

# FREP Visual Quality Effectiveness Evaluation 101



Jason Yates, RPF  
Visual Resource Management Officer  
Forest Science, Planning and Practices  
Branch  
[Jason.Yates@gov.bc.ca](mailto:Jason.Yates@gov.bc.ca)

Ministry of Forests



# Outline

- Current VRM Ministry team introduction
- Some VRM terms and tools.
- Overview of the FREP VQEE protocol
- What are we evaluating
- What are the procedures
- How is the information used.

# Visual Quality Objectives

- VQOs are management objectives established by the Statutory Decision Maker under the Government Actions Regulation Sect 7(2), grandparented from the FPC, or were set in Higher Level Plans.
- Describe levels of visual alteration appropriate for landscapes based on their visual sensitivity.



**Retention**



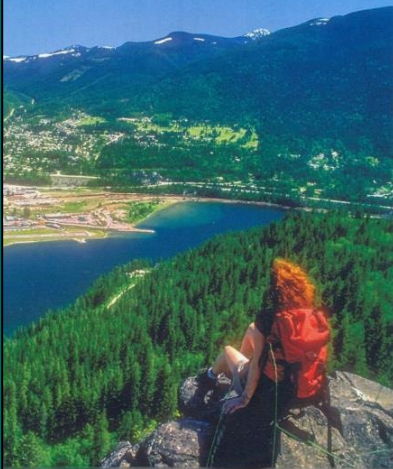
**Partial Retention**



**Modification**

# Visual Quality Objectives

## MANAGING CHANGE ON BRITISH COLUMBIA'S SCENIC LANDSCAPES



Ministry of  
Forests, Lands and  
Natural Resource Operations

## A Guide to Visual Quality Objectives

### Categories of Visually Altered Forest Landscapes

#### VISUAL QUALITY OBJECTIVES

##### PRESERVATION

Attention is very small in scale, and not easily distinguishable from the predominant landscape.  
Percent alteration in perspective view: 0% of ground may be visible.

##### RETENTION

Attention is difficult to see, small in scale, and natural in appearance.  
Percent alteration in perspective view: 0% to 10% of ground may be visible.

##### PARTIAL RETENTION

Attention is easy to see, small to medium in scale, and natural and not recognizable or prominent in shape.  
Percent alteration in perspective view: 10% to 25% of ground may be visible.

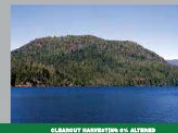
##### MODIFICATION

Attention is very easy to see, and is large in scale and natural in its appearance, or is small to medium in scale but with very unique characteristics.  
Percent alteration in perspective view: 25% to 50% of ground may be visible.

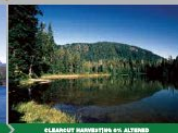
##### MAXIMUM MODIFICATION

Attention is very easy to see, and is very large in scale, and is highly visible and prominent in shape, or is unique.  
Percent alteration in perspective view: 50% to 100% of ground may be visible.

#### CLEARCUT HARVESTING



CLEARCUT HARVESTING 0% ALTERED



CLEARCUT HARVESTING 0% ALTERED



CLEARCUT HARVESTING 1% ALTERED



CLEARCUT HARVESTING 1% ALTERED



CLEARCUT HARVESTING 2.5% ALTERED



CLEARCUT HARVESTING 2.5% ALTERED



CLEARCUT HARVESTING 5% ALTERED



CLEARCUT HARVESTING 5% ALTERED

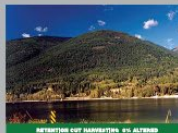


CLEARCUT HARVESTING 10% ALTERED

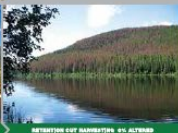


CLEARCUT HARVESTING 10% ALTERED

#### RETENTION CUT HARVESTING



RETENTION CUT HARVESTING 0% ALTERED



RETENTION CUT HARVESTING 0% ALTERED



RETENTION CUT HARVESTING 10% ALTERED



RETENTION CUT HARVESTING 10% ALTERED



RETENTION CUT HARVESTING 2.5% ALTERED



RETENTION CUT HARVESTING 2.5% ALTERED



RETENTION CUT HARVESTING 5% ALTERED



RETENTION CUT HARVESTING 5% ALTERED



RETENTION CUT HARVESTING 10% ALTERED



RETENTION CUT HARVESTING 10% ALTERED

#### PARTIAL CUT HARVESTING



PARTIAL CUT HARVESTING 0% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 0% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 10% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 10% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 2.5% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 2.5% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 5% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 5% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 10% VOLUPTUOUS REMOVED



PARTIAL CUT HARVESTING 10% VOLUPTUOUS REMOVED

#### THE DEFINITIONS

Visual Quality Objectives (VQOs) are defined in the Forest Planning and Practices Regulation to provide qualitative descriptions of expected visual conditions.

**Anticipating Visual Quality Objectives**  
The application of Visual Quality Objectives and Predictions are essential to the success of a project's Visual Quality Objectives.

**Indicators for Anticipating Visual Quality Objectives**  
Visual Quality Objectives are defined in the Forest Planning and Practices Regulation to provide qualitative descriptions of expected visual conditions. Indicators are used to measure the degree of visual alteration.

#### CLEARCUT HARVESTING ALTERATION GUIDE

The alteration percentages shown for each Visual Quality Objective are based on the degree of alteration.

| Visual Quality Objective | Alteration Percentage |
|--------------------------|-----------------------|
| Preservation             | 0%                    |
| Retention                | 0 - 10%               |
| Partial Retention        | 10 - 25%              |
| Modification             | 25 - 50%              |
| Maximum Modification     | 50 - 100%             |

#### ALTERATION GUIDE APPLIED TO AN IDENTIFIABLE LANDFORM

Use this guide to calculate alteration percentages for each Visual Quality Objective.

**ALTERATION GUIDE**  
A 100% alteration is the maximum alteration possible for a given Visual Quality Objective. Alteration percentages are calculated based on the degree of alteration. Alteration percentages are calculated based on the degree of alteration. Alteration percentages are calculated based on the degree of alteration.



#### PARTIAL CUT HARVESTING ALTERATION GUIDE

Use this guide to calculate alteration percentages for each Visual Quality Objective.

**ALTERATION GUIDE**  
A 100% alteration is the maximum alteration possible for a given Visual Quality Objective. Alteration percentages are calculated based on the degree of alteration. Alteration percentages are calculated based on the degree of alteration.

| Visual Quality Objective | Alteration Percentage |
|--------------------------|-----------------------|
| Preservation             | 0%                    |
| Retention                | 0 - 10%               |
| Partial Retention        | 10 - 25%              |
| Modification             | 25 - 50%              |
| Maximum Modification     | 50 - 100%             |

# Visual Quality Effectiveness Evaluation (VQEE)

---

## What is it?

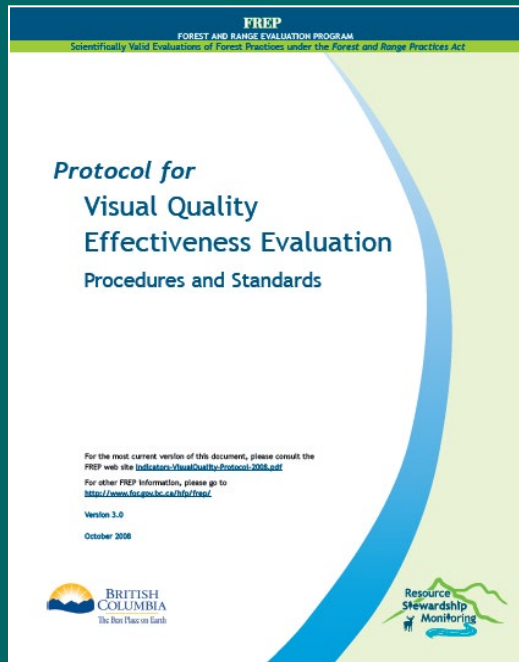
It is a process and set of criteria used to evaluate the achievement of Visual Quality Objectives (VQO's).

## Role:

Its role is to provide information on visual resource status/trends, which in turn identify if forest legislation, policies and practices are working.

Support Practice Improvements

# Visual Quality Effectiveness Evaluation



Procedures & standards document released July 2004 and finalized in 2008.

The procedures & standards were developed to be applied to a single block or multiple blocks visible from significant public viewpoints suitable for Resource Stewardship Monitoring.

# Visual Evaluation Procedures

The FREP visual evaluation approach assesses each view using two independent measures:

1. The definition for each FPPR 1.1 category of alteration (VQO) is evaluated through a field-based assessment and;
2. The perspective percent alteration and design elements are assessed using standards and criteria derived through research.

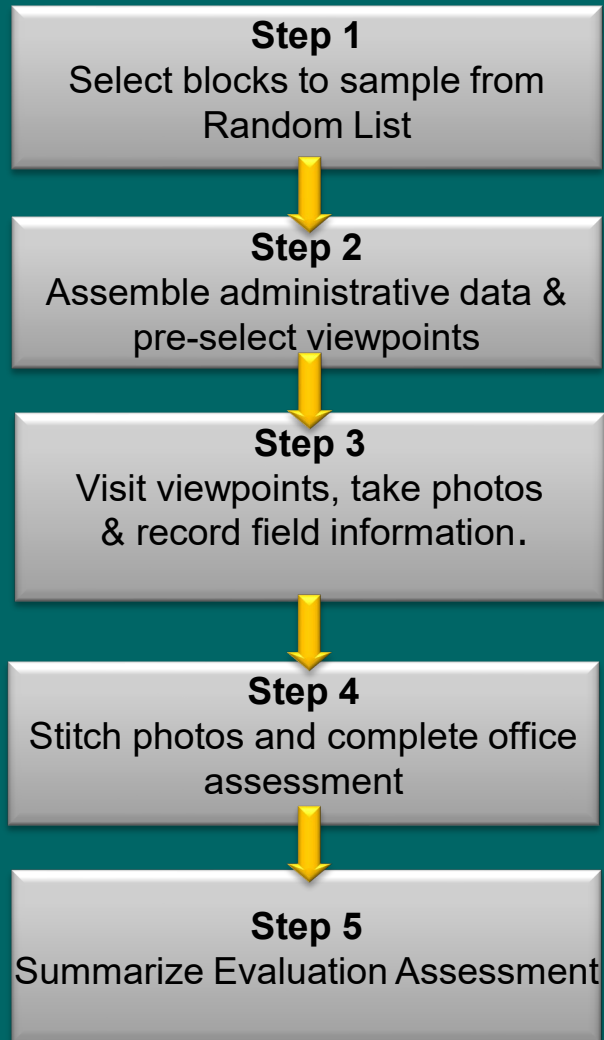
The two measures are combined to determine a final rating of VQO achievement.

|                                                                                                                                                                          |                                                                                                                                                           |                                                               |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------|
| <b>2.1.2 Site Information (Office)</b>                                                                                                                                   |                                                                                                                                                           |                                                               |                       |
| Forest District ...                                                                                                                                                      | Sample Code _____                                                                                                                                         |                                                               |                       |
| Licensee _____                                                                                                                                                           | Date of Field Evaluation <input type="text" value="MM/DD/YYYY"/>                                                                                          |                                                               |                       |
| License No. _____ CP No. _____                                                                                                                                           | Block _____                                                                                                                                               |                                                               |                       |
| General Location _____                                                                                                                                                   | Results Opening ID _____                                                                                                                                  |                                                               |                       |
| <b>2.1.3 VLI Information (Office)</b>                                                                                                                                    |                                                                                                                                                           |                                                               |                       |
| Date of Update <input type="text" value="MM/DD/YYYY"/>                                                                                                                   | VAC ...                                                                                                                                                   | Established VQO ...                                           |                       |
| Polygon No. _____                                                                                                                                                        | VSC ...                                                                                                                                                   | Date of Establishment <input type="text" value="MM/DD/YYYY"/> |                       |
| EVC ...                                                                                                                                                                  | Recommended VQC ...                                                                                                                                       | Source Document _____                                         |                       |
| <b>2.2.1 Viewpoint (Field)</b>                                                                                                                                           |                                                                                                                                                           |                                                               |                       |
| Viewpoint No. _____                                                                                                                                                      | GPS Lat D/M/S _____                                                                                                                                       | Viewing Direction _____                                       |                       |
| GPS Long D/M/S _____                                                                                                                                                     | Elevation (m) _____                                                                                                                                       | Viewing Distance _____                                        |                       |
| <b>2.2.2 Photography (Field)</b>                                                                                                                                         |                                                                                                                                                           |                                                               |                       |
| Camera Make _____ Model _____                                                                                                                                            | Viewpoint Importance (low) <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 (high) | Field of View Width(degrees) _____                            |                       |
| Digital Photo ID Nos _____                                                                                                                                               | Viewpoint Description _____                                                                                                                               | Field of View Height(degrees) _____                           |                       |
| <b>2.2.3 Assess Basic VQC (Field)</b>                                                                                                                                    |                                                                                                                                                           |                                                               |                       |
| Alterations meet with Basic VQC definition? Circle where in the range for that VQC. Notes: Ease of Seeing: ...                                                           |                                                                                                                                                           |                                                               |                       |
| Basic VQC <input type="radio"/> P <input type="radio"/> R <input type="radio"/> PR <input type="radio"/> M <input type="radio"/> MM <input type="radio"/> ... Scale: ... |                                                                                                                                                           |                                                               |                       |
| <b>2.2.4 Design Observations (Field)</b>                                                                                                                                 |                                                                                                                                                           |                                                               |                       |
| Design Elements                                                                                                                                                          | G (-1)                                                                                                                                                    | M (0)                                                         | P (+1)                |
| Response to visual force lines                                                                                                                                           | <input type="radio"/>                                                                                                                                     | <input type="radio"/>                                         | <input type="radio"/> |
| Borrows from natural character                                                                                                                                           | <input type="radio"/>                                                                                                                                     | <input type="radio"/>                                         | <input type="radio"/> |
| Edge treatments incorporated                                                                                                                                             | <input type="radio"/>                                                                                                                                     | <input type="radio"/>                                         | <input type="radio"/> |
| Distance from the viewpoint                                                                                                                                              | <input type="radio"/>                                                                                                                                     | <input type="radio"/>                                         | <input type="radio"/> |
| Position on the landform                                                                                                                                                 | <input type="radio"/>                                                                                                                                     | <input type="radio"/>                                         | <input type="radio"/> |
| <b>Total Design</b>                                                                                                                                                      | _____                                                                                                                                                     | _____                                                         | _____                 |
| <b>2.3.2 Assess Initial VQC (Office)</b>                                                                                                                                 |                                                                                                                                                           |                                                               |                       |
| a) % of landform altered by recent openings _____                                                                                                                        |                                                                                                                                                           |                                                               |                       |
| b) % of landform with site disturbance outside openings _____                                                                                                            |                                                                                                                                                           |                                                               |                       |
| c) % non veg contribution of old openings _____                                                                                                                          |                                                                                                                                                           |                                                               |                       |
| X = (a+b+c) = _____ % alteration Initial VQC _____                                                                                                                       |                                                                                                                                                           |                                                               |                       |
| <b>2.3.3 Assess Adjusted VQC (Office)</b>                                                                                                                                |                                                                                                                                                           |                                                               |                       |
| d) Impact of roads, side cast, etc. (within openings) _____                                                                                                              |                                                                                                                                                           |                                                               |                       |
| <input type="checkbox"/> None <input type="checkbox"/> Subordinate <input type="checkbox"/> Significant <input type="checkbox"/> Dominant Adj. Factor _____              |                                                                                                                                                           |                                                               |                       |
| e) Tree retention _____                                                                                                                                                  |                                                                                                                                                           |                                                               |                       |
| <input type="checkbox"/> Good <input type="checkbox"/> Moderate <input type="checkbox"/> Poor Adj. Factor _____                                                          |                                                                                                                                                           |                                                               |                       |
| f) Design (enter total from 2.2.4 above) Adj. Factor _____                                                                                                               |                                                                                                                                                           |                                                               |                       |
| Total adjustment Y = (d+e+f) Adj. Total _____                                                                                                                            |                                                                                                                                                           |                                                               |                       |
| Calculate adjusted % alteration $X'(1 + 0.14*Y) =$ _____                                                                                                                 |                                                                                                                                                           |                                                               |                       |
| <b>Adjusted VQC</b> _____                                                                                                                                                |                                                                                                                                                           |                                                               |                       |
| Adjusted % alt _____                                                                                                                                                     |                                                                                                                                                           |                                                               |                       |
| <b>2.3.4 Partial Cut Alterations</b>                                                                                                                                     |                                                                                                                                                           |                                                               |                       |
| Partial cutting _____                                                                                                                                                    |                                                                                                                                                           |                                                               |                       |
| % removed _____                                                                                                                                                          |                                                                                                                                                           |                                                               |                       |
| Average tree height (m) _____                                                                                                                                            |                                                                                                                                                           |                                                               |                       |
| Clearcut equivalent _____ % alteration as read from Table 4.                                                                                                             |                                                                                                                                                           |                                                               |                       |
| Record this value on line 2.3.2 a.                                                                                                                                       |                                                                                                                                                           |                                                               |                       |
| <b>2.3.6 Determining EE Rating for the Landform by Comparing Basic VQC with Adjusted VQC (Office)</b>                                                                    |                                                                                                                                                           |                                                               |                       |
| 1 <input type="checkbox"/> Clearly not met (Neither method indicates VQO achievement, both are far from class boundary)                                                  |                                                                                                                                                           |                                                               |                       |
| 2 <input type="checkbox"/> Not met (Neither method indicates VQO achievement, but both are close to class boundary)                                                      |                                                                                                                                                           |                                                               |                       |
| 3 <input type="checkbox"/> Borderline (One method indicates VQO achievement, one does not)                                                                               |                                                                                                                                                           |                                                               |                       |
| 4 <input type="checkbox"/> Met (Both methods indicate VQO achievement, but one or both are close to the high end "maximum % alteration limit.")                          |                                                                                                                                                           |                                                               |                       |
| 5 <input type="checkbox"/> Well met (Both methods indicate VQO achievement and are on the lower % alteration limit or mid-range for the class)                           |                                                                                                                                                           |                                                               |                       |
| <b>2.3.7 Allowance for Over-ride</b>                                                                                                                                     |                                                                                                                                                           |                                                               |                       |
| Over-ride EE _____                                                                                                                                                       |                                                                                                                                                           |                                                               |                       |
| Rationale: _____                                                                                                                                                         |                                                                                                                                                           |                                                               |                       |
| <b>2.3.8 Photo Information</b>                                                                                                                                           |                                                                                                                                                           |                                                               |                       |
| Lens Focal Length x _____                                                                                                                                                |                                                                                                                                                           |                                                               |                       |
| Crop Factor = _____                                                                                                                                                      |                                                                                                                                                           |                                                               |                       |
| Adjusted Focal Length _____                                                                                                                                              |                                                                                                                                                           |                                                               |                       |
| Evaluated by _____                                                                                                                                                       |                                                                                                                                                           |                                                               |                       |
| Signature _____                                                                                                                                                          |                                                                                                                                                           |                                                               |                       |

# The Effectiveness Evaluation Form

# Visual Quality Effectiveness Evaluation

---



## Step ① Select Blocks From Random List

Each spring the Forest and Range Evaluation program generates a list of random openings harvested in the previous 3 years and which occur in VQO polygons.

Previous samples that have been entered into the FREP database are removed from the list.

*Note: Random blocks should be chosen in the same order as on the list, if possible.*

*Note: It is advisable to prepare more openings than your target number, as some openings may not qualify as samples (e.g. not visible, more than one on landform).*

# VQEE Random List

| OPENING_ID | DISTRICT_COD | MGMT_UNIT_DESCRIPTION | DISTURBANCE_START_DATE | REC_EVQO_CODE |
|------------|--------------|-----------------------|------------------------|---------------|
| 1699311    | DCC          | Williams Lake TSA     | 2017-10-01             | PR            |
| 1722608    | DCC          | Williams Lake TSA     | 2019-02-11             | PR            |
| 1726200    | DCC          | Williams Lake TSA     | 2018-12-14             | PR            |
| 1706011    | DCC          | Williams Lake TSA     | 2018-07-25             | PR            |
| 1712188    | DCC          | Williams Lake TSA     | 2018-05-15             | M             |
| 1714859    | DCC          | Williams Lake TSA     | 2018-10-19             | M             |
| 1726209    | DCC          | Williams Lake TSA     | 2019-02-28             | PR            |
| 1729889    | DCC          | Williams Lake TSA     | 2019-12-27             | PR            |
| 1695040    | DCC          | Williams Lake TSA     | 2017-01-15             | PR            |
| 1712197    | DCC          | Williams Lake TSA     | 2018-05-15             | M             |
| 1723967    | DCC          | Williams Lake TSA     | 2019-05-01             | PR            |
| 1712346    | DCC          | Williams Lake TSA     | 2018-05-15             | M             |
| 1727129    | DCC          | Williams Lake TSA     | 2018-05-15             | M             |
| 1726201    | DCC          | Williams Lake TSA     | 2019-02-25             | PR            |
| 1731352    | DCC          | Williams Lake TSA     | 2019-09-15             | PR            |

## Step 2 Assemble Administrative Data & Pre-Select Viewpoints

1. Identify harvest units to be sampled.
2. Create maps or load device for navigation purposes and to locate the block on the landscape.
3. Complete EE header on the fillable form.
4. Record VLI data and VQO for area.

# Significant Public Viewpoint

---

- This term is used extensively in the Forest Planning and Practices Regulation (FPPR) section 1.1 but is not defined.

*“a place or location on the water or land that is accessible to the public and provides a direct viewing opportunity to the alteration and landform being assessed.”*

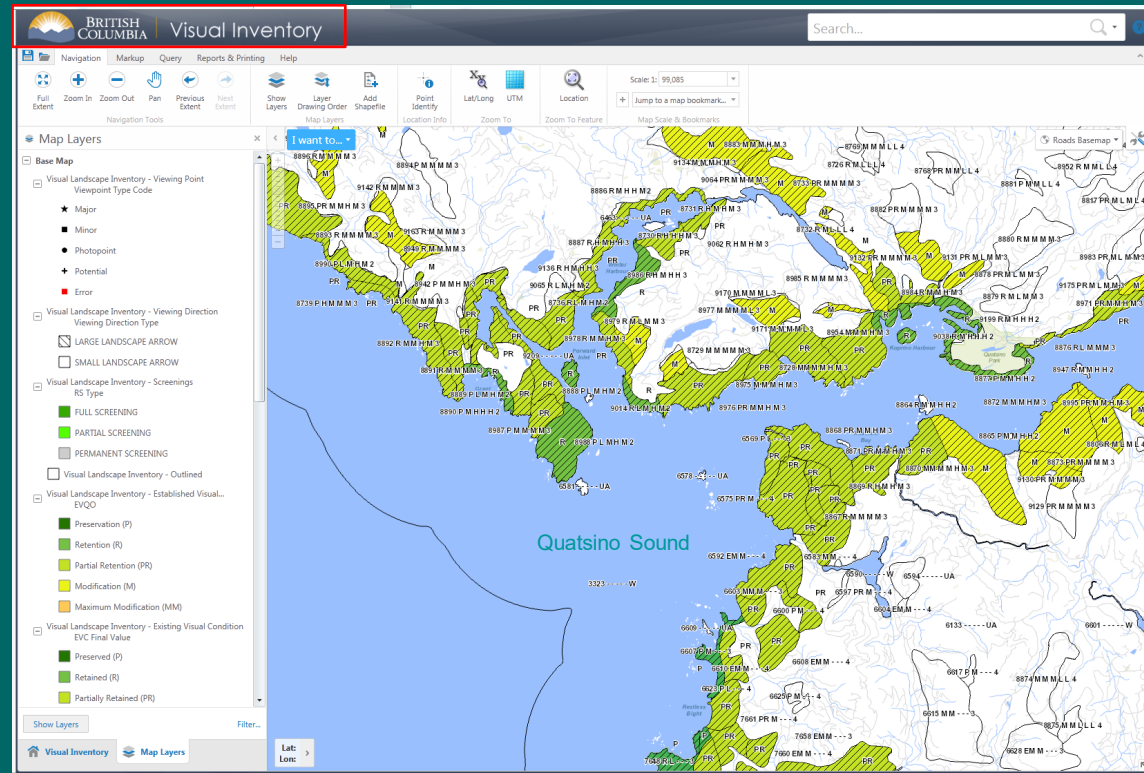


Note: a significant public viewpoint isn't based on viewer numbers.

# Where to Find VQO Data

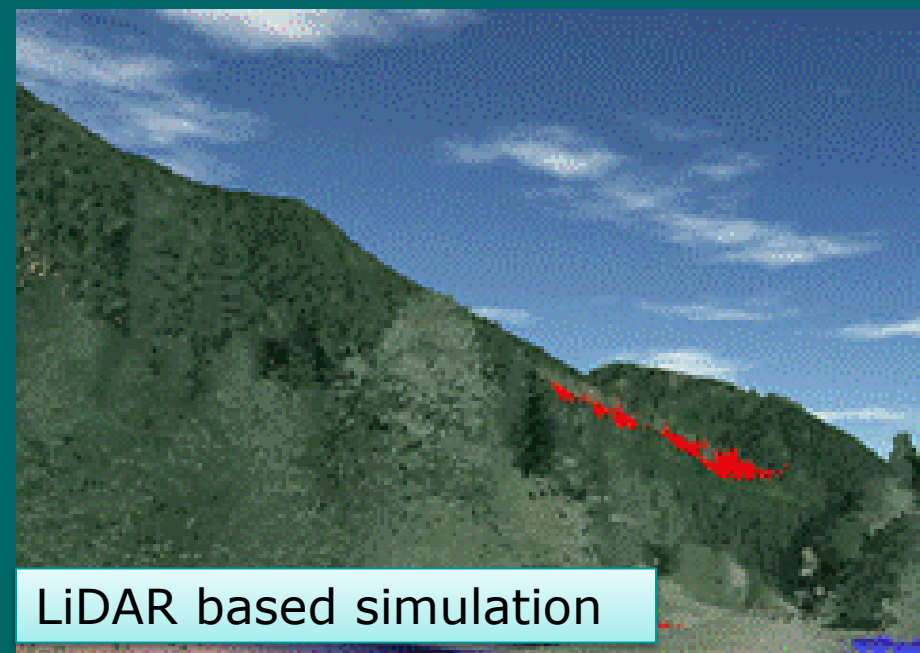
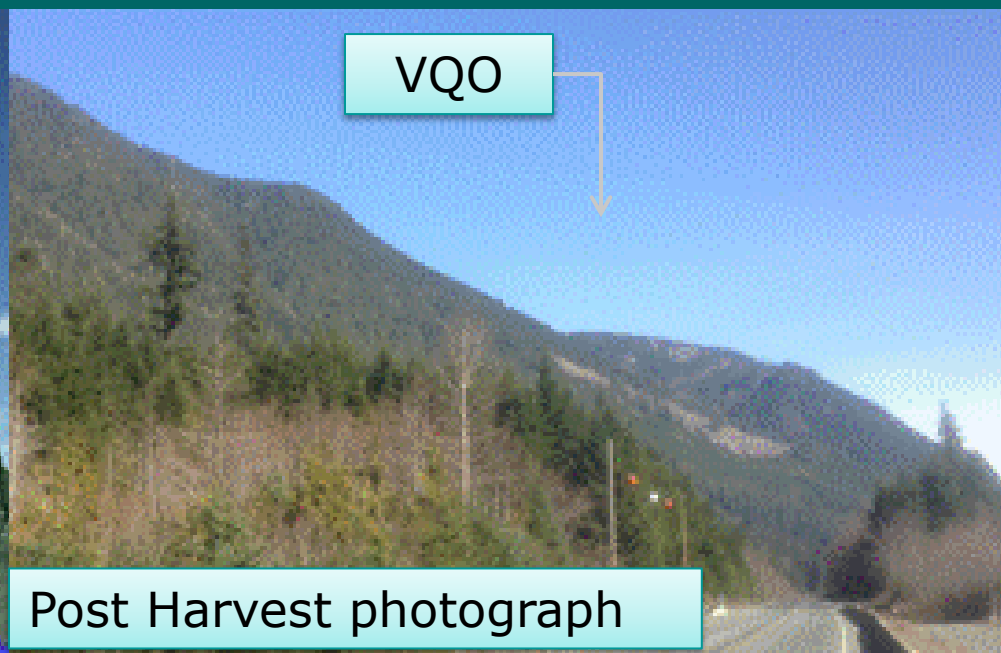
Most established VQO's are available in the BC Geographic Warehouse (BCGW).

Determine the VQO for the area by consulting the MapView Visual Inventory application, or iMap or ArcGIS.



## Step 2 Assemble Administrative Data & Pre-Select Viewpoints

- Pre-select possible viewpoints using VLI and completed VIA packages if available.
- Google Earth is a useful tool that helps with this step



## Step 3 Visit Viewpoints, Take Photos & Record Field Information

1. Check the validity of the pre-selected viewpoints and add/delete from the selection as needed.
2. At each viewpoint record the GPS coordinates and complete field section of EE form.
3. Photograph the entire subject landform with overlapping photographs where necessary.
4. Mentally delineate the landform against which the alteration will be evaluated.
5. Determine which category of alteration definition has been achieved.
6. Rate the visual design elements present.

## Step 4 Complete Office Assessment

1. Stitch the photographs together.
2. Define the landform.
3. Measure the scale of alteration(s) using Adobe Acrobat.
4. Measure the scale of other site disturbances
5. Confirm visual design elements seen in the field

## Step 5 Summarize EE Assessment.

1. Rationalize any differences between VQC determined in the field (ocular) and VQC calculated from the photographs.
2. Compare achieved visual condition with VQO.
3. Determine the degree to which the VQO was met or not met.

# Finalize and Submit FREP VQEE Packages

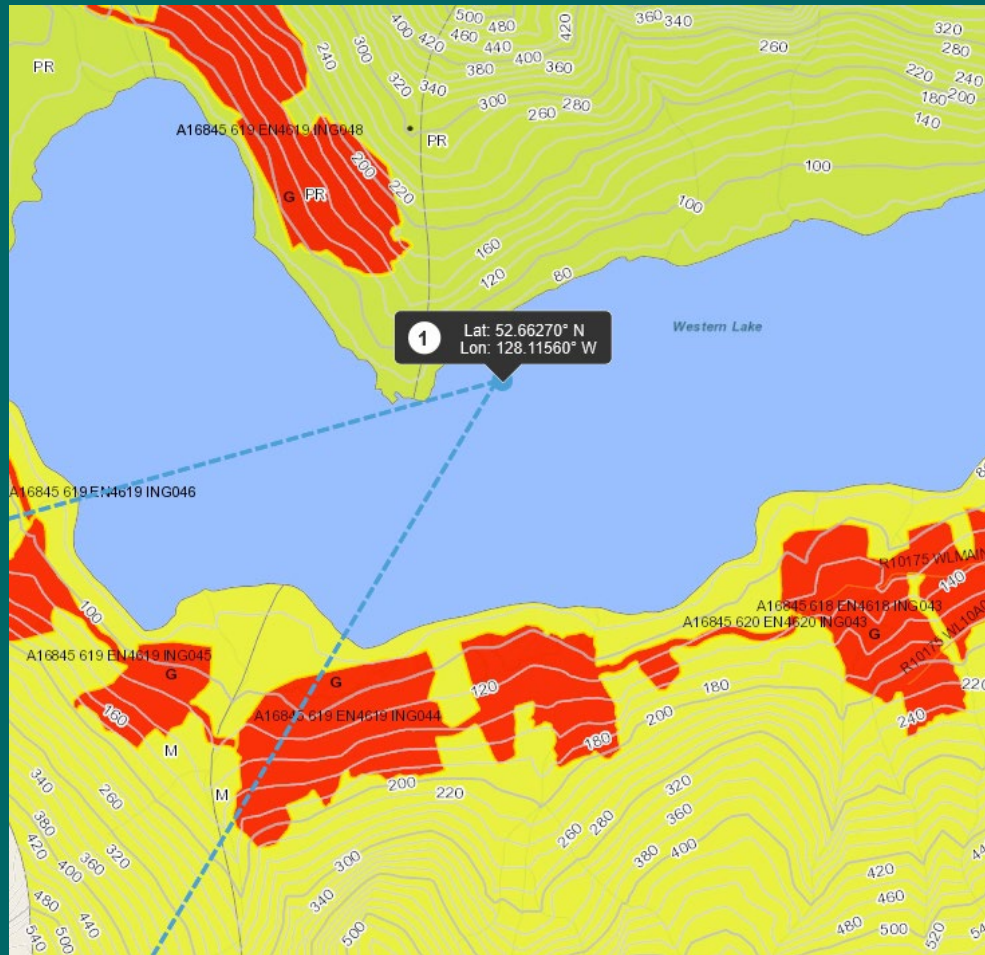
1. Completed FREP VQEE Form
2. Image of the sample block from viewpoint
3. Image with lines of force delineated
4. Image with the landform and block delineated and measured
5. Location map showing the viewpoint, view arrow to the sample, and the VSU the sample block is located in, and the block.

# Example of VQEE sample

|  <b>BRITISH COLUMBIA</b> Forest and Range Evaluation Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Visual Quality Effectiveness Evaluation<br>Resource Stewardship Monitoring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Clear Form Page 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| <b>2.1.2 Site Information (Office)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| NRD Code <u>DN1</u><br>Licensee <u>WESTERN FOREST PRODUCTS INC.</u><br>Licence No. <u>A16645</u> CP No. <u>615</u><br>General Location <u>Western Lake-Mathieson Channel</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Sample Code <u>DN1-092</u><br>Date of Field Evaluation <u>08/11/2021</u><br>Block <u>JNG045</u><br>Results Opening ID <u>1721723</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| <b>2.1.3 VLI Information (Office)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Date of Update <u>01/01/1997</u> VAC <u>M</u><br>Polygon No. <u>8365</u> VQC <u>3</u><br>EVC <u>R</u> Recommended VQC ...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Established VQO <u>M</u><br>Date of Establishment <u>M/M/A/D/Y/Y/Y</u><br>Source Document <u>GAR 6.17 established VQO6</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <b>2.2.1 Viewpoint (Field)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Viewpoint No. <u>1</u><br>Long Dec Degrees <u>-128.116</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Lat Dec Degrees <u>52.863</u><br>Elevation (m) <u>75</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Viewing Direction <u>226</u><br>Viewing Distance <u>1.27</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| <b>2.2.2 Photography (Field)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Camera Make <u>Nikon</u> Model <u>D7100</u><br>Digital Photo ID Nos <u>8481-8485</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Viewpoint Importance (sw) <u>100045</u> (sig)<br>Viewpoint Description <u>Western Lake</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Field of View Width (degrees) <u>51</u><br>Field of View Height (degrees) <u>15</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <b>2.2.3 Assess Basic VQC (Field)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Alterations meet with Basic VQC definition? Circle where in the range for that VQC. Notes: Ease of Seeing: <u>Easy to see</u><br>Basic VQC <u>P</u> <u>R</u> <u>PR</u> <u>M</u> <u>Mt</u> <u>M</u> Scale: <u>small</u><br>Design: <u>angular</u>                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <b>2.2.4 Design Observations (Field)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <b>2.3.4 Partial Cut Alterations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| Design Elements <u>G (-1)</u> <u>M (0)</u> <u>P (+1)</u><br>Response to visual force lines<br>Borrow from natural character<br>Edge treatments incorporated<br>Distance from the viewpoint<br>Position on the landform<br>Total Design <u>0</u>                                                                                                                                                                                                                                                                                                                                                                                      |  | Partial cutting<br>% removed <u>...</u><br>Average tree height (m) <u>...</u><br>Clearcut equivalent <u>...</u> % alteration as read from Table 4.<br>Record this value on line 2.3.2 a.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <b>2.3.2 Assess Initial VQC (Office)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <b>2.3.6 Determining EE Rating for the Landform by Comparing Basic VQC with Adjusted VQC (Office)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| a) % of landform altered by recent openings <u>5.19</u><br>b) % of landform with site disturbance outside openings <u>0.00</u><br>c) % non veg contribution of old openings <u>0.00</u><br>$X = (a+b+c) = 5.19$ % alteration Initial VQC <u>PR</u>                                                                                                                                                                                                                                                                                                                                                                                   |  | 1 <input type="checkbox"/> Clearly not met (Neither method indicates VQO achievement, both are far from class boundary)<br>2 <input type="checkbox"/> Not met (Neither method indicates VQO achievement, but both are close to class boundary)<br>3 <input type="checkbox"/> Borderline (One method indicates VQO achievement, one does not)<br>4 <input type="checkbox"/> Met (Both methods indicate VQO achievement, but one or both are close to the high end "maximum % alteration limit")<br>5 <input type="checkbox"/> Well met (Both methods indicate VQO achievement and are on the lower % alteration limit or mid-range for the class) |  |
| <b>2.3.3 Assess Adjusted VQC (Office)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | <b>2.3.7 Allowance for Over-ride</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| d) Impact of roads, side cast, etc. (within openings) <u>2</u><br><input type="checkbox"/> None <input type="checkbox"/> Subordinate <input checked="" type="checkbox"/> Significant <input type="checkbox"/> Dominant Adj. Factor<br>e) Dispersed Tree retention<br><input type="checkbox"/> Good <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Poor Adj. Factor <u>0</u><br>f) Design (enter total from 2.2.4 above) Adj. Factor <u>0</u><br>Total adjustment Y = (d+e+f) Adj. Total <u>2</u><br>Calculate adjusted % alteration $X^{(Y)} = 0.14^{(Y)} = 6.64$<br>Adjusted VQC<br>Adjusted % alt <u>PR</u> |  | Over-ride EE <u>...</u><br>Rationale:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Evaluated by <u>M Estlin J Webb</u><br>Signature <u>Murray Estlin, RPF</u> (Digitally signed by Murray Estlin, RPF Date: 2021.12.01 14:58:48 -0500)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | <b>2.3.8 Photo Information</b><br>Lens Focal Length <u>35</u><br>Crop Factor <u>1.5</u><br>Adjusted Focal Length <u>52.5</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |

FS1262 2008/04

# Example of VQEE sample



# Example of VQEE sample



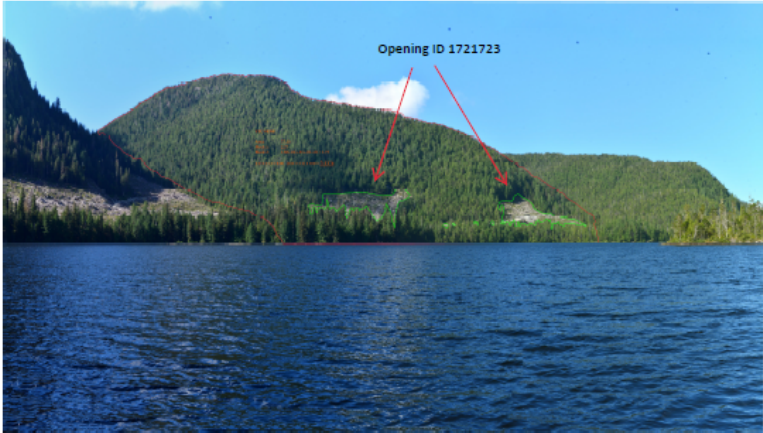
# Example of VQEE sample



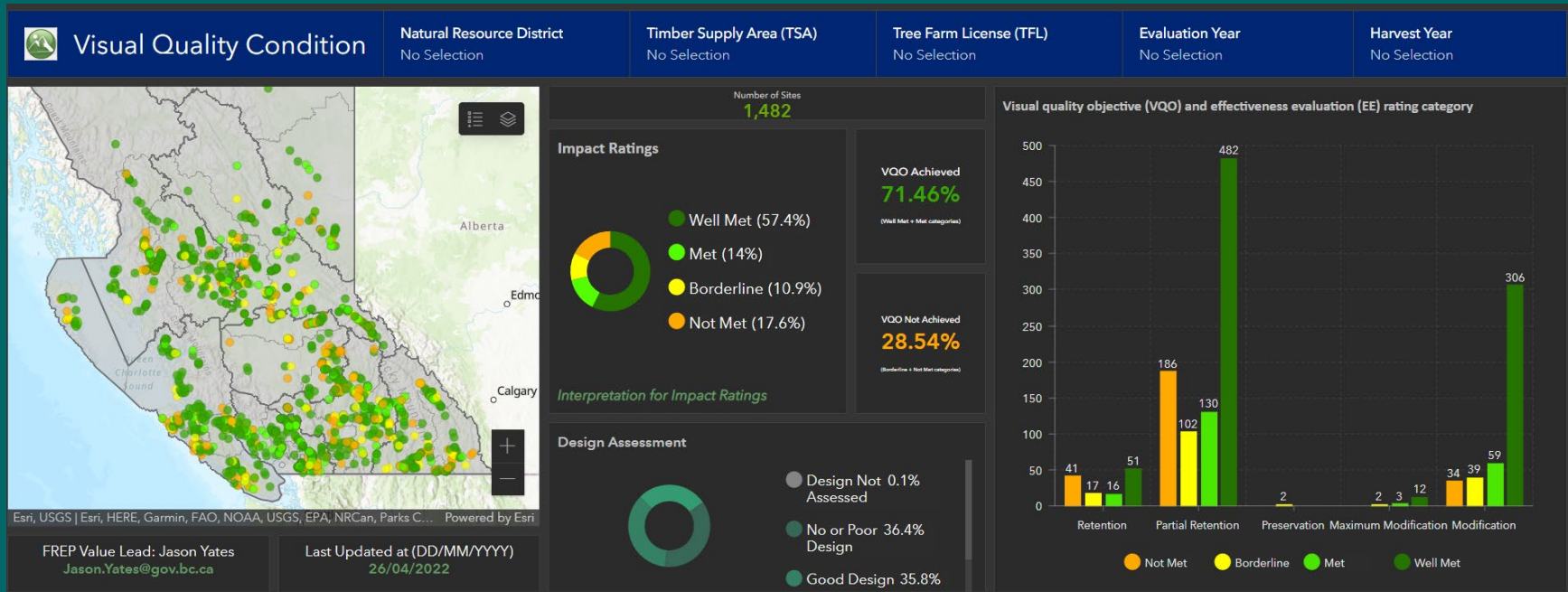
# Example of 2021 VQEE sample



# Example of 2021 VQEE sample

| DNI 092 Western Lake Viewpoint #1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                | % Alteration Calculations               |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------|--|-----------------------------------------|--|-----------------|----------------------------------------|-----------------|------|---------------------|------------|-----------------|-----------|---------------|-----|-----------------|-------|-------------|--------|------|---|--------------------|------------|---------------------------|--|------------|---------|-----------------|---------------------------------|
| <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p><b>Landform</b><br/>77.13</p> <p><b>% Landform Altered by Recent Openings 4.00= 5.19%</b></p> <p><b>% Non-Veg Contribution of Old Openings</b><br/>0.00%</p> <p><b>% Disturbance Outside Openings 0.00%</b></p> <p><b>% Adjusted VQC</b><br/>7.37%</p> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |                                         |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| Photo Location: Western Lake, Mathieson Channel<br>Date Taken: August 11, 2021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Viewpoint GPS Coordinates Elev: N 52.662705 W 128.156805 75m<br>Focal Length Used (mm): 52.5mm |                                         |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| <div style="display: flex; justify-content: space-between;"> <span>% of Landform Altered by Recent Openings: 5.19%</span> <span>% of Landform with Site Disturbance Outside Openings: 0.00%</span> <span>% Non VEG Contribution of Old Openings: 0.00%</span> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                |                                         |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left; padding: 5px;">Sample Information:</th> <th colspan="2" style="text-align: left; padding: 5px;">Visual Landscape Inventory Information:</th> </tr> </thead> <tbody> <tr> <td style="width: 50%; padding: 5px;">Forest District</td> <td style="padding: 5px;">North Island Natural Resource District</td> <td style="width: 50%; padding: 5px;">VLI Polygon No.</td> <td style="padding: 5px;">8366</td> </tr> <tr> <td style="padding: 5px;">Field Sampling Date</td> <td style="padding: 5px;">08/21/2021</td> <td style="padding: 5px;">VLI Update Date</td> <td style="padding: 5px;">01/1/1997</td> </tr> <tr> <td style="padding: 5px;">Licensee Name</td> <td style="padding: 5px;">WFP</td> <td style="padding: 5px;">EVC / VAC / VSC</td> <td style="padding: 5px;">R/M/3</td> </tr> <tr> <td style="padding: 5px;">License No.</td> <td style="padding: 5px;">A16845</td> <td style="padding: 5px;">EVQO</td> <td style="padding: 5px;">M</td> </tr> <tr> <td style="padding: 5px;">CP No. / Block No.</td> <td style="padding: 5px;">619/ING045</td> <td style="padding: 5px;">Date of VQO Establishment</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Opening ID</td> <td style="padding: 5px;">1721723</td> <td style="padding: 5px;">Source Document</td> <td style="padding: 5px;">GAR s.17 established VQOs, 2004</td> </tr> </tbody> </table> |                                                                                                |                                         | Sample Information:             |  | Visual Landscape Inventory Information: |  | Forest District | North Island Natural Resource District | VLI Polygon No. | 8366 | Field Sampling Date | 08/21/2021 | VLI Update Date | 01/1/1997 | Licensee Name | WFP | EVC / VAC / VSC | R/M/3 | License No. | A16845 | EVQO | M | CP No. / Block No. | 619/ING045 | Date of VQO Establishment |  | Opening ID | 1721723 | Source Document | GAR s.17 established VQOs, 2004 |
| Sample Information:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                | Visual Landscape Inventory Information: |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| Forest District                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | North Island Natural Resource District                                                         | VLI Polygon No.                         | 8366                            |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| Field Sampling Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 08/21/2021                                                                                     | VLI Update Date                         | 01/1/1997                       |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| Licensee Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | WFP                                                                                            | EVC / VAC / VSC                         | R/M/3                           |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| License No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A16845                                                                                         | EVQO                                    | M                               |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| CP No. / Block No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 619/ING045                                                                                     | Date of VQO Establishment               |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| Opening ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1721723                                                                                        | Source Document                         | GAR s.17 established VQOs, 2004 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |
| Annex A v. 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                |                                         |                                 |  |                                         |  |                 |                                        |                 |      |                     |            |                 |           |               |     |                 |       |             |        |      |   |                    |            |                           |  |            |         |                 |                                 |

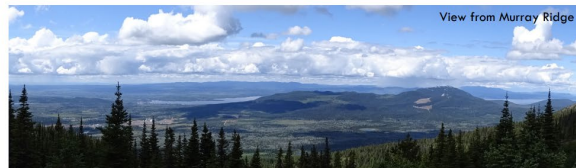
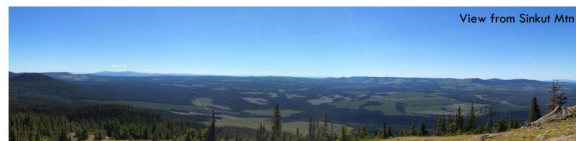
# What the VQEE data tells us



# What the VQEE data tells us



## STUART NECHAKO FREP RESULTS



2021

### Multiple Resource Value Assessment

Summary of FREP monitoring results for the Forest & Range Practices Act era (2005 to present).

# Helpful Links

---

Visual Resource Management BC government:

<https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/visual-resource-management>

FREP Visual Protocol (for detailed procedures):

[https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/visual-resource-mgmt/monitoring-vrm/vrm\\_protocol\\_for\\_visual\\_quality\\_effectiveness.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/visual-resource-mgmt/monitoring-vrm/vrm_protocol_for_visual_quality_effectiveness.pdf)

VLI Viewer (for visual inventory data):

<http://maps.gov.bc.ca/ess/hm/visinv/>

VIA Handbook (New)

[https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/visual-resource-mgmt/visual\\_impact\\_assessment\\_handbook.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/visual-resource-mgmt/visual_impact_assessment_handbook.pdf)

<https://get.adobe.com/reader/otherversions/>

Autostitch (for panorama stitching):

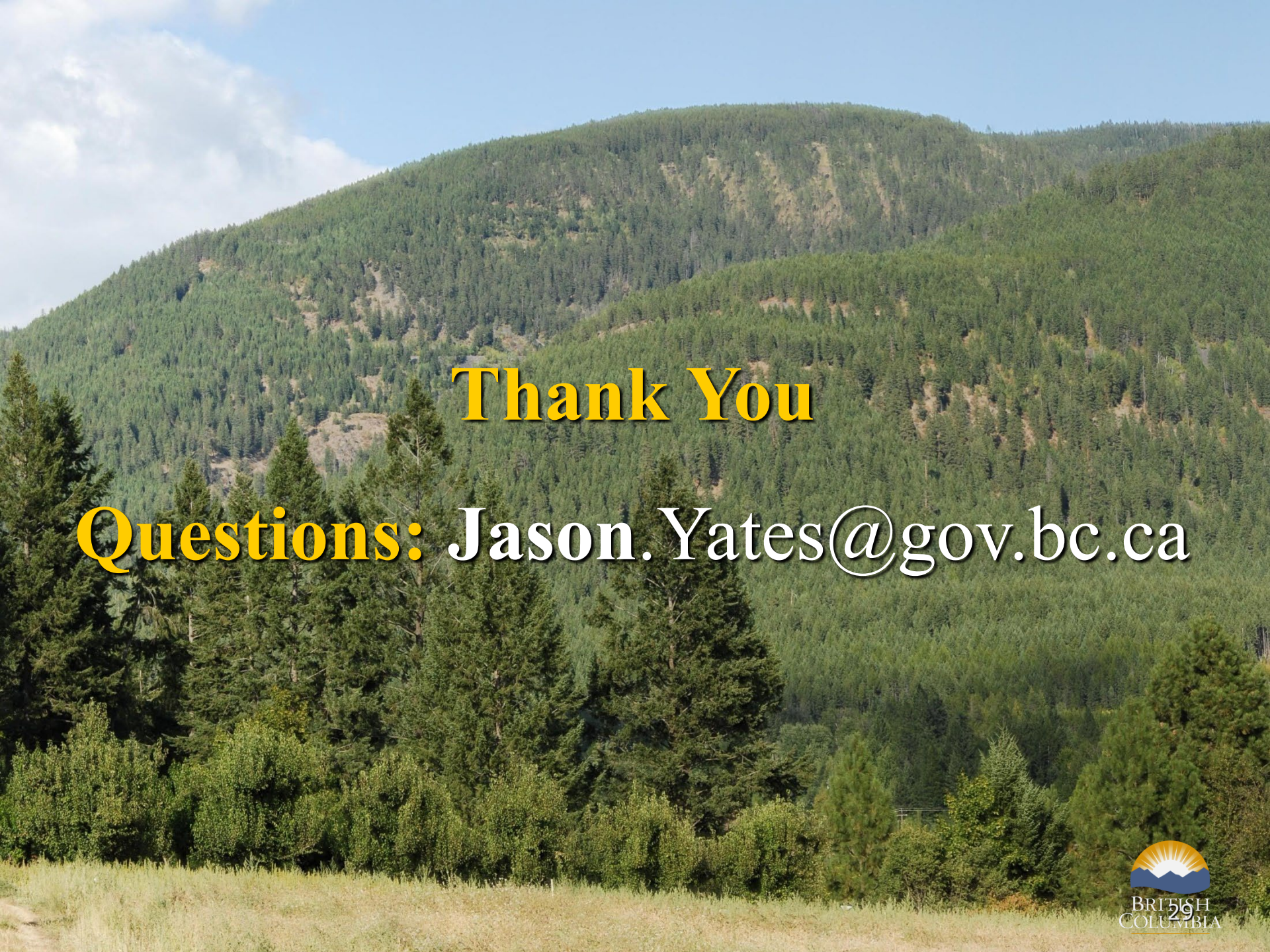
<http://www.autostitch.net>

FREP reports and publications:

<https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/integrated-resource-monitoring/forest-range-evaluation-program/frep-reports-extension-notes>

VQO Poster (for photo examples of achieved VQOs):

[https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/visual-resource-mgmt/vrm\\_a\\_guide\\_to\\_visual\\_quality\\_objectives.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/visual-resource-mgmt/vrm_a_guide_to_visual_quality_objectives.pdf)



**Thank You**

**Questions:** [Jason.Yates@gov.bc.ca](mailto:Jason.Yates@gov.bc.ca)