



# SUNSHINE COAST COMMUNITY FOREST

Sunshine Coast Community Forest  
Box 215, 213 – 5710 Teredo St  
Sechelt, BC V0N 3A0

## **Visual Impact Assessment**

### **Blocks AN03, AN3A, and AN15**

Angus Creek Operating Area – Sunshine Coast Community Forest

PREPARED BY



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## Summary

This report summarizes the Visual Impact Assessment (VIA) conducted for planned Blocks AN03, AN3A, and AN15 located north of Sechelt in the Angus Creek Operating area of the Sunshine Coast Community Forest (SCCF). These three blocks are located 6.5km north of Sechelt and 0.8km southeast of Gray Creek on the west facing mountain slopes 2.5km east of Sechelt Inlet. These slopes are visually sensitive and highly visible from various locations in and around the community of Sechelt.

The VIA assesses the projected impact of each block from various viewpoints from which the blocks will be visible. With due consideration for all significant publicly accessible viewpoints, several key viewpoints were selected for visual modelling. The locations of these viewpoints are shown on the *Visual Impact Assessment Viewpoint Map 1:50,000 Angus Creek AN03 AN3A AN15* (see Appendix A1). This VIA assesses the visual impact of each block at the landform scale against the relevant Visual Quality Objectives (VQOs). The results of the visual modeling (see Appendix A2 to A8) are assessed and summarized in Tables 1 to 5 and a detailed discussion is included to support the conclusion.

## Background – Visual Assessments & Visual Quality Objectives

This VIA is conducted in accordance with the Forest Stewardship Plan for Sunshine Coast Community Forest (Community Forest Agreement K3F FSP #787) approved March 20, 2020. The FSP Section 3.2.9 Visual Quality requires that a detailed VIA is completed to ensure the activities are consistent with the VQOs, taking into account the current state of the VQOs and the effects of surrounding development. Where portions of an assessed landform contain existing non-forested alterations, such as private land, gravel pits, or natural rock bluffs, the VIA will not assess these areas as contributing to the current state of the VQO. Further, the FSP requires that primary forest activities must be consistent with the VQOs as established:

- a. by the District Manager for the Sunshine Coast Forest District on April 22, 1997 and amended June 4, 1999;
- b. the VQOs established under the order dated June 19, 2009 for TFL39, block 1; and,
- c. subsequent amendments made to the VQOs in a and b.

The Order of the Minister of Forests No. M299 came into effect on September 15, 2022 and replaced the VQOs established for the District in 1997 and 2009. For all landforms discussed in this VIA the VQOs established under Order No. M299 are Partial Retention (PR) and are consistent with the previously established VQOs.

The VQO of PR is defined in FPPR Section 1.1 as consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is:

- i. easy to see,
- ii. small to medium in scale and
- iii. natural, and not rectilinear or geometric in shape in its appearance

The assessment of whether the planned road and block are consistent with the definition of PR is based on three elements of the VQO definition:

**Visibility** – How easy is the block to see, based on its location on the landscape, the location of viewpoints, the size and scale of the alteration, the distinctness of the alteration relative to the character of the landscape, foreground screening, and the duration and focus of the viewing experience.

**Size and scale** – The size and scale of proposed block relative to the visible area of the landform must be considered. The determination of size and scale combines the qualitative assessment of proposed block in context of the characteristics of the landform and viewpoints and integrates these with the quantitative analysis of *percent alteration*. The *percent alteration* is a metric of what portion of the visible landform is being altered by the proposed development. When the *percent alteration* is between 1.6% and 7% of the landform it is an indicator that the size and scale of the proposed alteration is small to medium in scale, which is one of the three elements of the definition of PR.

**Visual Design** – The shape, location, and character of the block relative to the landform must be considered. Specifically, the shape and characteristics of the block must be assessed with respect to the block's response to the lines of force of the topography and natural features such as ridges/draws that draw the viewer's eye towards or away from the alteration. Generally, straight lines (rectilinear) and sharp angles (angular) with repeating patterns or symmetry (geometrical) results in block design which appears unnatural or out of place to the viewer on the landscape.

These three elements of the definition of the VQOs must be considered collectively and require a qualitative judgment in determining to what degree the VQO is met. The extent to which the VQO is met is described with the following terms:

- **Clearly not met** - VQO definition not achieved, % alteration in excess of VQO range
- **Not met** – VQO definition not achieved, % alteration within VQO range
- **Inconclusive** – VQO definition on class boundary, % alteration in excess of VQO range
- **Met** – VQO definition achieved, % alteration in excess of VQO range
- **Well Met** – VQO definition achieved, % alteration well within VQO range

## Methodology

This VIA is based on procedures and guidance published in “Visual Impact Assessment Guidebook, 2<sup>nd</sup> edition” (MOF 2001) and the training seminar “Visual Impact Assessment Workshop” (MOF 2018) presented by Jacques Marc, RFT and Peter Williams of the Ministry of Forest, Lands, Natural Resource Operations and Rural Development in Squamish on March 27, 2018. The objective of the VIA is to determine if the definition of the relevant VQO will be met post-harvest. The visual impact was assessed for the relevant VQOs at the landform scale.

The VQOs are designated for Visual Sensitivity Units (VSUs) in the Visual Landscape Inventory (VLI), which is available through the B.C. Geographic Data Warehouse or the Visual Landscape Inventory Viewer. The existing VQO for the relevant VSUs are listed in Table 1.

The VIA was conducted by selecting multiple significant public viewpoints and modelling the visual impact of the planned forestry activities from each viewpoint. These viewpoints are listed in Table 3. The projected view from each viewpoint was modelled using Visual Nature Studio 3 software. The model consists of two parts, a digital terrain model with 25m resolution base data and a vegetation and forest cover model based on the provincial Vegetation Resource Inventory (VRI) data. The vegetation model was superimposed or “grown” on the terrain model, while the proposed roads and blocks were modelled with the vegetation removed. Existing blocks that have not reached Visually Effective Green-up (non-V.E.G.) and other visible features were modeled with the timber removed or reduced in height and density. The accuracy of the models was verified against photos taken from select viewpoints and satellite imagery.

The planned blocks were modelled from each of the selected viewpoints to determine the relative importance of each viewpoint. Viewpoint locations are shown on the *Visual Impact Assessment Angus Creek Map 1:50,000* (see Appendix A1). The selected viewpoints (Table 3) are located at Oyster Bay, Piper Point, Carlson Point, Porpoise Bay Gov't dock, Sechelt Golf Club, The Shores, and Xenichen Ave at Friendship Park.

For each viewpoint, the visible landforms were defined based on field reviews, photographs, renders from visual model, and topographic maps. Landforms boundaries were defined based on the skyline, shoreline, and major visible topographic breaks such as ridges and draws. Significant areas of non-vegetated land such as rocky mountain slopes are excluded from the landform. Landform boundaries were assessed and defined for each viewpoint perspective and are indicated on renders of the visual model (see Appendix A2 to A8). The landforms and associated VSUs are summarized in Table 2 and are shown on *Visual Impact Assessment Angus Creek Map 1:50,000* (see Appendix A1). Where multiple VSUs occur within a landform, a single VSU and associated VQO was selected for the landform (Table 2). The Existing Visual Condition (EVC) of each landform was assessed against current imagery and photography, and where required the EVC was varied from the current value assigned to the VSU in the VLI.

During the block planning and development process the preliminary harvest areas were modelled and the proposed block boundaries were modified to mitigate the visual impacts. Following these changes to the harvest plan the model was updated to confirm the desired effect had been achieved. The viewpoints selected for analysis are described and assessed in this VIA, and the modeled *Perspective Viewpoint Analysis* renders for each viewpoint are included in this report (see Appendix A2 to A8). The rendered *Perspective Viewpoint Analysis* images show the digitally simulated projection of the post-harvest visual impact. In addition, the renders show the visible landform boundary and the calculated percent alteration of the relevant landform.

An initial assessment of the visual impact of the proposed harvest of Blocks AN03 AN3A, AN15 is summarized in Table 4. This assessment was completed for each landform and sub-landform (see Perspective Viewpoints in Appendix A2 to A8) with due consideration to the *visibility, size and scale*, and *visual design* elements which constitute the definition of the VQO of PR in FPPR Section 1.1.

The *Sechelt Golf Club* (see Appendix A6) was selected as the most significant viewpoint for Landform 1 and Sub-landform 1a as the visual impacted was most significant when viewed from this viewpoint. A detailed assessment was conducted for this viewpoint (Table 5) with considerations for several additional factors which are sub-elements of the three fundamental elements of the VQO definition. The *visibility* was assessed in terms of the level of impact and the how easy it is to see. The *size and scale* was assessed based on the *percent alteration* calculated at the landform scale. The *visual design* was assessed based on the response to visual lines of force, how the alteration borrows and fits the natural character of the landform, the character of the block edges and edge treatments, the presence of islands of timber within the block, the viewing distance of the viewpoint from the landform, the position of the block on the landform, and the overall appearance of block in terms of visual design. The final determination of proposed alteration against the definition of the VQO considered all these factors as they compliment and relate



to the three primary elements of the definition of the VQO. The VIA includes a discussion based on the analysis shown Tables 4 and Table 5 and a conclusion with the final determination of whether the proposed alteration meets the VQO of PR.

**Private Land** - The *Perspective Viewpoint Analysis* render shows the private land areas highlighted. No “tree down” renders are included in this VIA as there is no private land near Blocks AN03, AN3A, and AN15. Any potential future changes to private land use will not affect the visual impact of the blocks.

**Linear utility corridors** – A BC Hydro transmission power line corridor runs north from Sechelt up to Gray Creek. This corridor is located on Landforms 1. The lack of forest cover along the transmission corridor is a permanent feature of the landscape and the corridor is not subject to management to the VQOs. As such, the transmission line is not considered as an ‘alteration’ on the landform and is not considered as a visual impact. The corridor is not prominently visible from any of the selected viewpoints.

## Landform and Viewpoints

The Blocks AN03, AN3A, and AN15 are located on the eastern side of Sechelt Peninsula north of Sechelt and south of Mount Richardson and Gray Creek. The blocks are located on the west facing slope south of Gray Creek and north of Angus Creek. The blocks are located within VSU polygons # 1284 (Table 1). The topography of the landscape within the area consists of moderate slopes rising to rounded ridge tops with several prominent creek draws dividing landforms. The vegetation consists of tall, dense, second growth Douglas-fir leading stands with a component of western hemlock and western red cedar. The landscape has a long history of intensive forest harvesting, however; the rate of harvesting and the scale of clearcut harvesting has slowed in recent decades.

As viewed from the selected viewpoints the landscape is composed of 4 visible landforms (Table 2). Landforms 1 can be divided into Sub-landforms 1a, 1b, and 1c when viewed from the *Shores* and *Sechelt Golf Club* viewpoints. The VQO of PR, the Visual Sensitivity Class (VSC) of 2, and Visual Absorptive Capacity (VAC) of High are adopted for Landform 1 (as shown in Table 2).

The significant public viewpoints from which the blocks were assessed, and their relative significance are listed in Table 3 and shown on the *Visual Impact Assessment Angus Creek Map 1:50,000* (see Appendix A1).

## Results and Tables

Table 1: Summary of Visual Sensitivity Unit Attributes

VSU Polygon	Blocks within VSU	VSC <sup>1</sup>	VAC <sup>2</sup>	EVC <sup>3</sup>	VQO
VSU # 1284	AN03 AN3A AN15 2 Non-VEG Blocks	2	H	M	PR - Partial Retention
VSU # 1258	None	3	M	PR	PR - Partial Retention
VSU # 1324	None	2	M	M	PR - Partial Retention

Table 1 Footnotes:

<sup>1</sup> VSC – Visual Sensitivity Class is a component of the visual landscape inventory that rates the sensitivity of the landscape to visual alteration based on biophysical characteristics, as well as viewing and viewer-related factors. It is an assessment of the likelihood that carrying out forest practices or other resource development activities in the VSU would give rise to some degree or kind of criticism or concern. It is expressed on a scale of 1 to 5, with 1 being “very high sensitivity” and 5 being “very low sensitivity.”

<sup>2</sup> VAC – Visual Absorption Capability is a measure of a landscape’s ability to absorb alteration and maintain its visual integrity. Landscapes have varying abilities to absorb human caused alterations due to their biophysical characteristics. VAC is expressed in terms of a relative rating as follows:

- High (H) - Landscape has high ability to absorb alteration and maintain its visual integrity
- Moderate (M) - Landscape has moderate ability to absorb alteration and maintain visual integrity
- Low (L) - Landscape has low ability to absorb alteration and maintain its visual integrity

<sup>3</sup> EVC – Existing Visual Condition is a measure of the VLI that represents the level of human-made landscape alteration caused by resource development activities in a visual sensitivity unit; expressed as visual quality classes. It uses the same categories as the VQO. It is a high-level categorization and is only current to the most recent VLI.

Table 2: Landform Summary

Visible Landforms	Blocks	Primary VSU #	VSC	VAC	EVC (VSU) & Landform (LF)	VQO	Landform Description
Landform 1	AN03 AN3A AN15	1284	2	H	M (VSU) PR (LF)	PR	Located the eastern side of Sechelt Peninsula north of Sechelt and south of Mount Richardson and Gray Creek. The Blocks AN03, AN3A and AN15 which are proposed for harvest are located within this landform. The landform contains private land at lower elevations and a linear transmission powerline corridor which runs north from Sechelt. There are several recently harvested areas within the SCCF south of the proposed blocks which are non-V.E.G. The landform contains VSU polygon #1284, #1258, and # 1324. The dominant VSU polygon within the landform is polygon #1284.
Sub-landform 1a	AN03 AN3A AN15	1284	2	H	M (VSU) PR (LF)	PR	Located in the northwestern portion of Landform 1 immediately south of south of Mount Richardson and Gray Creek. The landform is separated from Sub-landform 1a by the Angus Creek drainage. Blocks AN03, AN3A and AN15 are located within this sub-landform, which is entirely located within VSU polygon #1284.
Sub - Landform 1b	-	-	-	-	-	PR	Located in the southern portion of Landform 1 immediately north of Sechelt. Sub-landform 1b is bordered by Landform 2 at Irgens Creek (Dusty Road) and Sub-Landform 1a at Angus Creek.
Sub-landform 1c	-	-	-	-	R (LF)	-	Located upslope of Sub-Landforms 1a and 1b and is comprised of low rolling slopes and benches on the upper mountain slopes on the plateau upslope of Angus Creek. This Sub-landform represents the background portion of Landform 1 visible from select viewpoints. The Sub-landform does not contain any previously harvested areas which are visible from the selected viewpoints and has been assigned an EVC of Retention (R).
Landform 2	-	1307	2	M	PR (VSU) R(LF)	PR	Located along the shoreline of Sechelt Inlet directly east of Porpoise Bay immediately downslope and west of Landform 1. This Landform represents the foreground shoreline timber and slopes visible from viewpoints at sea level.
Landform 4	-	1258	3	M	PR (VSU) R(LF)	PR	Landform 4 is located north of Landform 1. The boundary between Landform 1 and Landform 4 is East Gray Creek.

Table 3: Summary of Viewpoint and Significance<sup>4</sup>

Viewpoint	Visible Proposed and Non-Greened Up Cutblocks	Description of Viewpoint and Significance or Importance	Viewpoint and Significance <sup>4</sup>
Oyster Bay	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	10.0km north of the Sechelt just off the point north of Oyster Bay on the western shore of Sechelt Inlet. The viewpoint was selected due to the high boat traffic. The viewing experience from this viewpoint is sustained focal views and side views, primarily from recreational watercraft.	Moderate (3)
Piper Point	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	7.6km north of the Sechelt just off Piper Point on the western shore of Sechelt Inlet. The viewpoint was selected due to the high boat traffic. The viewing experience from this viewpoint is sustained focal views and side views, primarily from recreational watercraft.	Moderate (3)
Carlson Point	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	6.2km north of the Sechelt just off Carlson Point on the western shore of Sechelt Inlet. The viewpoint was selected due to the high boat traffic. Carlson Point is road accessible, but recreational use of the area is limited as there is a log dump located on the point. The viewing experience from this viewpoint is sustained focal views and side views, primarily from recreational watercraft.	Moderate (3)
Porpoise Bay Gov't dock	Non-VEG Blocks Proposed Blocks (possible glimpses) AN03, AN3A, AN15	In Sechelt at the southern shore of Porpoise Bay. The viewpoint was selected due to the location of residences nearby and the presence of hospitality and tourism services businesses. There is also significant recreational boat traffic in the marinas located in Porpoise Bay. The viewing experience is primarily static long-term views.	High (5)
Sechelt Golf Club	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	Northwest of Sechelt upslope of the western shore of Porpoise Bay looking at Angus / Burnett / Gray Creeks. The viewpoint was selected due to the presence of residences and the golf course, which at the highest point in this neighbourhood and has wide open unobstructed views. The viewing experience is primarily static long-term views.	High (5)
The Shores	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	Northwest of Sechelt on the lower slopes near the western shore of Porpoise Bay looking at Angus / Burnett / Gray Creeks. The viewpoint was selected due to the presence of residences with unobstructed views. The viewing experience is primarily static long-term views.	High (5)
Xenichen Ave	Non-VEG Blocks Proposed Blocks (possible glimpses) AN03, AN3A, AN15	In Sechelt at Friendship Park near the shore of Strait of Georgia. The viewpoint was selected due to the location of residences nearby and the presence of hospitality and tourism services businesses. This is a high traffic area for pedestrians. The viewing experience is primarily static long-term views.	High (5)

## Table 3 Footnotes:

<sup>4</sup> Significance is based on the "Effectiveness Evaluation of Visual Impacts" (MOF, 2005). The importance of the viewpoint using a five-point scale with Low (1) to High (5). The scale is calibrated to the viewing duration:

- (1) *Low* - glimpse view, less than 10 seconds
- (2) *Low to Moderate* - sustained side view
- (3) *Moderate* - sustained focal view, travelling toward the alteration for more than one minute,
- (4) *Moderate to High* - viewpoint is at a rest stop, campsite, or other static short-term view location,
- (5) *High* - viewpoint is the location of a community, commercial tourist-related enterprise, or other static long-term view location.

<sup>5</sup> VLI – Visual Landscape Inventory

Table 4: Assessment of Visual Impact for Viewpoints (see Appendix A2 to A8)

Viewpoint	Visible Landforms	VQO	Visible Blocks in Landform	Visibility <sup>6</sup>	Percent Alteration (%) <sup>7</sup>	Size and Scale <sup>8</sup>	Design and Character <sup>9</sup>	VQO Met Initial Assessment <sup>10</sup>
Oyster Bay	1	PR	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	Easy to see	2.59	Small to medium	Natural & Non-rectilinear	Well Met
Piper Point	1	PR	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	Easy to see	1.94	Small to medium	Natural & Non-rectilinear	Well Met
Carlson Point	1	PR	Proposed Blocks AN03, AN3A, AN15 Non-Veg Blocks	Easy to see	2.07	Small to medium	Natural & Non-rectilinear	Well Met
Porpoise Bay Gov't dock	1	PR	Non-VEG Blocks and possible glimpses of Proposed Blocks AN03, AN3A, AN15	Difficult to See	0.86	Small	Natural & Non-rectilinear	Well Met
Sechelt Golf Club	1		Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	Easy to see	1.22	Small to medium	Natural & Non-rectilinear	Well Met
	<i>1a</i>	<i>PR</i>	<i>Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks</i>	<i>Easy to see</i>	<i>2.78</i>	<i>Small to medium</i>	<i>Natural &amp; Non-rectilinear</i>	<i>Well Met</i>
	<i>1b</i>	<i>PR</i>	<i>Non-VEG Blocks</i>	<i>Easy to see</i>	<i>0.93</i>	<i>Small</i>	<i>Natural &amp; Non-rectilinear</i>	<i>Well Met</i>
	<i>1c</i>	-	-	-	-	-	-	<i>N/A</i>
The Shores	1	PR	Proposed Blocks AN03, AN3A, AN15 Non-VEG Blocks	Easy to see	1.05	Small to medium	Natural & Non-rectilinear	Well Met
	<i>1a</i>	<i>PR</i>	<i>Proposed Blocks AN03, AN3A, AN15</i>	<i>Easy to see</i>	<i>1.97</i>	<i>Small to medium</i>	<i>Natural &amp; Non-rectilinear</i>	<i>Well Met</i>
	<i>1b</i>	<i>PR</i>	<i>Non-VEG Blocks</i>	<i>Difficult to See</i>	<i>0.46</i>	<i>Small</i>	<i>Natural &amp; Non-rectilinear</i>	<i>Well Met</i>
	<i>1c</i>	-	-	-	-	-	-	<i>N/A</i>
Xenichen Ave	1	PR	Non-VEG Blocks Proposed Blocks AN03, AN3A, AN15	Easy to see	1.62	Small to medium	Natural & Non-rectilinear	Well Met

## Table 4 Footnotes:

<sup>6</sup>**Visibility** is described with the following terms in FPPR Section 1.1:

- *Not easily distinguishable* – Not visually apparent regardless of view duration.
- *Difficult to see* – Requires much effort or skill to discern visually. Peripheral, obscured, or extremely distant, as seen from non-static viewpoints.
- *Easy to see* – Able to discern visually without great effort or difficulty. Directly in sight or unobscured, as seen from one to a few stationary, viewpoints or moving views of moderate duration.
- *Very Easy to see* – Able to discern visually without any effort or difficulty. Directly seen or unobscured focal view as seen from single to multiple viewpoints of long duration.
- *Extremely Easy to see* – Able to discern visually without any effort. Unobscured focal view, dominates the view, as seen from multiple stationary or continuous viewpoints of long duration (>1 minute).

<sup>7</sup>**Percent Alteration:** What % of the landform does alteration (plus non-veg and CP ready blocks, if present) occupy? See Appendix for calculations.

<sup>8</sup>**Size and scale** are described with the following terms used in the in FPPR Section 1.1, with the associated percent alteration:

- Very Small (0%)
- Small (0-1.5%)
- Small to Medium (1.5-7%)
- Large (7.1-18%)
- Very large (18.1-30%)

<sup>9</sup>**Design** is described with the following terms used in the in FPPR Section 1.1:

- *Natural* – Includes irregular organic shapes, curvilinear lines, or a diffuse or dispersed pattern or texture
- *Rectilinear* – Contained by, consisting of, or moving in a straight line or lines
- *Geometric* – Characterized by regular lines or shapes (ei. Squares, rectangles, triangles, and circles).
- *Angular* – Having angles or sharp corners

<sup>10</sup>**VQO met? Initial Assessment** This is a yes/no determination based on a judgment weighing the three fundamental elements of the VQO definition. The extent to which a VQO is met is described in the following terms:

- *Clearly not met* - VQO definition not achieved, % alteration in excess of VQO range
- *Not met* – VQO definition not achieved, % alteration within VQO range.
- *Inconclusive* – VQO definition on class boundary, % alteration in excess of VQO range.
- *Met* -VQO definition achieved, % alteration in excess of VQO range.
- *Well Met* – VQO definition achieved, % alteration well within VQO range.

Table 5: Detailed Assessment of Visual Impact for Key Viewpoint by Block (see Appendix A6)

Viewpoint			Assessing Visibility <sup>12</sup>	Assessing Size and Scale <sup>14</sup>	Assessing Visual Design							VQO met for Blocks? Final Determination <sup>22</sup>
Block	Landform (and VQO)	Level of Impact <sup>11</sup> & Visibility <sup>12</sup>	Percent Alteration <sup>13</sup> (%) & Size and Scale <sup>14</sup>	Response to Visual Force Lines <sup>15</sup>	Does alteration borrow from natural character of landscape? <sup>16</sup>	Have edge treatments been incorporated? <sup>17</sup>	Have islands or patches of trees been maintained to mitigate visual impacts? <sup>18</sup>	Distance from the viewpoint <sup>19</sup>	Position on the landform <sup>20</sup>	Overall Design <sup>21</sup>		
Sechelt Golf Club	Block AN03	1	Subordinate & Easy to See	Small to Medium	Moderate	Good	Moderate	Moderate	Good 6.6km	Good	Natural & Non-rectilinear	Well Met
	Block AN3A	1	Not visually evident & Difficult to see		Moderate	Good	Moderate	Moderate	Good 6.3km	Moderate	Natural & Non-rectilinear	Well Met
	Block AN15	1	Not visually evident & Difficult to see		Moderate	Good	Moderate	Moderate	Good 7.0km	Good	Natural & Non-rectilinear	Well Met
	Sub-landform 1a	PR	Subordinate & Easy to See		Moderate	Good	Moderate	Moderate	Good	Moderate	Natural & Non-rectilinear	Well Met
	Overall Landform 1	PR	Subordinate & Easy to See		Small 1.22%	Moderate	Good	Moderate	Moderate	Good	Moderate to Good	Natural & Non-rectilinear

## Table 5 Footnotes:

- <sup>11</sup> **Level of Impact:** Describe the level of impact that the proposed alteration, in combination with any existing non-vegetated and cutting permit ready blocks, will have on the landscape from each viewpoint using one of the following terms: Not visible, Not visually evident, Subordinate, Dominant, Out of scale.
- <sup>12</sup> **Visibility:** The following terms used in FPPR Section 1.1 define the overall visibility of the alteration on the landform:
- *Not easily distinguishable* – Not visually apparent regardless of view duration.
  - *Difficult to see* – Requires much effort or skill to discern visually. Peripheral, obscured, or extremely distant, as seen from non-static viewpoints
  - *Easy to see* – Able to discern visually without great effort or difficulty. Directly in sight or unobscured, as seen from one to a few stationary viewpoints or moving views of moderate duration.
  - *Very Easy to see* – Able to discern visually without any effort or difficulty. Directly seen or unobscured focal view as seen from single to multiple viewpoints of long duration.
  - *Extremely Easy to see* – Able to discern visually without any effort. Unobscured focal view, dominates the view, as seen from multiple stationary or continuous viewpoints of long duration (>1 minute).
- <sup>13</sup> **Percent Alteration:** What % of the landform does alteration (plus non-veg and CP ready blocks, if present) occupy? See viewpoint render for calculation.
- <sup>14</sup> **Size and scale** are described with the following terms used in the in FPPR Section 1.1, with the associated percent alteration:
- *Very Small* (0%)
  - *Small* (0-1.5%)
  - *Small to Medium* (1.5-7%)
  - *Large* (7.1-18%)
  - *Very large* (18.1-30%).
- <sup>15</sup> **Response to Visual Force Lines:** Opening boundaries should respond to topography by pushing up in hollows and dropping down on ridges. Lines of force would be rated *Good* if there is a strong response, and *Poor* if there is little or no response. If visual force lines are not apparent on the landform (i.e. due to lack of undulation or undulation being obscured by residual trees) the rating would be neutral. Rate as: *Good, Moderate, Poor*.
- <sup>16</sup> **Does the alteration borrow from the natural character of the landscape?** Does the shape of the alteration reflect the quality of shapes found in the natural landscape (rounded curvilinear shapes on rounded landforms; spiky more jagged shapes in more rugged terrain) and does the opening respond to natural vegetation patterns and openings in both in scale and shape? Rate as: *Good, Moderate, Poor*.
- <sup>17</sup> **Have edge treatments been incorporated?** Edge treatments include two aspects – feathering to soften the transition between the alteration and the unaltered forest, and the use of irregular or wavy boundaries. If both aspects are present the rating is *Good*, if one aspect is present the rating is *Moderate*, and if neither aspect is present the rating is *Poor*. Heavy dispersed retention across the block acts as feathering.
- <sup>18</sup> **Have islands or patches of tree been maintained to mitigate visual impacts?** Retention patches can be placed in strategic locations, and have good orientation and design to break up the visible opening, and to coordinate / mimic the visual effect of surrounding terrain features. Rate as: *Good, Moderate, Poor*.
- <sup>19</sup> **Distance from the viewpoint:** The distance from the viewpoint can significantly influence public perception of an opening. Foreground openings are difficult to integrate because all the detail is visible. Distant openings are much easier to integrate because less detail is visible. The distance factor is rated *Poor* if less than 2 km, *Moderate* if from 2 to 5 km, and *Good* if over 5 km distant.
- <sup>20</sup> **Position on the landform:** If an opening occupies the centre of a landscape in direct view it would rate *Poor* for position. Openings located lower down and to one side of a landform are more comfortable and are rated higher. Rate as: *Good, Moderate, Poor*.
- <sup>21</sup> **Design** is described with the following terms used in the in FPPR Section 1.1:
- *Natural* – Includes irregular organic shapes, curvilinear lines, or a diffuse or dispersed pattern or texture
  - *Rectilinear* – Contained by, consisting of, or moving in a straight line or lines
  - *Geometric* – Characterized by regular lines or shapes (ei. squares, rectangles, triangles, and circles).
  - *Angular* – Having angles or sharp corners
- <sup>22</sup> **VQO met for block?** This is a yes/no determination based on a judgment weighing all factors. The extent to which a VQO is met is described in the following terms:
- *Clearly not met* - VQO definition not achieved, % alteration in excess of VQO range
  - *Not met* – VQO definition not achieved, % alteration within VQO range.
  - *Inconclusive* – VQO definition on class boundary, % alteration in excess of VQO range.
  - *Met* -VQO definition achieved, % alteration in excess of VQO range.
  - *Well Met* – VQO definition achieved, % alteration well within VQO range

## Discussion of Visual Impacts

### Block AN03 AN3A AN15– Landform 1a

The Blocks AN03, AN3A, and AN15 are located in Landform 1 within Sub-Landform 1a. The visual impact of these three blocks was assessed in aggregate from several viewpoints identified on the *Visual Impact Assessment Viewpoint Map 1:50,000 Angus Creek AN03 AN3A AN15* (see Appendix A1). The viewpoint *Sechelt Golf Club* (see Appendix A6) was selected for detailed analysis and assessment against the VQOs. This detailed VIA analysis is summarized in Table 5. The visual design was assessed against the three sub-elements of visibility, size and scale, and visual design.

**Visibility** - Blocks AN3A and AN15 are projected to have a level of impact that is *not visually evident* and the visibility is *difficult to see* from the selected viewpoint; however, AN03 is projected to be visually *subordinate* and be *easy to see* as it is a larger opening. The overall visual impact of the three blocks when assessed collectively is projected to be visually *subordinate* and the visibility is *easy to see*.

**Size and scale** – The visual impact of Blocks AN03, AN3A, and AN15 are modeled to be *small to medium* in scale when assessed as a group. Block AN15 and AN3A are both *small* in scale, but Block AN03 is *small to medium* in scale.

**Visual design** – The visual design is assessed against several diagnostic elements including the response to visual lines of force, how the alteration borrows from the natural character of the landform, the character of the block edges and edge treatments, the presence of islands of timber within the block, the viewing distance of the viewpoint from the landform, the position of the block on the landform, and the overall appearance of block in terms of visual design. The landform is gentle sloped and lacks defined lines of force in proximity to the planned Blocks AN03, AN3A, and AN15 when viewed from the *Sechelt Golf Club* viewpoint. The proposed alteration burrows from the character of the landform with low angles and undulating lines, and the harvest boundaries are irregular across the slope. The viewing distance is between 6.3km and 7.0km from the selected viewpoint, and the proposed blocks appear on the lower left edge of the landform. The appearance of the blocks is natural and non-rectilinear.

The VQO of PR is well met for Blocks AN03, AN3A, and AN15 within Landform 1 and Sub-landform 1a.

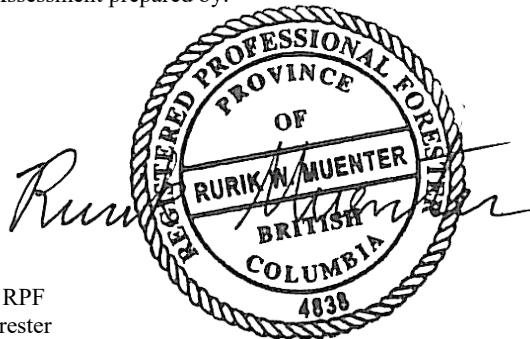
## Conclusions

Based on the VIA analysis detailed in this report the VQO of PR is well met at the landform scale for Blocks AN03, AN3A, and AN15 as it meets the definition of PR as being i) *easy to see*, ii) *small to medium in scale*, and iii) *natural, and not rectilinear or geometric* in appearance.

**Limitations** - Although the VIA renders are based on high quality data, there are inherent limitation to the accuracy of the predicted visual impact. Specifically, the VIA cannot account for potential operational changes to the planned harvest area or retention areas. There is potential for post-harvest windthrow which could alter the outcome of the visual impact. The risks posed by post-harvest windthrow were considered during the windthrow assessment and mitigation action to reduce the windthrow risk has been planned accordingly.

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Visual Impact Assessment prepared by:



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Professional Forester  
CHARTWELL CONSULTANTS LTD.

*I certify that the work described herein fulfills the standards expected of a member of the Association of Forest Professionals of British Columbia and that I did personally supervise the work.*

May 9, 2023

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## References

- Jacques Marc, MFR Forest Practices Branch. 2008. Protocol for Visual Quality Effectiveness Evaluations Procedures and Standards. Forest and Range Evaluation Program. Victoria, B.C
- Jacques Marc and Peter Williams, Ministry of Forest, Lands, Natural Resource Operations and Rural Development. 2018. "Visual Impact Assessment Workshop". Unpublished material from training seminar held in Squamish on March 27, 2018.
- Ministry of Forests, Forest Practices Branch. 1997. Visual Landscape Inventory Procedures & Standards Manual. Victoria, B.C.
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- Province of British Columbia. 1996. Forest Practices Code of British Columbia Act. Victoria, B.C.
- Province of British Columbia. 2004a. Forest and Range Practices Act. Victoria, BC.
- Province of British Columbia. 2004b. Forest and Planning and Practices Regulation. Victoria, BC.



# Visual Impact Assessment

## Angus Creek

### Legend

- Project Assigned Viewpoints
  - Government Assigned Viewpoints
  - Landform
  - Visual Sensitivity Unit (Order M299)
  - Riparian Management Zone (Partial Retention)
  - Retention
  - Proposed Blocks
  - Planned Blocks (2022 - 2025)
  - NonVEG
  - Existing Block (Visually Greened Up)
  - Gravel Pit
  - Private Land (PMBC./ First Nations)
- Roads**
- Highway
  - Paved
  - Rough
  - Proposed
- Water**
- Lake / River / Ocean
  - Stream

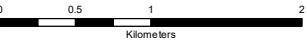
#### Visual Polygon Label Key:

- Polygon #
- VSC
- VAC EVC
- VQO

#### Visual Sensitivity Unit Label Key:

- VSU Visual Sensitivity Unit
- VSC Visual Sensitivity Class
- VAC/EVC Visual Absorption Capacity/Existing Visual Condition
- VQO Visual Quality Objective

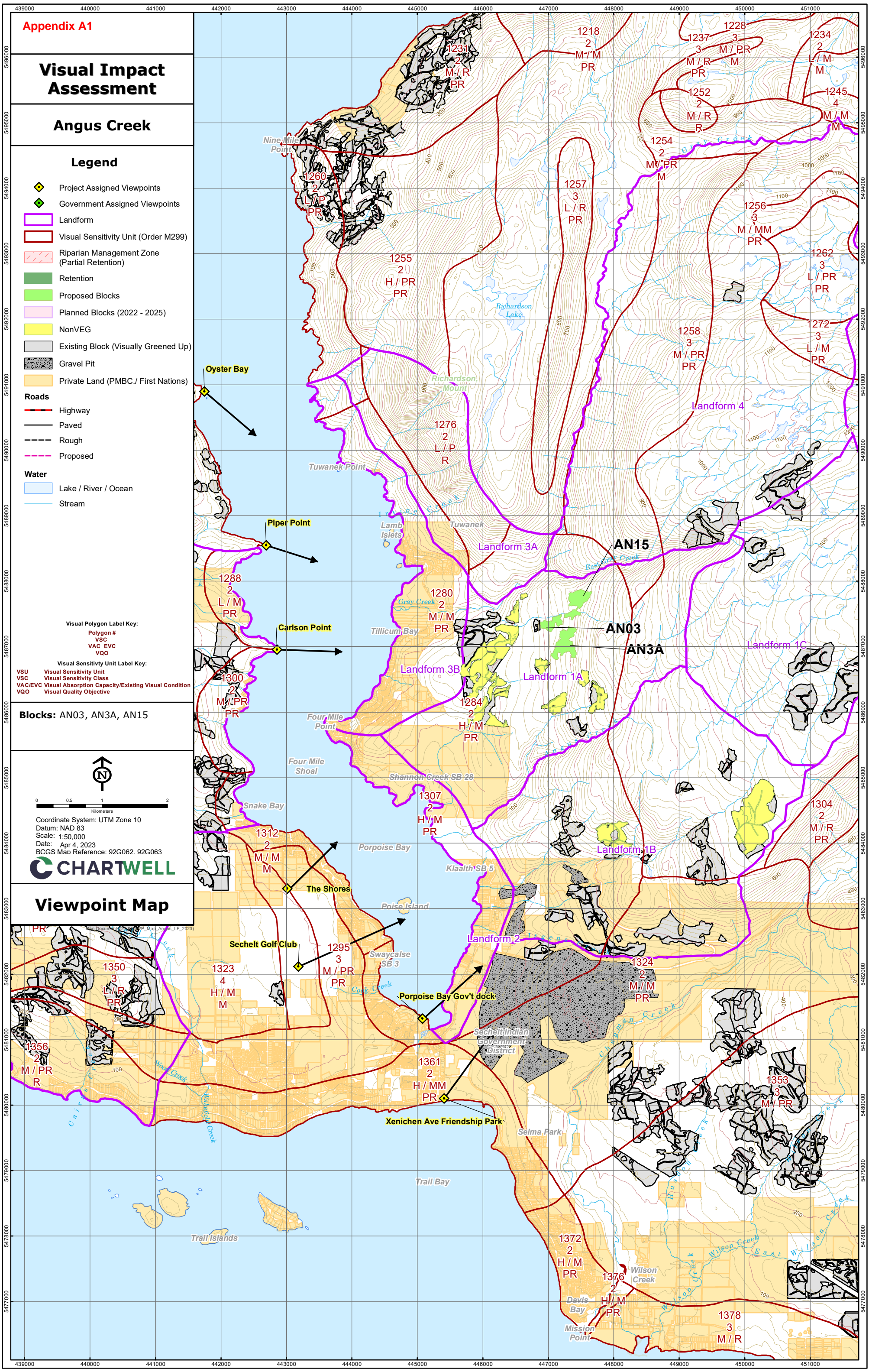
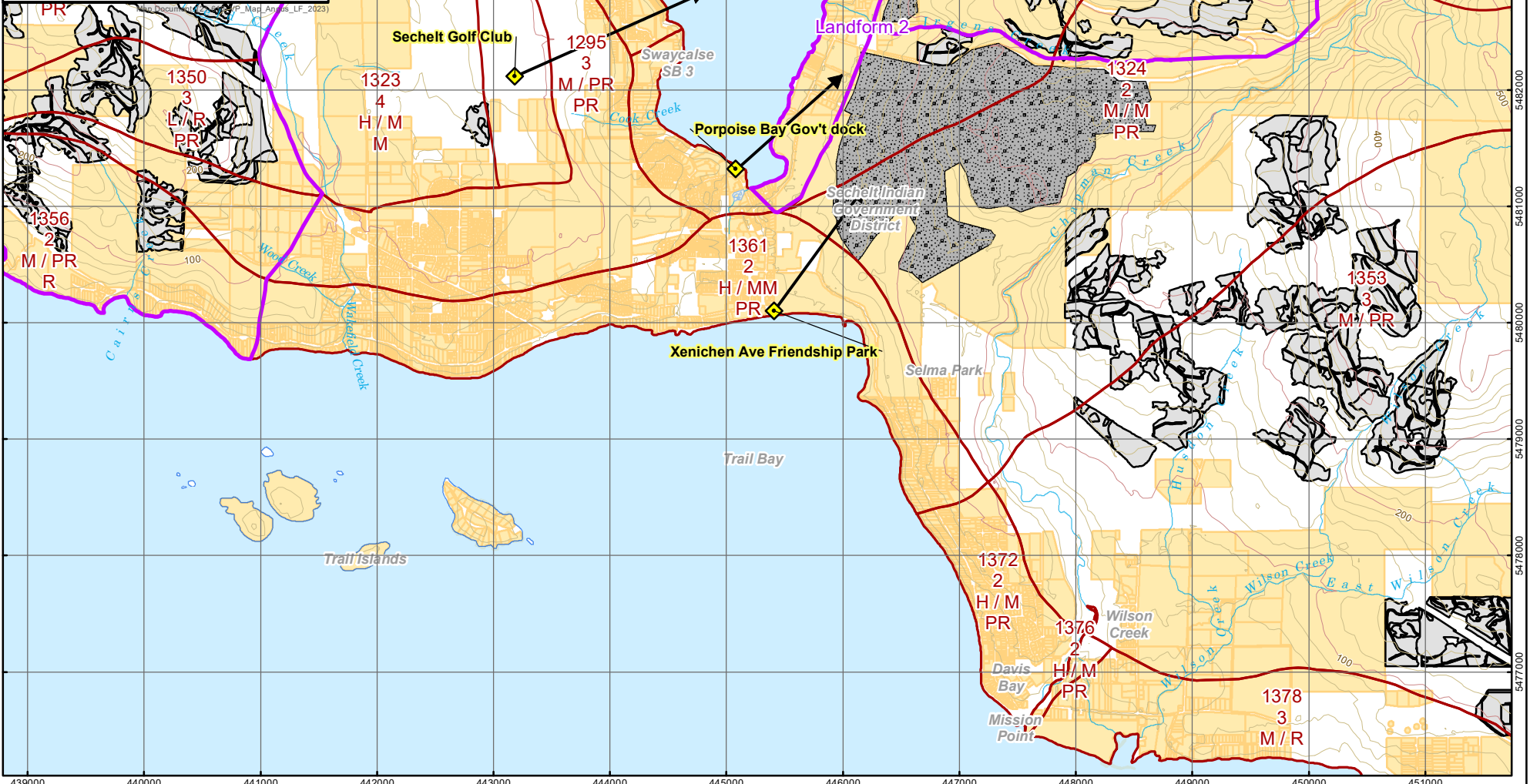
Blocks: AN03, AN3A, AN15



Coordinate System: UTM Zone 10  
 Datum: NAD 83  
 Scale: 1:50,000  
 Date: Apr 4, 2023  
 BCGS Map Reference: 92G062, 92G063



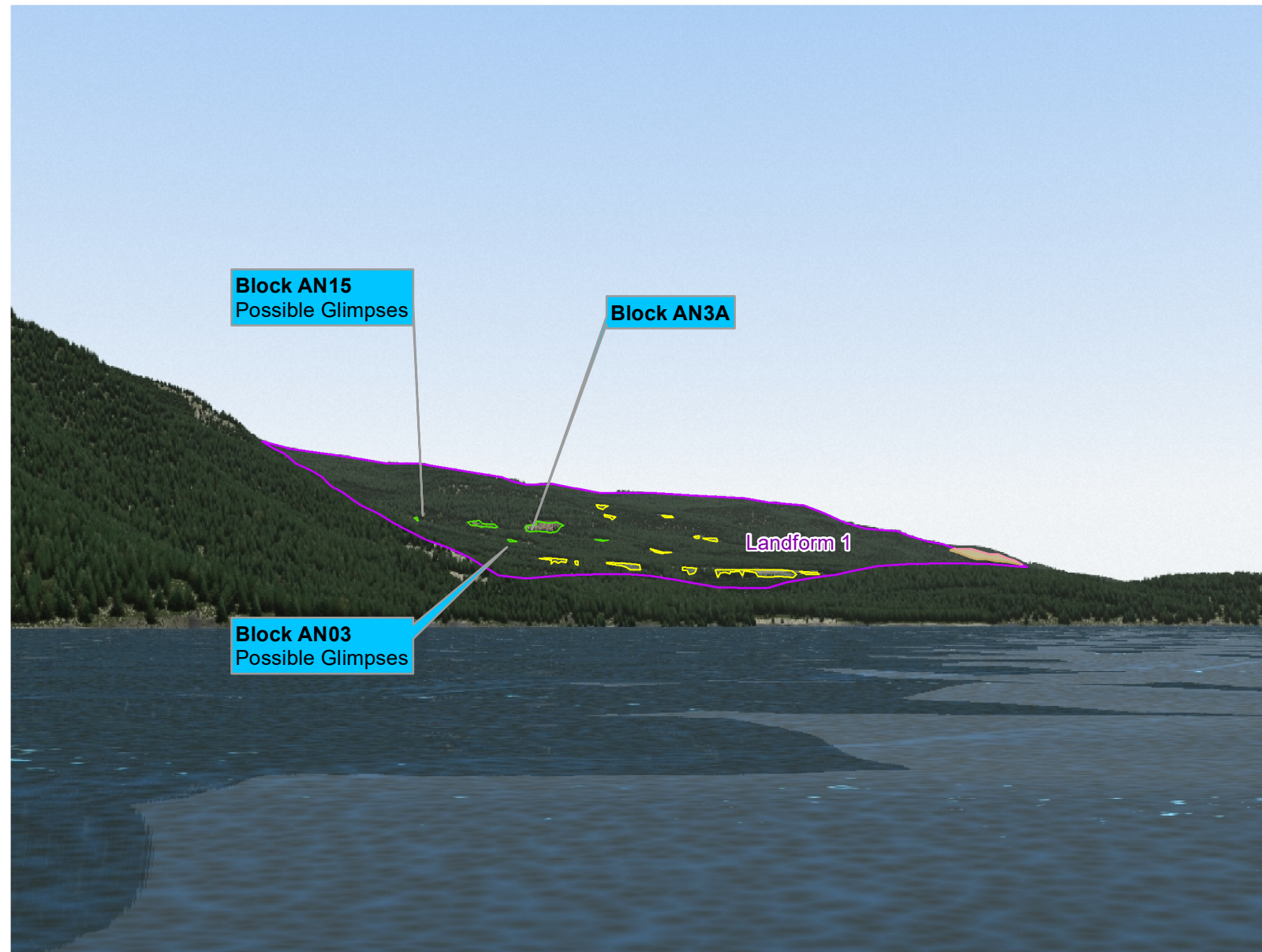
### Viewpoint Map





# Visual Impact Assessment

## Perspective Viewpoint Analysis Angus Creek - Oyster Bay



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: Oyster Bay**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
VAC - Visual Absorbption Capability  
EVC - Existing Visual Condition  
VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 = 28054  
Area of NonVEG Blocks = 471 (1.68%)  
Area of Proposed Blocks = 254 (0.91%)

**Total % Alteration:**  
**(NonVEG + Proposed Blocks) / Landform = 2.59%\***

\*Units of area measured in pixels

**Legend**

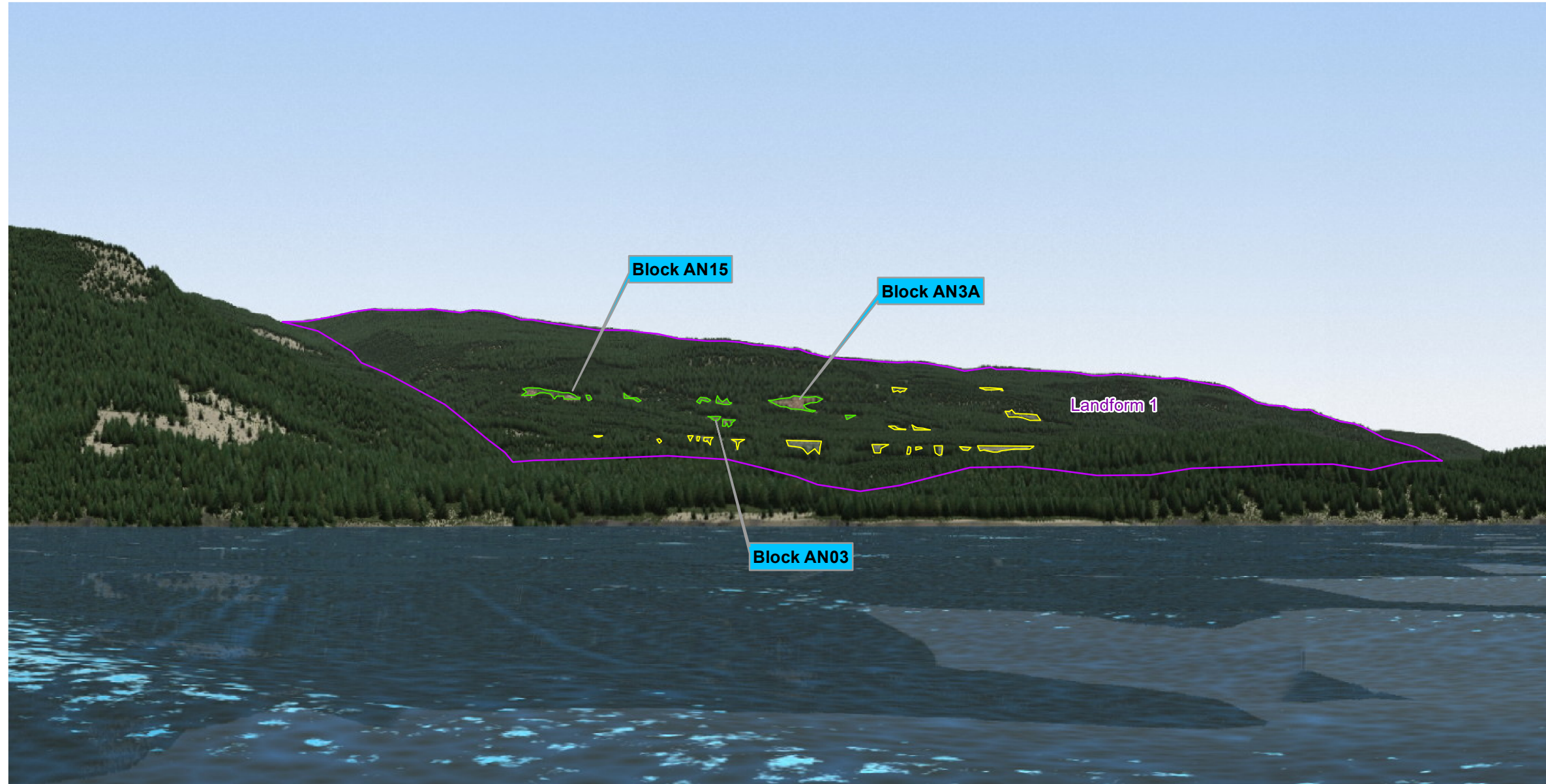
- Proposed Block
- NonV.E.G.
- Landform
- Private Land

\*Private Land is only depicted within Landform 1



# Visual Impact Assessment

## Perspective Viewpoint Analysis Angus Creek - Pipers Point



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: Piper's Point**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
VAC - Visual Absorbption Capability  
EVC - Existing Visual Condition  
VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 = 86 255  
Area of NonVEG Blocks = 766 (1.03%)  
Area of Proposed Blocks = 788 (0.91%)

**Total % Alteration:**  
**(NonVEG + Proposed Blocks) / Landform = 1.94%\***

\*Units of area measured in pixels

**Legend**

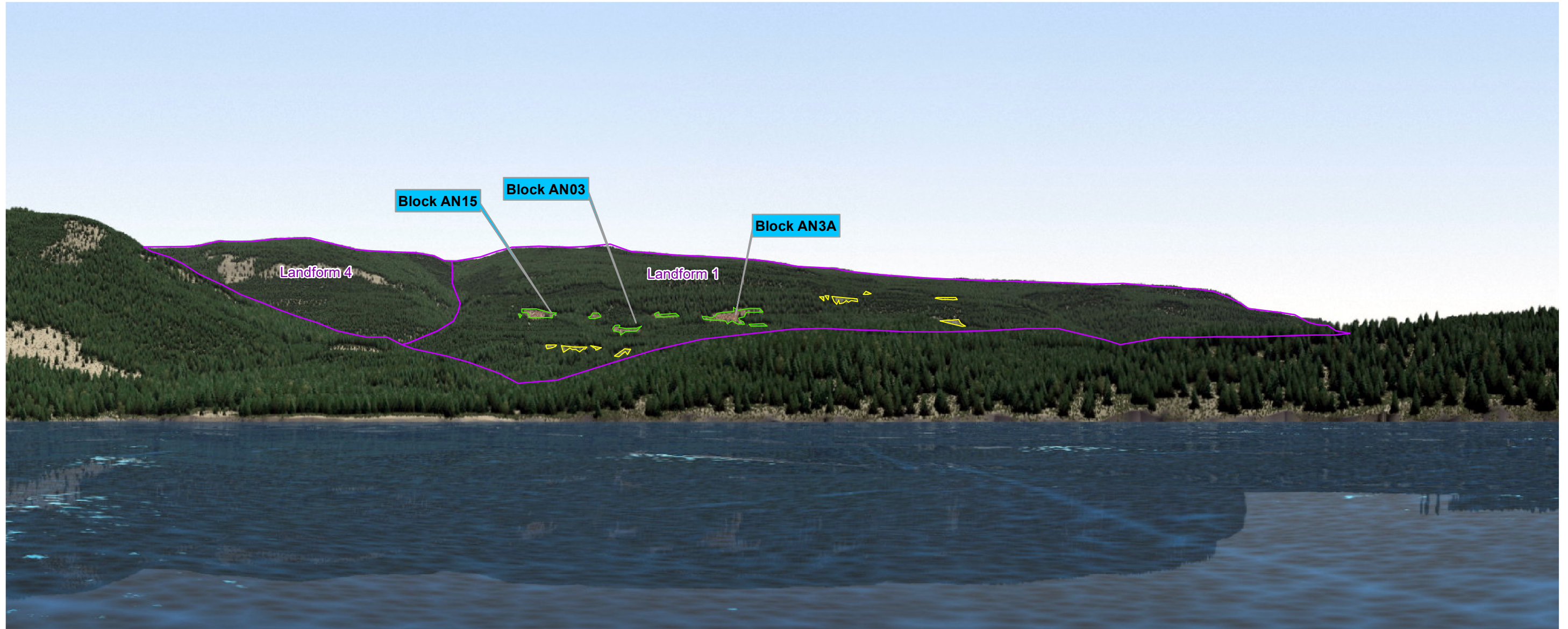
- Proposed Block
- NonV.E.G.
- Landform
- Private Land

\*Private Land is only depicted within Landform 1



# Visual Impact Assessment

## Perspective Viewpoint Analysis Angus Creek - Carlson Point



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: Carlson Point**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
VAC - Visual Absorbtion Capability  
EVC - Existing Visual Condition  
VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 = 101 708  
Area of NonVEG Blocks = 520 (0.67%)  
Area of Proposed Blocks = 1085 (1.40%)

**Total % Alteration:**  
**(NonVEG + Proposed Blocks) / Landform = 2.07%\***

\*Units of area measured in pixels

**Legend**

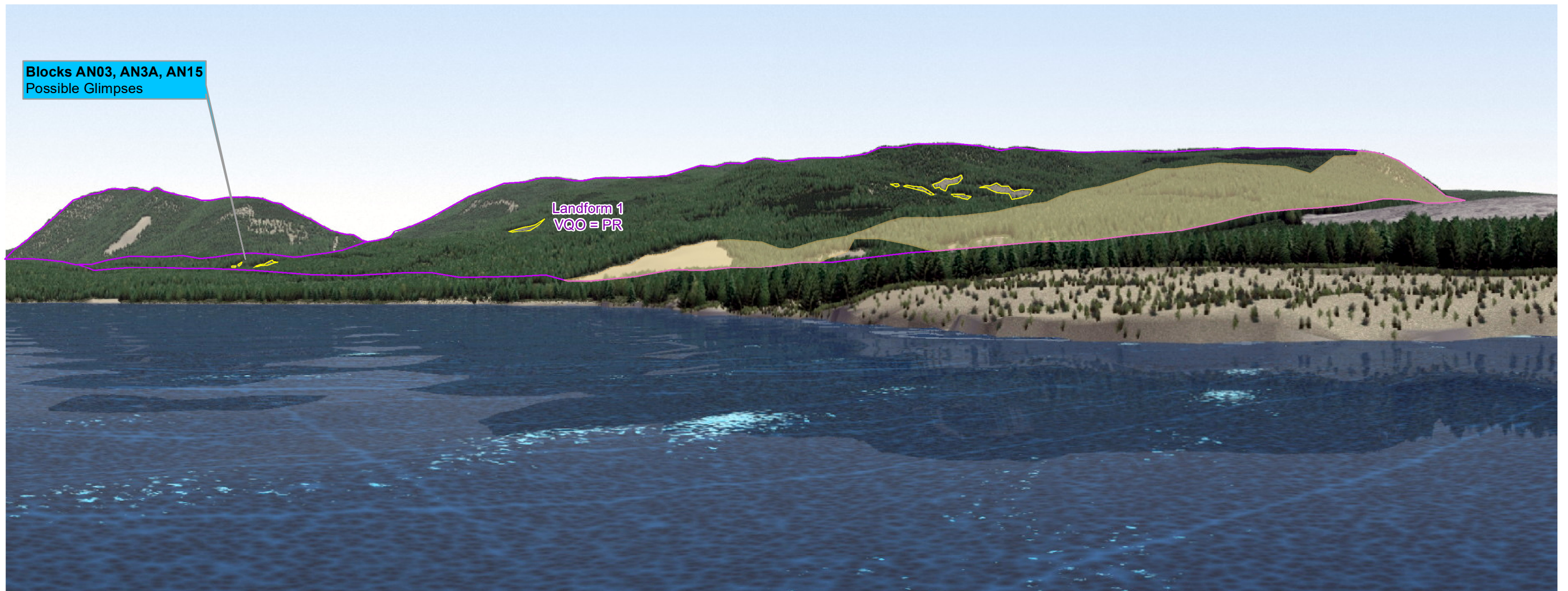
- Proposed Block
- NonV.E.G.
- Landform
- Private Land

\*Private Land is only depicted within Landform 1



# Visual Impact Assessment

## Perspective Viewpoint Analysis Angus Creek - Porpoise Bay



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: Porpoise Bay**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
VAC - Visual Absorbption Capability  
EVC - Existing Visual Condition  
VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 = =133852  
Area of NonVEG Blocks = 1152 (0.86%)  
Area of Proposed Blocks = 0 (0.00%)

**Total % Alteration:**  
**(NonVEG + Proposed Blocks) / Landform = 0.86%\***

\*Units of area measured in pixels

**Legend**

- Proposed Block
- NonV.E.G.
- Landform
- Private Land

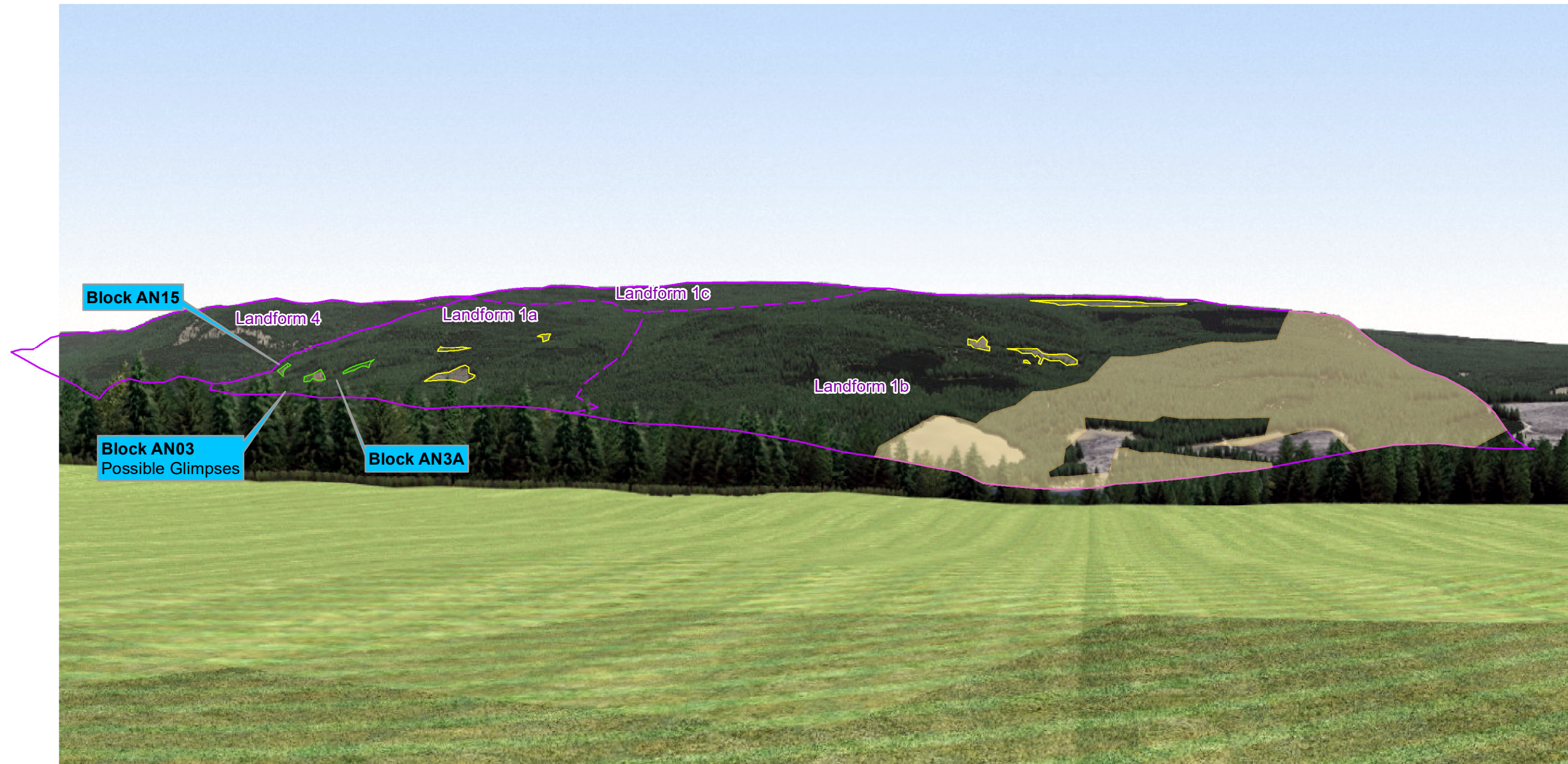
\*Private Land is only depicted within Landform 1



# Visual Impact Assessment

## Perspective Viewpoint Analysis

### Angus Creek - The Sechelt Golf Club



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: Sechlet Golf Club**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
 VAC - Visual Absorbption Capability  
 EVC - Existing Visual Condition  
 VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 (Full) = 141 912  
 Area of NonVEG Blocks = 1496 (1.05%)  
 Area of Proposed Blocks = 240 (0.17%)

**Total % Alteration:**  
 (NonVEG + Proposed Blocks) / Landform = 1.22%\*

\*Units of area measured in pixels

**Percent Alteration Calculation**

Area of Sub-Landform 1a = 25807  
 Area of NonVEG Blocks = 478 (1.85%)  
 Area of Proposed Blocks = 240 (0.93%)

**Total % Alteration:**  
 (NonVEG + Proposed Blocks) / Landform = 2.78%\*

**Percent Alteration Calculation**

Area of Sub-Landform 1b = 109838  
 Area of NonVEG Blocks = 1018 (0.93%)  
 Area of Proposed Blocks = 0 (0.00%)

**Total % Alteration:**  
 (NonVEG + Proposed Blocks) / Landform = 0.93%\*

**Legend**

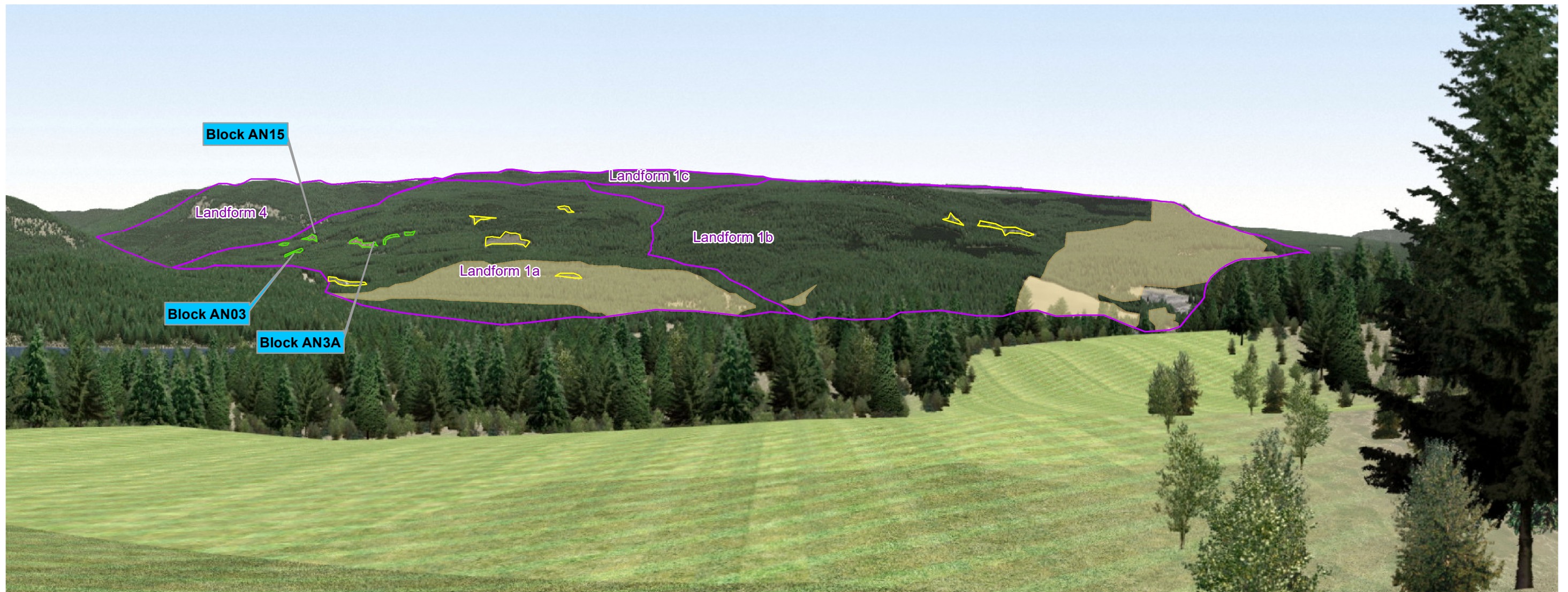
- Proposed Block
- NonV.E.G.
- Landform
- Private Land

\*Private Land is only depicted within Landform 1



# Visual Impact Assessment

## Perspective Viewpoint Analysis Angus Creek - The Shores



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: The Shores**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
VAC - Visual Absorbtion Capability  
EVC - Existing Visual Condition  
VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 (Full) = 172018  
Area of NonVEG Blocks = 1413 (0.82%)  
Area of Proposed Blocks = 401 (0.23%)

**Total % Alteration:**  
(NonVEG + Proposed Blocks) / Landform = 1.05%\*

\*Units of area measured in pixels

**Percent Alteration Calculation**

Area of Sub-Landform 1a = 69301  
Area of NonVEG Blocks = 964 (1.39%)  
Area of Proposed Blocks = 401 (0.58%)

**Total % Alteration:**  
(NonVEG + Proposed Blocks) / Landform = 1.97%\*

**Percent Alteration Calculation**

Area of Sub-Landform 1b = 97122  
Area of NonVEG Blocks = 449 (0.46%)  
Area of Proposed Blocks = 0 (0.00%)

**Total % Alteration:**  
(NonVEG + Proposed Blocks) / Landform = 0.46%\*

**Legend**

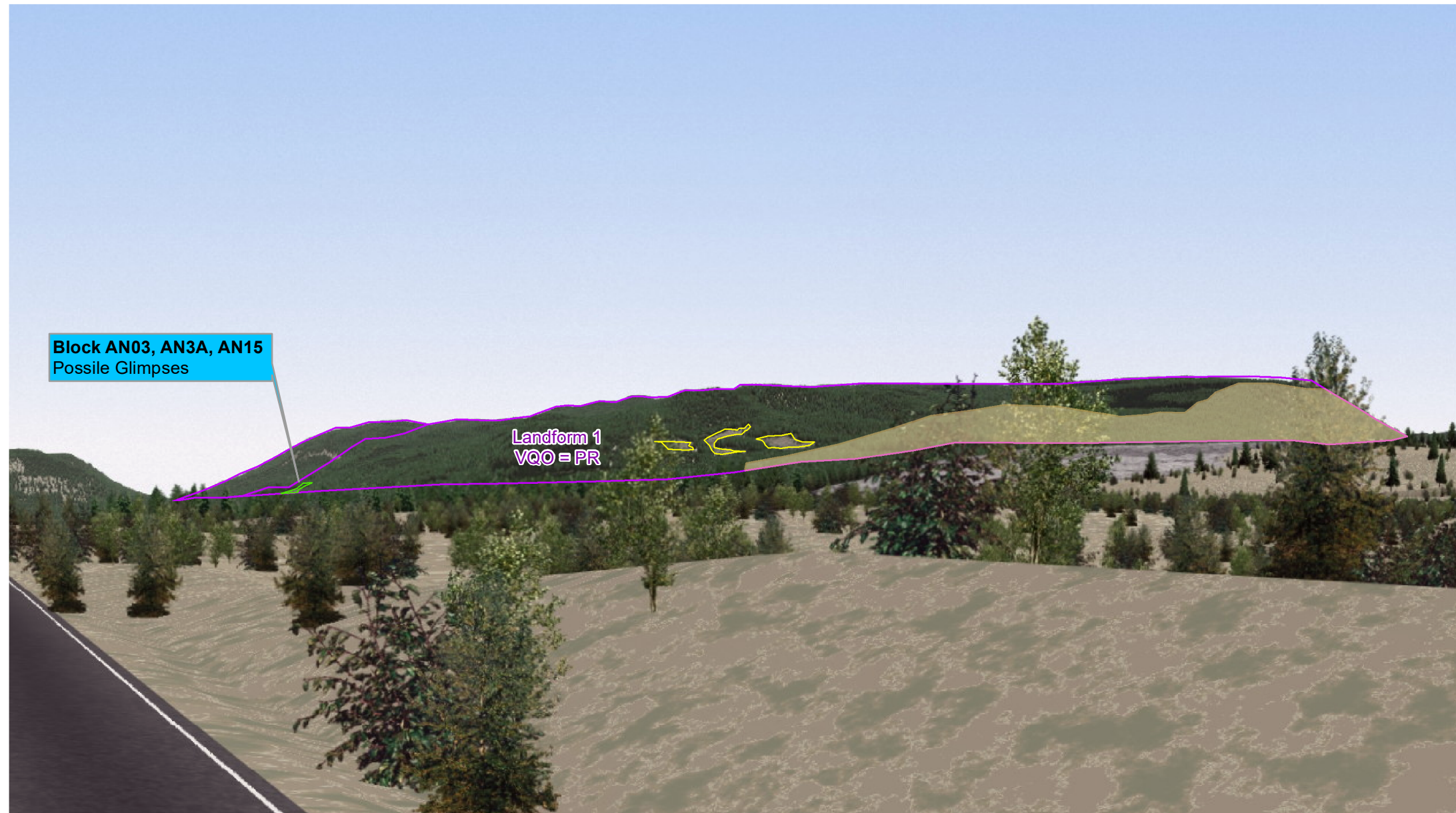
- Proposed Block
- NonV.E.G.
- Landform
- Private Land

\*Private Land is only depicted within Landform 1



# Visual Impact Assessment

## Perspective Viewpoint Analysis Angus Creek - Xenichen



**Landform: 1**

**Proposed Blocks: AN15, AN03, AN3A**

**Viewpoint No: Angus Xenichen**

**Visual Inventory Legend**



VSU - Visual Sensitivity Unit  
VAC - Visual Absorbption Capability  
EVC - Existing Visual Condition  
VQO - Visual Quality Objective

**Percent Alteration Calculation**

Area of Landform 1 = 52654  
Area of NonVEG Blocks = 803 (1.52%)  
Area of Proposed Blocks = 52 (0.10%)

**Total % Alteration:**  
**(NonVEG + Proposed Blocks) / Landform = 1.62%\***

\*Units of area measured in pixels

**Legend**

- Proposed Block
- NonV.E.G.
- Landform
- Private Land

\*Private Land is only depicted within Landform 1