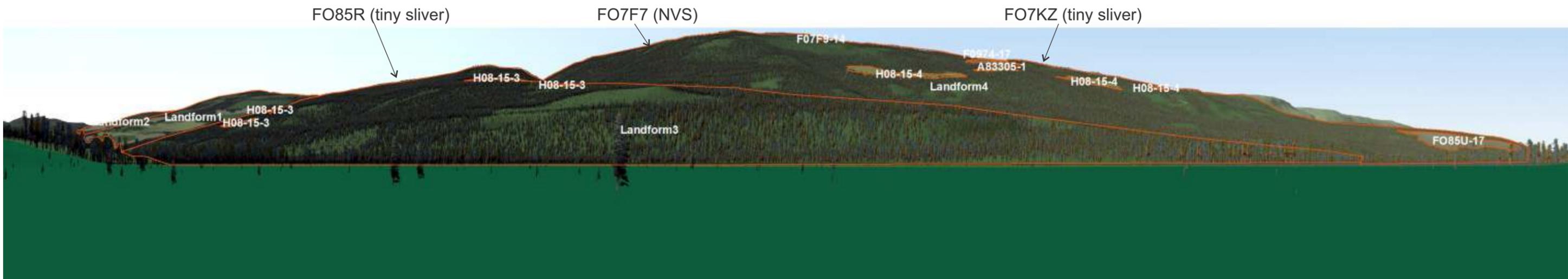
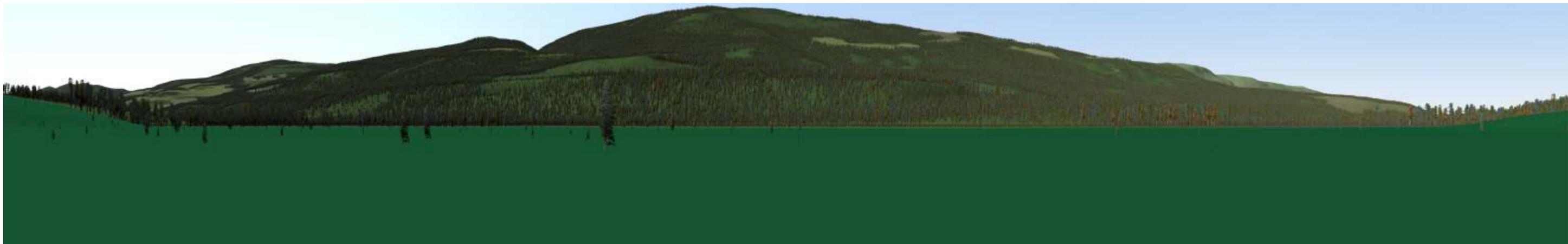


9327 pixel width



Fo8L9 only in L4. See McCorvie and Sandbox for L1 blocks.

See Sandbox and McCorvie for Percent Alteration of Landform 1



Percent Alteration - Birch Viewpoint		
Item	Area2	% Alt.
Landform3 - PR	516784.98	
H08-15-3	493.32	0.10%
H08-15-3	698.08	0.14%
H08-15-3	261.71	0.05%
H08-15-3	83.07	0.02%
<b>Sum / %Alt</b>	<b>1536.18</b>	<b>0.30%</b>
Landform4 - PR	319644.23	
FO85U-17	7755.39	2.43%
A83305-1-17	1096.77	0.34%
F0974-17	974.34	0.30%
F07F9-14	71.59	0.02%
H08-15-4	3373.08	1.06%
H08-15-4	1593.45	0.50%
H08-15-4	194.31	0.06%
H08-15-4	1593.45	0.50%
H08-15-4	194.31	0.06%
<b>Sum / %Alt</b>	<b>16846.69</b>	<b>5.27%</b>
Additional*	no cutblock calculation	
Landform1	32723.20	
Landform2	3527.59	
* see prior Viewpoint for calculations		

Landform 3 easily meets PR.

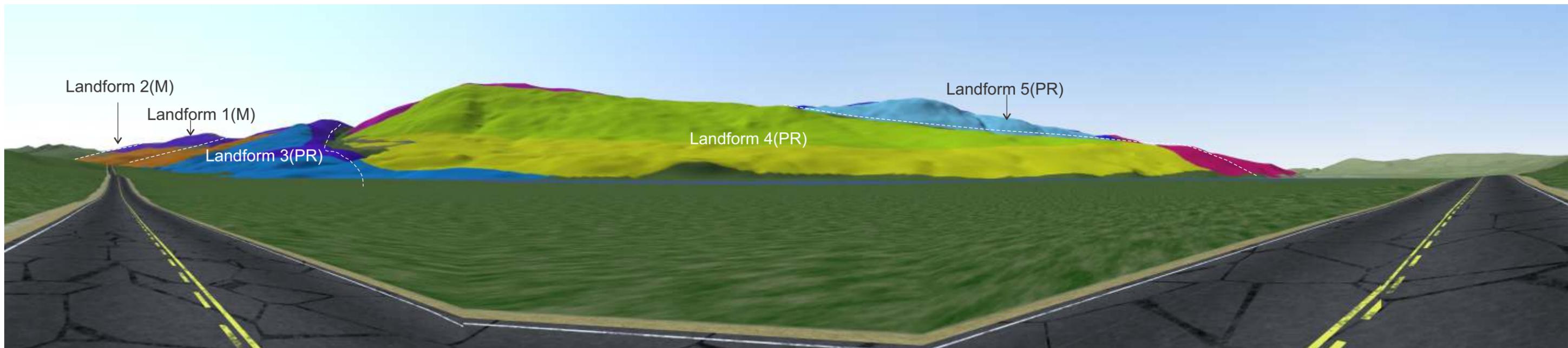
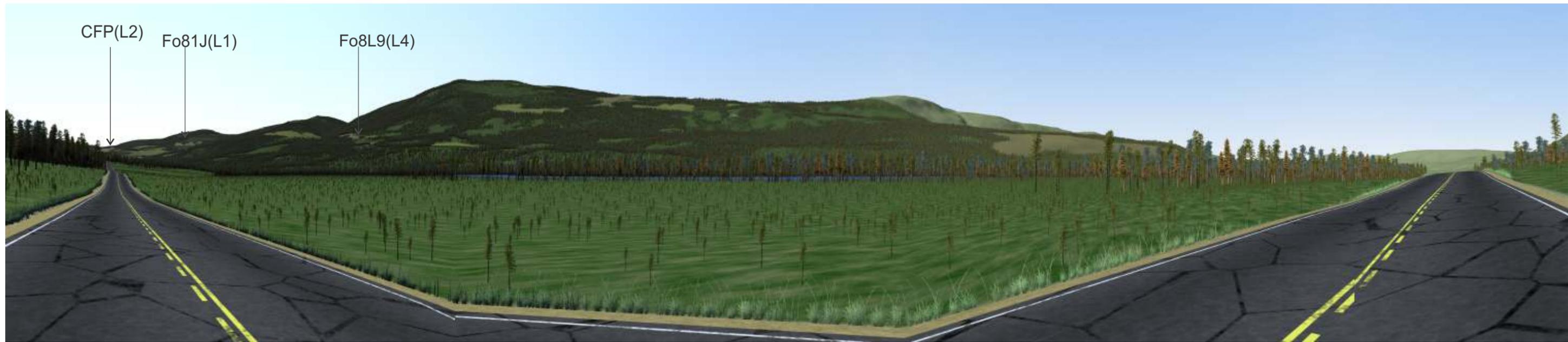
Landform 4 meets PR by Percent Alteration. Some or all of the regenerating openings harvested since 2008 and marked H08-15 may now be exhibiting Visually Effective Green-up (VEG). If so, total alteration could be reduced by up to 1.6%.

FO85U sits on the far right of the landform and is medium in scale in itself, relative to the scale of the end piece of the landform, however, the block exhibits conformity with the shape of the end of the landform and appears natural. The 2015 photo on the preceding page indicates the cutblock will likely be screened, though other views may expose the block. As a precaution, in-block retention should be sought.

See also Miller and Raft viewpoints for Landform 4 and Sandbox and McCorvie viewpoints for Percent Alteration in Landform 1.

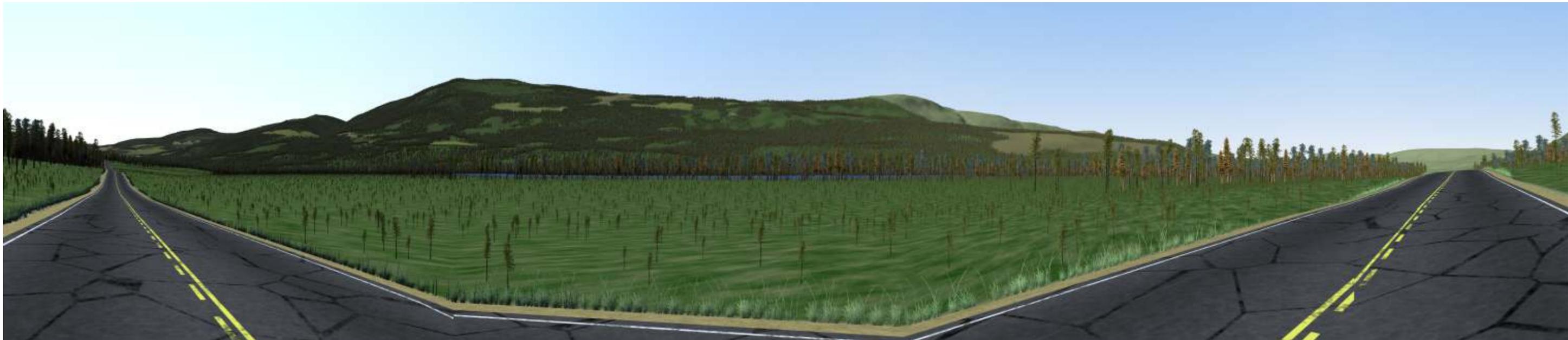
The Partial Retention category of altered forest is 1) easy to see, 2) small to medium in scale, and 3) natural and not rectilinear or geometric in shape.

## Birch Viewpoint Percent Alteration 2017 and Recommendations

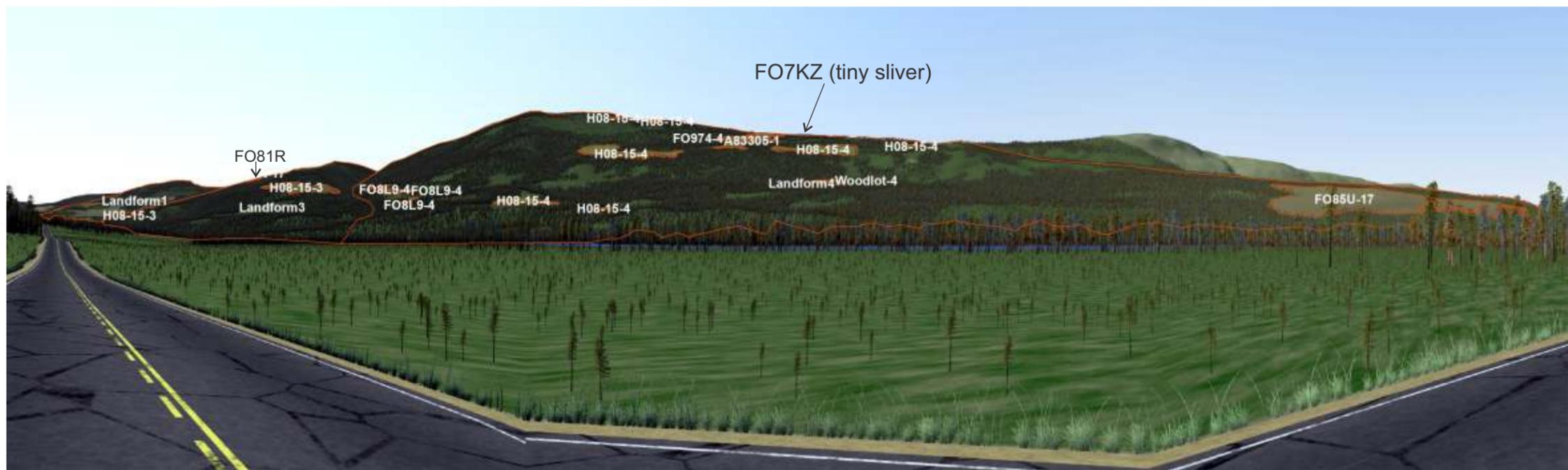


Fo8L9 only in L4. See McCorvie and Sandbox for L1 and L3 blocks.

No Percent Alteration prepared for Landform 4 due small size of Fo8L9.



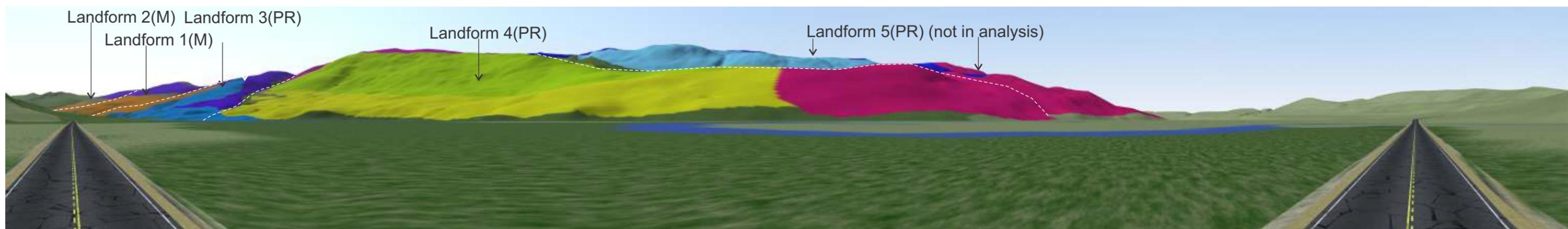
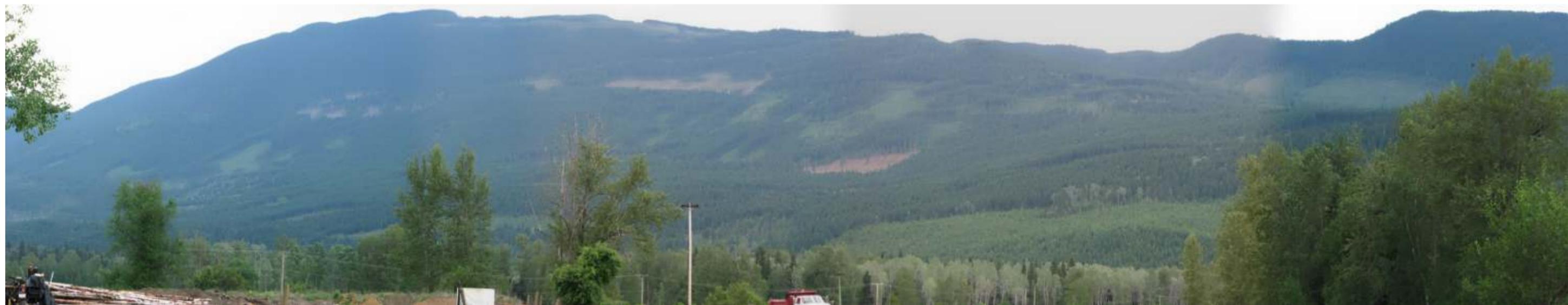
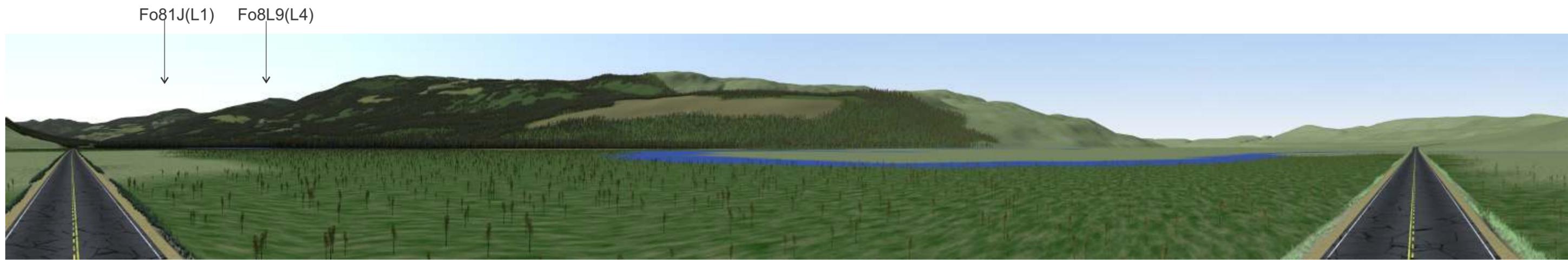
Miller Viewpoint Percent Alteration		
Item	Area2	% Alt
Landform4 - PR	424823.52	
A83305-1	1380.04	0.32%
FO974-4	647.99	0.15%
FO85U-17	19782.68	4.66%
FO8L9-4	433.68	0.10%
FO8L9-4	156.95	0.04%
FO8L9-4	101.19	0.02%
H08-15-4	277.22	0.07%
H08-15-4	2442.04	0.57%
Woodlot-4	216.94	0.05%
H08-15-4	127.79	0.03%
H08-15-4	116.49	0.03%
H08-15-4	2871.94	0.68%
H08-15-4	883.42	0.21%
H08-15-4	99.69	0.02%
<b>SUM / % Alt</b>	<b>29538.06</b>	<b>6.95%</b>
Landform3 - PR	62466.13	
H08-15-3	116.35	0.19%
FO81R-17	79.95	0.13%
H08-15-3	2210.89	3.54%
<b>Sum / % Alt</b>	<b>2407.18</b>	<b>3.85%</b>
Landform1* - M	13713.51	
*see previous viewpoints		



Landform 3 easily meets PR.

Landform 4 meets the extreme upper end of PR by Percent Alteration. Some or all of the regenerating openings harvested since 2008 and marked H08-15 may now be exhibiting Visually Effective Green-up (VEG). If so, total alteration could be reduced by up to 1%. FO85U sits on the far right of the landform and is medium in scale in itself, relative to the scale of the end piece of the landform, however, the block exhibits conformity with the shape of the end of the landform and appears natural. The 2015 photo on the preceding page indicates the cutblock will likely be partly screened, though other views may expose the block. As a precaution, in-block retention should be sought. FO8KZ might be seen as a narrow sliver to the right of FO974/A83305-1. FO7F7 is NVS.

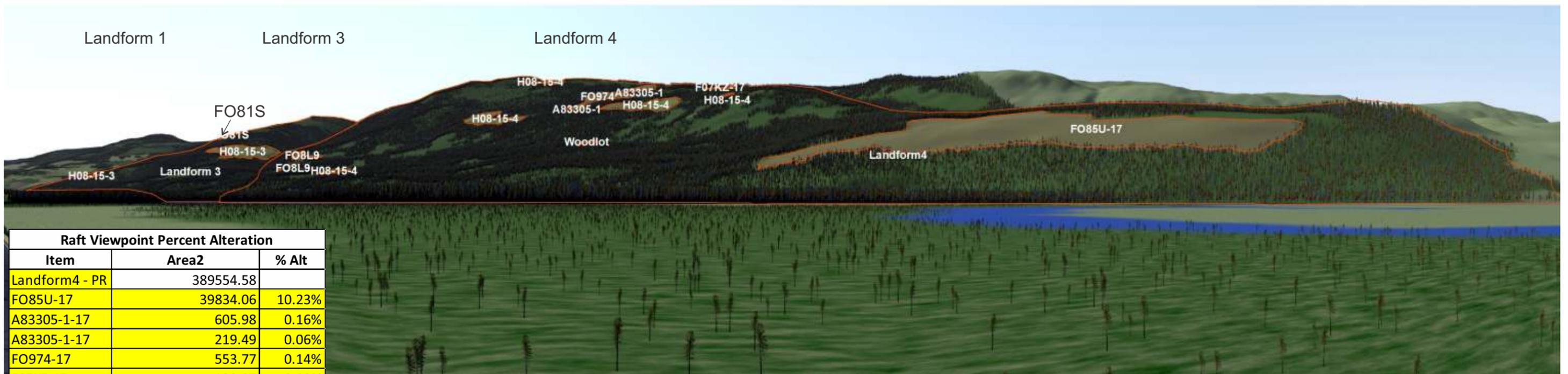
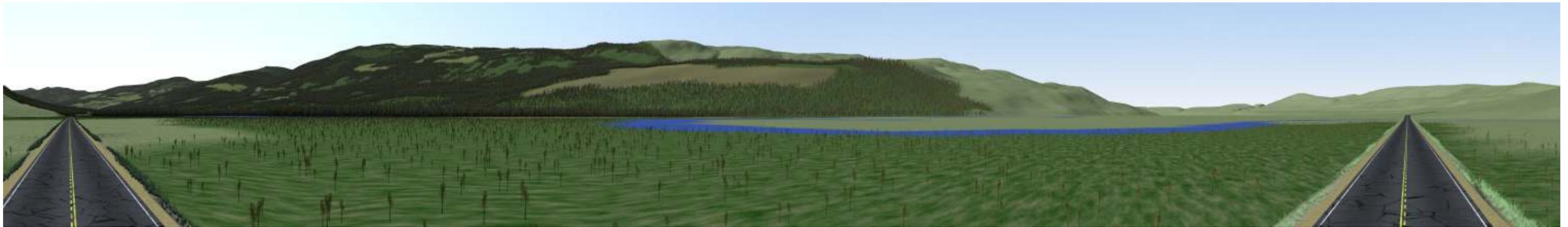
See also Birch and Raft viewpoints for Landform 4. FO8PY in Landform 1 is 8.5 km distant from Miller. See Sandbox and McCorvie viewpoints for Percent Alteration in Landform 1.



See McCorvie and Sandbox for L1 and L3 blocks.

10015

See Percent Alteration prepared for Landform 4 on next page.



Raft Viewpoint Percent Alteration		
Item	Area2	% Alt
Landform4 - PR	389554.58	
FO85U-17	39834.06	10.23%
A83305-1-17	605.98	0.16%
A83305-1-17	219.49	0.06%
FO974-17	553.77	0.14%
F07KZ-17	129.87	0.03%
Woodlot-4	112.07	0.03%
FO8L9-4	293.80	0.08%
FO8L9-4	12.25	0.00%
FO8L9-4	24.72	0.01%
Harv 08-15-4	1143.37	0.29%
Harv 08-15-4	1711.74	0.44%
Harv 08-15-4	243.35	0.06%
Harv 08-15-4	47.17	0.01%
Harv 08-15-4	181.68	0.05%
<b>Sum / % Alt</b>	<b>45113.34</b>	<b>11.58%</b>
Landform 3 - PR	31058.48	
FO81S	89.72	0.29%
Harv 08-15-3	123.92	0.40%
Harv 08-15-3	1990.42	6.41%
<b>Sum / % Alt</b>	<b>2204.06</b>	<b>7.10%</b>

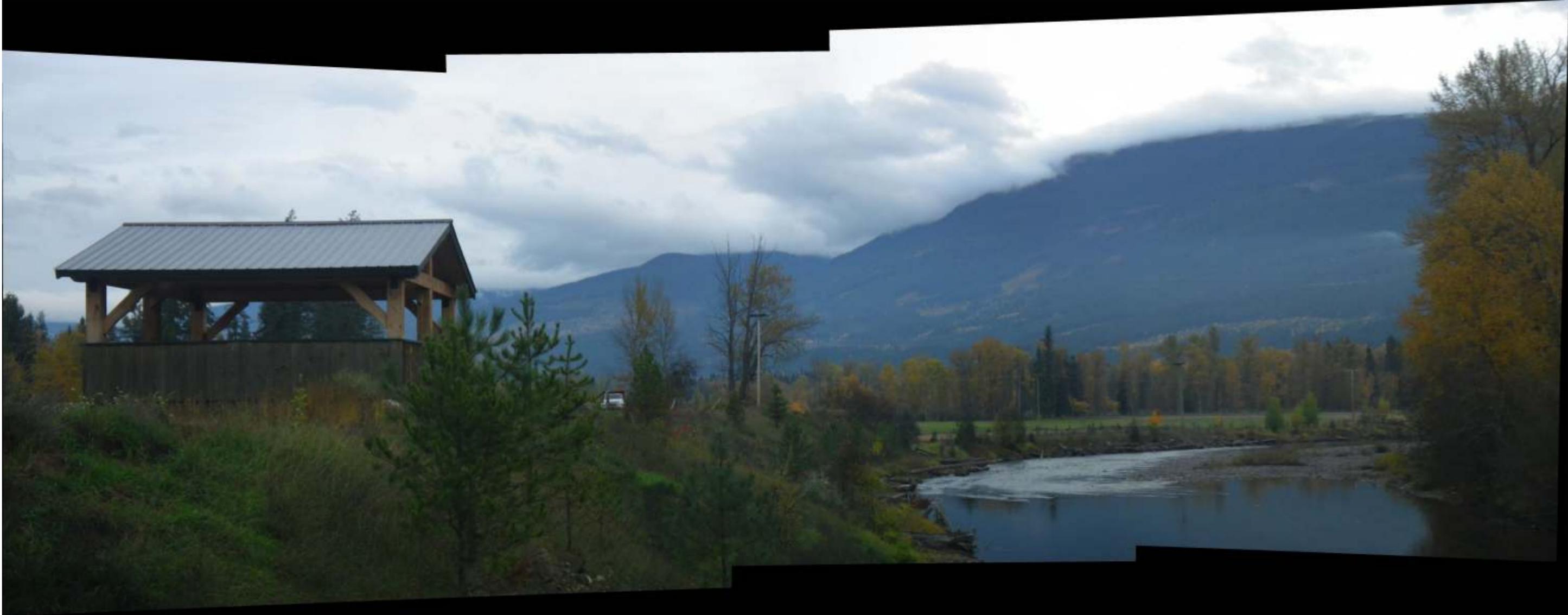
See McCorvie and Sandbox for % Alt Landform 1

Landform 4 (11.58%) exceeds the upper end of PR (7%) by Percent Alteration by 5% if clearly visible in its entirety. Full photo coverage not available, but the 2015 photo on the previous page indicates some screening towards the right side of the landform where FO85U would be located. Regenerating openings harvested since 2008 and marked H08-15 may now be exhibiting Visually Effective Green-up (VEG). If so, total alteration could be reduced by up to 1%. FO85U sits on the far right of the landform and is large in scale in itself, relative to the scale of the end piece of the landform. The block exhibits conformity with the shape of the end of the landform and might appear natural. The 2015 photos on the preceding page and on the next page indicate that the cutblock will likely be partly screened, though other views may expose the block. As a precaution, significant in-block retention should be sought. See also Birch and Miller viewpoints for Landform 4. FO7F7 and FO85R are NVS.

Landform 3 is at top end of PR, but no new cutblocks proposed. FO8PY in Landform 1 is 11 km distant from Raft Viewpoint. See Sandbox and McCorvie viewpoints for Percent Alteration in Landform 1.

The Partial Retention category of altered forest is 1) easy to see, 2) small to medium in scale, and 3) natural and not rectilinear or geometric in shape.

## Raft Viewpoint Percent Alteration 2017 and Recommendations



Raft Additional Photo