

**Guidance for Forest Professionals Practicing in**

**VISUAL RESOURCE MANAGEMENT**

**DRAFT GUIDANCE FOR MEMBER COMMENT**

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# Executive Summary

(To be included)

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## **Preface**

In the 1980's the forestry sector developed and began to use Visual Quality Objectives (VQO) as a way to recognize important visual characteristics on the land. By 1996, the VQO's were incorporated into the *Forest Practices Code of British Columbia Act* (the "Code"). The Code was a prescriptive legislation that contained rules and other requirements for forest management.

The Code required completion of a visual impact assessment for known scenic areas prior to receiving Ministry approvals for harvesting. A "Visual Impact Assessment Guidebook" contained a process for quantitatively predicting whether a proposed cutblock would meet a VQO.

In 2004, the Forest and Range Practices Act (*FRPA*) shifted legislation from a prescriptive "rules-based" regulatory regime to a "results-based" regime for forest practices. Under the *FRPA*, scenic areas continued to identify VQO's. Several changes in requirements included, no requirement for a visual impact assessment, the quantitative process for percent alteration was replaced with a descriptive requirement. Additionally, government no longer approved site level operational plans. Instead, section 5 of the *FRPA* requires licensees to specify results and strategies for achieving government objectives in a Forest Stewardship Plan (FSP) and section 21(1) of *FRPA* requires licensees to achieve those objectives.

The Forest Practices Board of BC (FPB) investigates and reports to the public, government, industry and professionals about compliance with the *FRPA* and Wildfire Act. The FPB provides important commentary for forest professionals regarding the outcomes of forest practice. The ABCFP reviews each report and if necessary, the background investigative data, to determine the professional work that is the subjects of the reports.

In 2015, the FPB investigated another compliance issue and found that the licensee failed to achieve the required VQO.

These circumstances and others led the FPB to describe the concern as follows, "*These are important scenic views clearly visible to the public that government has determined are significant for tourism and public recreation values. The Board has found this issue is not specific to an area of the province, a licensee or group of licensees, professionals, or government. The Board is concerned that stewardship of visual resources is inconsistent across the province.*"

As a result of their findings the FPB made three recommendations, one of which applied to the ABCFP:

*2. Government and the Association of BC Forest Professionals (ABCFP) review and update guidance and policy documents to ensure consistency of approach and use of best practices in the management of visual resources.*

Recognizing the need for professional guidance the ABCFP Professional Practice Committee established a subcommittee to build a framework for professional guidance in VRM. And, in 2017 the ABCFP hired professional expertise to assist with the production of the professional guidance in Visual Resource Management 2017.

# Acronyms and Definitions

## Acronyms:

- EVC – Existing Visual Condition
- RVQC – Recommended Visual Quality Class
- VAC – Visual Absorption Capability
- VEG – Visually Effective Green-up
- VIA – Visual Impact Assessment
- VLI – Visual Landscape Inventory
- VLU – Visual Landscape Unit
- VRI – Visual Resource Inventory
- VQC – Visual Quality Class
- VQEE – Visual Quality Effectiveness Evaluation
- VQO – Visual Quality Objective
- VRM – Visual Resource Management
- VSA – Visually Sensitive Area
- VSC – Visual Sensitivity Class
- VSU – Visual Sensitivity Unit

## Definitions:

**Delegated Decision Maker (DDM)** – A government official who has been delegated ministerial authority and responsibility to carry out specific activities

**Effectiveness Evaluations** - are management tools used to assess whether policies or practices meet their intents, based on evidence of their outcomes.

**Existing Visual Condition (EVC)** — is a component of the visual landscape inventory that represents the level of human-made landscape alteration caused by resource development activities in a visual sensitivity unit; expressed as visual quality classes.

**Forest Professional** - A person admitted under Section 14 of the *Foresters Act* as a Registered Professional Forester, Registered Forest Technologist, or a holder of a special permit entitled to practice professional forestry as defined in the *Foresters Act* and who completes and accepts accountability for the visual resource management work.

**Forest Stewardship Plan (FSP)** - is the broad regional plan that describes the way an area will be managed for a variety of resources including the harvesting of trees. Forest Stewardship Plans are required under the Forest and Range Practices Act (FRPA).

**Licensee** - An individual, company, or Provincial Crown agency possessing the legal right to harvest timber.

Landform - is a distinct topographical feature that is three dimensional in form and is generally defined by ridgelines, shorelines, tree lines, skylines and valley bottoms. Examples include hills, knolls and mountains.

Landscape-is defined by Webster's Dictionary as "*A picture representing a view of natural inland scenery. The landforms of a region in aggregate. A portion of territory that can be viewed at one time from one place*". In the forestry context landscapes are typically composed of one to many distinct landforms.

Member - A Registered Professional Forester, Registered Forest Technologist, Special Permit Holder registered and in good standing with ABCFP.

Recommended Visual Quality Class (RVQC) – is a VRM specialist's recommendation describing the level of alteration that would be appropriate for a visual sensitivity unit; this recommendation considers primarily visual quality, but with recognition of other forest values.

Reviewing Professional - A person admitted under Section 14 of the *Foresters Act* as a Registered Professional Forester, Registered Forest Technologist, or a holder of a special permit who undertakes a professional review of other professional work.

Significant public viewpoint - is a place or location on the water or land that is accessible to the public, provides a viewing opportunity, and is relevant to the forest landscape being assessed.

Scenic areas - are visually important areas that require special management because of their physical characteristics and public use/concern. Scenic areas are created, amended and cancelled by Resource District Managers under Government Action Reg. Sec. 7(1)

Statutory Decision Maker (SDM) – A person given powers under provincial legislation to make administrative decisions and approve operational plans for harvesting, road building, silviculture activities, and range use. SDMs interpret and apply relevant provincial legislation, regulations, and policies.

Viewscape- is the entire visible landscape area seen (360 degrees) from a single or grouping of viewpoints. For example, the visible landscape surrounding a community or recreational lake would be considered its viewscape.

Viewshed- is the entire visible area seen from a combination of all viewpoints of a travel corridor, waterway, or waterbody. It is typically composed of multiple viewscales and numerous visual sensitivity units. Viewsheds are typically compiled through GIS analysis.

Visual Absorption Capability (VAC) — is a component of the visual landscape inventory that rates the relative capacity of a landscape to absorb visual alterations and still maintain its visual integrity.

Visual Design – is a creative process that involves working with the visual patterns and forces of nature to guide changes to the resource in ways that meet the needs of society, both aesthetically and economically. In the context of the visual resource management process, visual design principles are used in the development of landscape- and stand-level cutblock designs to achieve VQOs and visual resource guidelines.

Visual force — is an illusion or sensation of movement created by a static image, object, or position of a number of elements in the landscape. (Visual Design Training)

Visual force analysis — is an analysis of landform structure to identify primary, secondary, and tertiary ridge lines and hollows in the landscape for use in visual landscape design.

- Visual Impact Assessment - is an assessment of the predicted visual impact of a forestry operation(s) in perspective view from “significant public viewpoints”. A visual impact assessment simulates, in perspective view, the visual effects on the landscape of proposed timber harvesting operations and road construction or modification operations.
- Visual Landscape Inventory — is the identification, classification, and recording of the location and quality of visual resources; these non-forest resources may be problematic if not managed to the concepts, principles, and practices set out in the visual landscape management process.
- Visual Quality Objectives - are management objectives established by the DDM under the Government Action Regulation Sect 7(2). They are used to reflect society’s desired level of visual quality on the landscape. Each VQO category is defined in FPPR 1.1.
- Visual Resource Management (VRM) — is a planning and management process for visual values and resources. It involves the identification, assessment, design, and manipulation of the visual features or values of a landscape, and the consideration of these values in the integrated management of forest and rangelands.
- Visually Sensitive Area (VSA) – is an area that is visible to the public from a significant viewpoint.
- Visual Sensitivity Class (VSC) — is a component of the visual landscape inventory that rates the sensitivity of the landscape to visual alteration based on biophysical characteristics, as well as viewing and viewer related factors.
- Visual Sensitivity Rating (VSR) — is a component of the visual landscape inventory that estimates the sensitivity of the landscape based on biophysical characteristics and viewing factors; this was replaced by visual sensitivity class in 1997.
- Visual Sensitivity Unit (VSU) — is a distinct topographical unit as viewed from one or more viewpoints; its delineation is based on the homogeneity of the landform and of biophysical elements. Commonly referred to as a visual inventory polygon.
- Visually Effective Green-up (VEG) — is the stage at which regeneration on a cutblock is perceived by the public as a newly established forest; forest cover on the cutblock should be of sufficient height to block stumps, logging debris, and bare ground from view; once achieved, an adjacent stand of timber is available for harvest.

## **1. Introduction**

The BC government, forest tenure holders and others rely on forest professionals to deliver professional work related to inventory, classification, planning, designing, implementing and monitoring of Visual Resource Management activities on the forest land base.

The Association of British Columbia Forest Professionals (ABCFP) has the authority to regulate forest professionals and the authority to regulate the practice of professional forestry in BC. This mandate includes identifying what constitutes professional work and setting practice standards to guide the professional work.

Visual Resource Management (VRM) falls under the scope of practice for forest professionals when applied to forests, forest lands, forest resources and forest ecosystems. Forest professionals direct or supervise the management of forests in order to meet BC laws and bring competent knowledge to real world concerns that protect society's values.

The guidelines that follow, will establish a benchmark of practice to assist forest professionals in fulfilling their professional obligations including the duty to protect the safety, health and welfare of the public and the environment. The guidelines address project organization, responsibilities of ABCFP members, the skills, experience and training necessary to develop or use the visual resource management products. The guidelines do not describe how to complete a Visual Impact Assessment (VIA), or how to integrate an assessment into various professional documents. The guidelines address the appropriate level of professional service and provide several scenarios encountered by forest professionals today while undertaking this work.

A working group comprised of ABCFP staff and forest professionals with subject area expertise has prepared these guidelines on professional practice in VRM.

## **2. Legislative Framework**

Visual Resource Management in British Columbia is governed by forest practices legislation. The professional advice, direction and oversight of the management of visual resources is contained within professional legislation.

The Forest and Range Practices Act (FRPA), the Forest Planning and Practices Regulation (FPPR) and Government Action Regulation (GAR) specify forest management requirements for tenure holders and government who operate on the land. Visual Quality is one of eleven objectives set by the government under the FRPA. These requirements ensure that the visual resources are included in plans and that resulting forest operations are consistent with Objectives Set by Government for Visual Quality. The FRPA does not assign a hierarchy to the objectives. Visual Quality is as important as the other objectives set by government.

The Foresters Act and ABCFP bylaws establish the standard of care required of practicing forest professionals. VRM requires a specialized knowledge to guide industrial operations in forested landscapes. The work is the practice of professional forestry, which is defined as: providing advice,



direction, judgement, related to forests, forest lands, forest resources (including visual quality) and forest ecosystems.

The ABCFP Bylaws established by forest professionals that guide professional practice are the Code of Ethics (Bylaw 11) and the Standards of Professional Practice (Bylaw 12). The key sections of the ABCFP Bylaws that are contained in this guidance include:

- 11.3.3: to have regard for existing legislation, regulation, policy and common law; and to seek to balance the health and sustainability of forests, forest lands, forest resources, and forest ecosystems with the needs of those who derive benefits from, rely on, have ownership of, have rights to, and interact with them.
- 11.3.7: to practice only in those fields where training and ability make the member professionally competent.
- 11.4.6: to keep informed in the member's field of practice, and to be aware of current issues and developments in forestry.
- 12.2.1: Competent members maintain sufficient knowledge in their field(s) of practice.
- 12.2.3: Competent members exercise appropriate judgement and discretion with due care.
- 12.2.4: Competent members provide professional work that is measurable or verifiable and can provide a rationale as to the methods used in measuring or verifying.
- 12.5.1: Members exercise due diligence in professional practice by being prudent and doing all work with constant and careful attention.

### **3. Visual Resource Management as a Component of Social License**

Forest professionals are employed by government and tenure holders to provide advice and direction on forest practices that are visually sensitive to the public. By following the advice and direction given, government and tenure holders have the best chance to achieve social license. The public entrusts forest professionals with VRM values because they are competent and have the proper balance of education, training and experience.

VRM is a unique value for forest professionals to manage because it relies on an understanding of the ecological aspects of forests, the effects of forest uses, the physical attributes of landscapes and an understanding of the public's values and perceptions toward forestry activities on these landscapes. It is the only value where the forest professional can ask the subject whether the objective has been met in their view. As a result, there is more social science in the objective than in others because the perspective of the public plays a pivotal role in setting the objective.

The public perception is often one that says, if the harvest area "looks good" then forest practices are good, and vice versa. While this may or may not be true, managing visual resources effectively, helps forest professionals demonstrate good stewardship of forests. Social license for government and tenure holders to operate on the land depends on maintaining public trust and confidence. VQOs are a

reflection of public concerns for visual quality, therefore meeting these objectives over time contributes to public trust and confidence. When visual impacts are going to occur in scenic areas, forest professionals will take the necessary time to proactively communicate with the public, First Nations, and recreation/tourism stakeholders. VRM is not simply about hiding the logging from view. Rather VRM includes a skill set that forest professionals use to manage the forest resources for multiple objectives and public expectations. Failure to meet VQO's leads to mistrust regarding the management and protection of important scenic values in BC.

Visual Resource Management is required in areas with VQO's, however, the forest professional will use visual management principles in areas where visual quality is important to a stakeholder, and where there are no identified VQO's.

The application of professional knowledge combined with proactive public communication supports good stewardship by the government and tenure holders and avoids surprises to the public when development occurs on the forested landscape.

## 4. Roles and Responsibilities

***The Forest Professional*** - is responsible for making recommendations and/or carrying out work (e.g. VIA) to ensure forest alterations undertaken by forest tenure holders are consistent with established Visual Quality Objectives and/ or FPPR 9.2 Objectives set by Government. The forest professional must ensure that results or strategies in FSPs, that they are responsible for, are consistent with the VQOs and are measurable and verifiable. When applying their professional identification, the forest professional certifies that, they are competent and have the necessary information, training and experience to carry out the required work. Forest professionals must also comply with all legislation and ABCFP bylaws and policies.

***BC Government VRM Specialists*** – As the land manager, the BC Government provides both Provincial and Regional expertise regarding VRM. The VRM Specialist is a forest professional who provides expertise in the field of VRM of Crown Land, including development and review of legislation, policies and procedures, and the management of visual and scenic values for the public, commercial recreation and wilderness tourism sector, while seeking a balance with forest management activities on BC's landscapes. Forest professionals should leverage these specialists for VRM leadership, clarity and accurate, up to date and consistent guidance.

***Coordinating Forest Professional (CFP)*** – the CFP is a forest professional who is a member, in good standing, of the ABCFP. The CFP is responsible for planning and coordinating all the professional services for achieving the visual quality objectives including the design, visual impact assessments, consultation, monitoring and visual conformance. The CFP must direct those activities with sufficient oversight and supervision such that they can take overall responsibility and accountability for the resulting visual quality. (Not always a necessary role but evident where multiple users on the land and heightened concerns exist e.g. [Port Alberni FPB](#), Upper Clearwater River VLI).

**Visual Specialist** - may or may not be a forest professional and is often hired to provide advice or prepare visual resource products in support of professional plans and/ or commitments.

*Note: Forest Professional assume the accountability for specialist work that they incorporate into their plans and prescriptions.*

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The CFP assumes the professional accountability for the Visual Specialist work. Accountability means to answer for work done. The CFP is responsible for assessing the reasonableness of the visual resource products or advice.

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Where visual resource management work is completed by an individual that is not a member of the ABCFP, the supervising forest professional must ensure that the quality of the work is to a professional standard.

**Tenure Holder** – undertakes forest practice activities on the land and is responsible for retaining a qualified registered forest professional with VRM expertise sufficient to meet their obligations.

**The Review Professional** –The Review Professional is a forest professional who is undertaking a review of the forest professional work. The Review Professional must ensure they are competent to carry out the required work and have the necessary training, information and experience. The Review Professional is accountable for the quality of the review. Independent peer reviews of VRM plans are encouraged to ensure quality and confidence of professional work.

*(In the FRPA context) The Review Professional providing work for a tenure holder is responsible for conducting a review of the visual FSP Results/Strategies, Visual Impact Assessments and other work carried out for the purpose of meeting tests of the Delegated Decision maker, or for evaluating compliance, or for assessing Objectives in the Forest and Range Evaluation Program. The Review Professional providing work for the government is responsible for ensuring Visual Inventory work has been completed to standard and that completed FREP samples meet provincial standards.*

**The Approving Authority** - the approving authority is the delegated decision maker (DDM) of the provincial government. In the FRPA context, the approving authority will review professional documents and plans and ensure that the result or strategy will be consistent with objectives set by government. The DDM approves the FSP of the tenure holder. Following FSP approval, Cutting Permits are issued by the government to harvest timber, and Site Plans and VIAs are prepared by the tenure holders to prescribe appropriate treatments on the land.

## 5. Distinguishing Professional and Technical Works related to VRM

VRM includes public perspectives, identifying scenic areas, activities of multiple land users and landowners, and management over extended periods. The work requires the involvement and collaboration of a number of technical and professional personnel who contribute to the overall success of managing the visual impact associated with planned forest alterations. As a forest professional responsible for VRM work, it is important to understand the difference between professional and technical works and service.

<b>Forest Professional or Review Professional</b>	<b>Technical Specialists</b> e.g. digital terrain modeller, photographer
<ul style="list-style-type: none"> <li>• creating, exploring, evaluating, and sharing solutions for VRM problems, conditions, and issues</li> </ul>	<ul style="list-style-type: none"> <li>• task based approach using recurring methods, procedures, and established processes</li> </ul>
<ul style="list-style-type: none"> <li>• applying specialized scientific and applied knowledge of forested ecosystems specific to the VRM effects of forest practice activities over time</li> </ul>	<ul style="list-style-type: none"> <li>• skill utilizing specific tools to create visual products; practical experience and on-the-job activities</li> </ul>
<ul style="list-style-type: none"> <li>• understanding theories, assumptions, principles, and their relationships underlying the practices of professional forestry</li> </ul>	<ul style="list-style-type: none"> <li>• applying an existing procedure and method in a specialized field of visual technology</li> </ul>
<ul style="list-style-type: none"> <li>• identifying, analyzing, advising, consulting, and reporting on scientific aspects of visual design, visual data, conditions, and problems</li> </ul>	<ul style="list-style-type: none"> <li>• carrying out tasks, methods, procedures, and computations</li> </ul>
<ul style="list-style-type: none"> <li>• assessing and judging the application of forestry science to legislative requirements</li> </ul>	<ul style="list-style-type: none"> <li>• describing the changes in visual products that affect the validity of results</li> </ul>
<ul style="list-style-type: none"> <li>• remain current in forest science and legislation governing forests</li> </ul>	<ul style="list-style-type: none"> <li>• staying abreast of existing and new technical methods and applications of visual tools</li> </ul>

The practice of professional forestry applied within the context of VRM includes:

- Conducting visual landscape inventory (VLI) including; mapping, data collection, attribute coding and quality assurance.
- Proposing and/or recommending visual quality classes to planning tables and/or Delegated Decision Makers for consideration during VQO establishment.
- Preparing results/strategies in response to Visual Quality Objectives and providing the professional identification of the work in Forest Stewardship Plans.

- Designing cut blocks and roads at the time operational plans are prepared, using recognized visual landscape design concepts and principles to ensure activities are consistent with established VQO's.
- Conducting Visual Impact Assessments to ensure achievement of established VQO's.
- Implementation of VIA results and recommendations into an operational plan (e.g. site plan).
- Providing input into the Timber Supply Analysis regarding the management of visual resources.
- Completing Visual Effectiveness Evaluation and visual monitoring post harvesting.
- Preparing contracts, schedules, supervising, performing quality control and quality assurance functions for visual activities.
- Providing expert advice and training on VRM.
- Initiating research in the field of aesthetics perception and social acceptability for a variety of forest practice and forest resource management activities.

The following are support and technical occupations related to the practice of professional forestry in VRM that often come under the supervision of a forest professional:

- Preparation of visual simulations
- Geographic Information System work
- Photography work and storage of data
- Compiling, inputting, summarizing the visual data

The Foresters Act and ABCFP Bylaws govern the conduct and practice of forest professionals. Under the Act and Bylaw 10, the forest professional who prepared or submitted the work must provide a signature block identifying the professional's name, designation and date. In this way, those relying on the professional work are assured of a particular standard of care and are aware of the professional who is accountable for the work.

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A visual simulation is an excellent example of technical support but it is not a professional document. A visual impact assessment that uses a visual simulation is professional work.

## 6. Skill Set for Professional Practice in VRM

Forest professionals who practice in VRM must have the necessary education, training and experience.

Currently, post-secondary forestry programs in British Columbia do not provide a program that covers visual landscape design and management of forests. Developing a personal professional development program that combines training and experience is one way of acquiring the expertise. Working with competent and experienced forest professionals, or obtaining supplementary landscape architecture training as a complement to forest science, are other ways of developing expertise.

At a minimum, a member of the ABCFP must have the following qualifications for professional practice in VRM:

- A Degree/Diploma in forestry or Forest Resources Management
- Supplemental education or experience with emphasis on visual resource management, or an equivalent combination of VRM education, training and experience.
- A demonstrated understanding of the legislations and associated regulations and policies that guide the management of visual resources in BC.
- A clear understanding of how VRM is integrated and considered within the context various plans e.g. Forest Stewardship Plan

Specific Technical skills needed to practice in VRM

- Acquired training and knowledge in Visual Landscape Design concepts, principles and practices.
- Understanding of a Visual Impact Assessment, ability to identify visual landforms and assess the consistency of the design/plan with the VQO.
- Ability to carry out a post-harvest visual assessment to determine if the results are consistent with the design and VQO.
- Understand basic photography concepts and capable of operating a digital SLR camera (using a 50mm lens).
- Ability to analyze to interpret landscape characteristics, delineate landforms, design and or assess harvest alterations.
- Ability to interpret visual simulations both from a perspective and planimetric view
- Knowledge of silvicultural systems, forest stand composition and structure, reforestation within BEC, logging layouts, road access development and the equipment and their application.
- Knowledge of the implications of visual management decisions over space and time.
- Ability to evaluate the implementation of visual landscape design principles.
- Knowledge of Geographic Information Systems and other related computer applications.
- Implementing the results of a VIA.
- Ability to access the visual landscape inventory (BCGW).
- Ability to understand and incorporate visual information into forest development plans.

Where a forest professional does not have the training and/or skill set described above they will need to work under the supervision of a qualified forest professional, or within a team of professionals. In these cases, the level of team experience to be competent to practice within VRM is as follows:

- Under the supervision of a registered forest professional qualified in VRM,
  - complete a minimum of three (3) VIAs that have had a VQO of at least Partial Retention and one (1) of which was Retention;
  - complete a minimum of (3) VIAs as the Coordinating Forest Professional, or

- Under the supervision of a registered forest professional qualified in VRM, document the completion of (3) previous VIAs with sufficient experience to undertake the next professional task in VRM.

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Experience can be gained in other ways than completing a VIA. For example, completion of Effectiveness Evaluations, Visual Landscape Inventories, or integrated visual designs. Each should be considered independently and determined if adequate experience has been obtained.

## 7. VRM Tactical Scenarios and Challenges

The application of VRM design principles is complex and requires experience to implement consistently. There are many variables occurring in time and space that cause assumptions to change, or to otherwise influence the outcome of forest practice activities. It is these changing conditions that affect the forest professional's ability to transact the intended outcome on the land.

Often forest professionals need more than the base knowledge in VRM. They also require experience in the application of the knowledge in a variety of scenarios. How they achieve the VQO can be complicated by the circumstances they encounter during the development of an area. The FPB and others have identified some of these challenges in their reports. While the scenarios below are operational and technical in nature, there is a significant value in sharing experiences in this area of professional practice.

The following are VRM Tactical Scenarios and other challenges encountered by forest professionals who are designing and implementing VRM.

### 7.1. Outdated Visual Landscape Inventory

The purpose of a Visual Landscape Inventory (VLI) is to provide information about the visual condition, characteristics and sensitivity to alteration of areas and travel corridors throughout BC. This information will assist land use planners and resource managers in deciding appropriate land uses, resource development objectives and management prescriptions.

BC forests are dynamic and ever changing. A VLI is a 'snap shot' of the landscape in time and as a result, it easily becomes outdated. A VLI that is found to be outdated will have an impact on key VRM processes such as operational planning, visual impact assessments and effectiveness evaluations. At the time of completing these works, the forest professional will need to consider the following steps relative to the outdated VLI:

- Communicating with the appropriate government VRM Regional and/or Provincial Specialist to identify and verify the VLI concerns.
- Seek professional or technical guidance from the government Specialist.
- Ensure that all regulatory considerations have been taken into account.
- Consult with adjacent tenure holders, land users and stakeholders regarding the VLI situation.
- Document and provide a professional rationale for how they have considered the changes in the VLI to reflect the current situation and how this has influenced their decisions.
- Updating VQOs is not a simple process and a DDM does not have a “quick fix” mechanism for changing VQOs. In some cases, it may be appropriate to request that the DDM exempt activities from achieving the established VQO where the VLI is clearly not accurate and has a bearing on the VRM strategies and tactics. In other cases, the professional must recognize and manage the circumstances appropriately, such as a VLI that is mapped incorrectly in a highly visible landscape having no VQO.

## **7.2. Two Different VQOs on the same Landform**

While not common, circumstances do exist across the province where a single landform has two VQOs. The classic example of this situation is the lower hillside, classified Modification, and the upper hillside, classified Partial Retention or vice versa. This situation is most prevalent in the Kootenay Boundary Land Use Plan area, where the VQOs were assigned based on distance zones.

Through the visual landscape inventory (VLI) process, the landbase is delineated into Visually Sensitive Areas (VSAs) that are further broken down into Visual Sensitivity Units (VSUs). Each VSU is described in terms of its Existing Visual Condition (EVC), Visual Absorption Capability (VAC), and biophysical and viewing characteristics. The attributes enable it to be classified it into a Visual Sensitivity Class (VSC). It is possible to have multiple VSUs with different VSCs and subsequently different VQOs.

This means that the portion of the opening that occurs in the Partial Retention cannot exceed Partial Retention. In other words, forest professionals are required to assist others in being consistent with the objectives set by government on the land base. In the event that two different VQOs occur on the same landform, the proposed alterations will need to be meet both objectives for the attendant VQO.

## **7.3. Existing Visual Condition Exceeds Visual Quality Objective**

There are situations where the existing visual condition (EVC) of the landscape exceeds the visual quality objective (VQO). It will be important to ask why the existing visual condition in a particular landform does not meet the VQO. Is it because of scale, design or both? If such a circumstance is encountered then forest professionals have the following options for management:

1. Wait for visually effective green-up (VEG) to be achieved.

The amount of time that managers must wait until forest practice activities can be undertaken in an area is proportional to the site index for the area. Which means, the length of time it takes for the



established reforestation to achieve a specific tree height. However, waiting for a base height to occur does not recognize when there is good or poor existing visual landscape design. In other words, waiting to achieve VEG may not be desirable because this will perpetuate poor design elements over the rotation.

2. Prescribe harvest that does not add to the visual impact.

The addition of smaller scale, partial cutting blocks within the viewscape are possible provided they do not show any visible ground from significant public viewpoints. Any further harvesting that adds to the visual impact would be contrary to restoring the visual condition.

3. Request an exemption from the VQO requirements.

Forest professionals or tenure holders are not empowered to change objectives set by government (i.e. VQOs). It is the role of the Delegated Decision Maker (DDM) to either establish or change a VQO. There are situations where an exemption is a preferred course of action. For example, when forest health factors have affected or damaged the forest additional harvesting may be a priority, an exemption requested.

In many cases, this will mean the forest professional will look for opportunities to improve upon the visual situation and not make it worse. The response in these situations will be site specific and will involve a forest professional qualified in VRM.

Whichever action is planned, forest professionals need to engage with the local Forest District for technical or professional discussion. Once the forest professionals understand their course of action, the decision and the steps to be undertaken in the future will need to be documented. A key aspect will be to create a monitoring and reporting schedule to ensure that alterations remain as planned towards meeting the objective over time.

SIDE BAR

The concept of meeting Visual Objectives over time may deal more effectively with impacts such as fire, windthrow and bark beetle outbreaks.

## 7.4. Legacy Blocks of Poor Design and VEG

Forestry operations have a long-lasting imprint on the landscape. In many cases, a visually sensitive landform will have existing “legacy” blocks that exhibit poor design (ie. rectilinear shapes with hard lines or right angles). Often these blocks are old enough that they also meet the definition of a block that has achieved visually effective green-up (VEG). When an older block meets VEG, the landform is no longer visually restricted to further harvest, although the poor legacy design will continue to have some influence on the evolving pattern and cumulative visual impact of both recent and past harvesting.

That said, forest professionals can learn from past visual designs and alterations. They can look for opportunities to improve upon the existing design by incorporating key design elements into new proposed alterations. Forest professionals also have more tools at their disposal today to consider different design elements.

Examples of improvements to legacy blocks could include:

- Adding to the opening to re-shape it and align better with lines of force,
- Borrowing from natural character in the landform with strategies and tactics such as incorporating edge treatments. This will soften the transition between mature timber and the new alteration. Often a combination of internal patch retention and individual trees is required.

Forest professionals may also consider a more comprehensive approach to the landform by developing a “Visual Rehabilitation Plan”. Such a plan will consider the entire landform over time and collaboration with multiple tenure holders, the public and stakeholders.

## **7.5. Interpretation of VQO Definitions**

Visual Quality Objectives are defined under the Forest Planning and Practice Regulation Section 1.1 entitled: Categories of Visually altered forest landscapes.

1.1 For the purposes of paragraph (c) of the definition of "altered forest landscape" in section 1, the following categories are prescribed, each according to the extent of alteration resulting from the size, shape and location of cutblocks and roads:

- (a) preservation: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is
  - (i) very small in scale, and
  - (ii) not easily distinguishable from the pre-harvest landscape;
- (b) retention: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is
  - (i) difficult to see,
  - (ii) small in scale, and
  - (iii) natural in appearance;
- (c) partial retention: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is
  - (i) easy to see,
  - (ii) small to medium in scale, and
  - (iii) natural and not rectilinear or geometric in shape;
- (d) modification: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint,
  - (i) is very easy to see, and
  - (ii) is
    - (A) large in scale and natural in its appearance, or

- (B) small to medium in scale but with some angular characteristics;
- (e) maximum modification: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint,
  - (i) is very easy to see, and
  - (ii) is
    - (A) very large in scale,
    - (B) rectilinear and geometric in shape, or
    - (C) both.

Recent Opportunities to be heard (OBTH) determinations, Forest Practice Board Investigation findings and Forest Appeal Commission rulings have helped provide clarity with respect to the meaning of the words used in the definitions.

### **Visibility**

VQO definitions include a measure of the ease or difficulty of seeing the forest alteration(s). Based on field experience and insights from organizations identified previously, the following variables or determinants can assist practitioners with determining the ease or difficulty of seeing forest alterations.

**Not easily distinguishable** - Not visually apparent regardless of view duration or number of viewpoints.

**Difficult to see** - Requires much effort or skill to discern visually. Peripheral, obscured, or extremely distant, as seen from non-static viewpoints.

**Easy to see** - able to discern visually without great effort or difficulty. Directly in sight or unobscured, as seen from one to a few stationary viewpoints or moving views of moderate duration.

**Very easy to see** - able to discern visually with little effort or difficulty. Directly seen or unobscured focal view as seen from single to multiple viewpoints of long duration.

**Extremely easy to see** - Able to discern visually without any effort. Unobscured focal view, dominates the view, as seen from multiple stationary or continuous viewpoints of long duration (>1 minute).

### **Scale** *(small, medium and large)*

FPPR, Section 1.1 describes categories of visually altered forest landscape using scale descriptors (i.e., very small, small, small to medium, large and very large).

While the intent in FRPA is to focus on qualitative definitions, scale of landform alteration in perspective view can also be a predictor of both public preference and visual quality. The [Visual Impact Assessment \(VIA\) Guidebook](#) (Table 3) contains numerical ranges by VQO category (i.e., category of visually altered landscape), which have been used operationally since 1996 to guide the scale of alteration for clear-cut harvesting on landforms. These numerical ranges are not in regulation; rather, they reflect policy guidance derived from research and monitoring.

VQO (category of visually altered landscape) (FPPR s. 1.1)	Scale (FPPR s. 1.1)	Most Probable % Alteration (policy guidance)
Preservation	Very small	0%
Retention	Small	0 – 1.5%
Partial Retention	Small to medium	1.6 – 7%
Modification	Large	7.1 – 18%
Maximum modification	Very large	18.1 – 30%

## Design

The third variable assessed in each VQO definition is the notion of design. The definition below provide more rigor around what the words in each definition mean.

**Natural** - Existing in or caused by nature; not made or caused by humankind. (Examples include irregular organic shapes, curvilinear lines, or a diffuse or dispersed pattern or texture)

**Rectilinear** - Contained by, consisting of, or moving in a straight line or lines. (Examples include straight cutblock boundary lines and roads that can result in unnatural or geometric shapes)

**Geometric** - Characterized by regular lines or shapes. (Examples include squares, rectangles, triangles, and circles.)

**Angular** - Having angles or sharp corners. (Examples include 90 degree right angle corners.)

VQO categories are defined by visibility (ease of seeing), scale, and aesthetic design characteristics; forest professionals are left with determining the difference between the ranges offered (easy to see, versus, very easy to see etc.). Even with the text in the legal framework and added guidance, the VQO descriptions require interpretation. As a result, there can be differences of professional opinion.

While the descriptions in the legislation provide prescriptive latitude, the ‘subjectivity’ and differences of professional opinion lead to a risk based approach for prescriptions. The forest professional’s concern include, what will those measuring performance observe? How do others interpret the subjective words? What is the public interest in this case? Where is my employer or client at risk? Forest professionals need the skill and ability to plan, assess, and distinguish between the VQO categories.

The circumstances require communication and collaboration at many scales. The following are considerations and steps to encourage respectful and open dialogue between forest professionals:

- Understand the various roles of individuals in the process.
- Respect that opinions on visual quality vary.

- Implement the roles and responsibilities. That is, the forest professional who is signing, or providing the professional identification of work for the key document is professionally accountable and therefore, should have the strongest voice regarding visibility, scale and design. The CFP also has the added burden of ensuring consultation with others that may have an interest.  
The review professional is responsible to provide professional opinion supported by a rationale.
- The forest professional’s opinion needs to be supported with reference to relevant policy, procedures, guidance and experience.
- Dialogue between forest professionals should be one built on trust.
- Consider in-field reviews and conversations where scenic values can be discussed and evaluated while observing..
- Seek independent, third party guidance and insight in the matter should uncertainty exist.

## **7.6. Forest Stewardship Plan Vs FPPR**

In some instances, forest professionals will have an approved Forest Stewardship Plan that allows for a different interpretation of the visual quality objectives than what is outlined in FPPR. For example, a FSP has a strategy that includes a percent alteration on the land and in the forest professional’s opinion creates circumstances that exceed the regulatory descriptions in the FPPR. The forest professional believes that the results on the land will undermine the local public expectation.

From FPB investigative work it is evident that some early FSPs were approved by DDM’s with wording that, from the FPB perspective, would not meet the FRPA Section 5 test. Consequently, the FPB found that VQOs were not achieved and an accountability void or gap was created.

The solution, implemented by the forest professional, is to advise the parties that the plan cannot override a regulatory provision and the circumstance must be remedied. Allowing the conditions to persist increases the risk that objective will not be achieved on the land and the public trust and confidence in the regulatory framework will erode.

Forest professionals have the exclusive authority to practice professional forestry because they practice competently in the public’s interest. The forest professional’s obligation is to ensure good forest stewardship and advise the responsible parties. The forest professional would do this by:

- Verifying the facts;
- Demonstrate that there is a high risk VQO’s won’t be achieved;
- Inform the responsible people;
- Work towards a solution; and
- If the problem is not resolved, then inform the ABCFP in writing<sup>1</sup>.

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<sup>1</sup> ABCFP Bylaw 11.3.4

In this situation, forest professionals would engage with the owner of the FSP to highlight their concerns and actions taken to address them. The forest professional, FLNRO and the tenure holder have the same objective in managing to the public interest and maintaining social license.

## **7.7. How Percent Alterations Are Considered**

In the spirit of a results-based regime, both the Forest and Range Practices Act (FRPA) and Forest Planning and Practices Regulation (FPPR) do not mention percent alteration as a test for meeting specific visual quality objectives. However, there exists a long history of using percent alteration as a guidance tool to forest professionals. Research shows that Retention and Partial Retention VQOs can be accurately predicted using percent alteration with accuracy rates of 77.8% and 85% respectively.

The Forest and Range Evaluation protocol for visuals uses two measures to determine if a VQO has been met. The basic definition for each category of alteration (VQO) (legal test) is evaluated through an ocular assessment and, the perspective percent alteration and design elements are assessed using standards and criteria derived through research.

Forest professionals will use percent alteration calculations as one of several inputs into their understanding if a proposal or alteration has met a VQO. Percent alteration is not intended to be the sole determinant whether a VQO has been met or not.

Percent alteration is described in the VIA Guidebook (Forest Practice Code era) as “a reasonable predictor of achieved visual condition”. It is determined by calculating the amount of visible area within a larger area that has been altered by forest harvest or by road building. The visibly altered area is described as a percentage of the larger “landform”. If that percentage falls within the range specified for a particular VQO, then the harvesting is predicted to, meet the VQO.

*[Note: percent alteration, as per VIA guidebook, is for the opening area of the alteration. There are no additives or reduction in % alteration – it is only for a visible area calculation. FREP and C&E have adjustment factors (FREP VQEE form). These are not included in VIA % alteration calculations as per VIA guidebook. There should be clear guidance on this aspect of percent visual alteration for both VIA and PHVA.]*

Another resource for Forest Professionals is the poster<sup>2</sup> produced by the provincial government “A Guide to Visual Quality Objectives: Categories of Visually Altered Forest Landscapes”. The poster provides photographic examples of altered forest landscapes broken down by VQO. At the base of the poster, is an interpretive guide inferring the VQO by percent alteration.

The biggest pitfall to percent alteration is that it is empirical and does not incorporate professional judgement. Achievement of a VQO is met through consideration of a number of factors, including, sound landscape design strategies and tactics , opening shape, pattern, scale, edge treatment, internal tree retention, site disturbance, road and landing location, construction and rehabilitation.

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<sup>2</sup> <https://www.for.gov.bc.ca/hfd/pubs/Docs/Mr/Rec/Rec044.pdf>

## **7.8. Harvest Method**

The ability to achieve a specific visual design in an area is influenced by the harvest method and the capabilities of the operators. Options to mitigate visual impacts through the retention of trees and patches become more complex when moving between ground-based to cable-based situations. Ground-based operations are typically on less steep terrain and consequently less visible. It is also easier to create irregular boundaries and islands within blocks. The cost of implementing a retention strategy within ground-based operations is typically less than within a cable or steep slope harvest program.

The options for retention trees using a cable-based harvesting system are more challenging. For example, it is difficult, if not impossible, to safely add curves to boundaries when running straight corridors for yarders. As a result, operational logging constraints must be considered when completing visual design works.

Forest professionals that practice in operations will need to communicate and discuss alternatives with their logging and road-building contractors. Careful supervision and understanding of the harvesting plan will be required. Often, equipment operators have the best solutions when they understand the objectives that the forest professional is trying to achieve.

Key harvest method factors that influence visual design are:

- **Development Costs.** There are typically greater upfront costs and investment required in planning, consultation, layout and roads within visually sensitive areas.
- **Operator experience.** There are different capabilities among road builders and loggers. In highly sensitive visual areas, competent, closely supervised operators should be used. Significant visual impacts can happen rapidly.
- **Technological investments.** Current harvesting equipment contain computers and equipment controls such as motorized carriages. Intermediate spars and tethered steep slope machines are often required to successfully meet VQOs.
- **Safety.** Additional training may be required. Retention of standing timber represents unique safety considerations.

## **7.9. Forest Roads**

VRM includes both blocks and roads as part of the altered landform that forest professionals manage. Roads often result in 'linear features' on the landform. They also tend to be more permanent on the landform over time because they are not typically reforested. When they are rehabilitated roads will look differently than the rest of the block which extends their visual impact.

Forest professionals need to understand and carefully consider how and why road infrastructure is being proposed and to what degree of permanency it is planned for. There are well established VRM strategies and tactics to address roads and landings within visually sensitive areas.

Visual impacts of roads should be included as part of the short and long term monitoring program.

## 7.10. Silvicultural Systems

VRM does not specify the type of silvicultural system that must be used to meet a VQO. That is the choice of the forest professional. When it comes to choice of silvicultural system, VRM research shows that selection systems and clear cuts can achieve VQOs equally well. The principle difference is that much more volume can be removed short term using a partial cut system as opposed to a clear cut system. In addition, retention-harvesting studies show that the public prefers systems that leave some standing volume in the block as opposed to nothing.

Based on the information above it is up to the forest professional to choose a silvicultural system that meets visual resource management objectives and other objectives on the land.

A retention system or unevenaged management may provide the best visual benefit, however the silvicultural system also must achieve a forest that is ecologically suited for the area. The experienced forest professional avoids the pitfalls of competing management situations.

If retaining trees is required to mitigate visual impacts, here's a list of questions to ask yourself when planning the management of the area:

- How many leave trees are required to meet the VQO?
- Will retention be dispersed and uniform versus clumped and patchy?
- Mature trees or immature trees or a combination?
- What is the windthrow risk?
- What species is being retained? In priority ranking?
- Will the retained trees be removed in the future? How? What is the impact to the understory when mature trees are removed?
- How will reforestation efforts be impacted by the retained trees? Competition for moisture? Competition for light? Both?
- What other values are being considered? Forest professionals are often faced with striking a balance between values that potentially compete with each other. To name a few: economic pressures to deliver wood to the mill, forest health, community safety from forest fire, root rot, bark beetles, stand level biodiversity, habitat, and a whole host of other factors.

The selection of which silvicultural system to use to achieve a VQO requires specialized knowledge and experience in advanced silviculture systems and visual design principles. Forest professionals should carefully consider their abilities and seek guidance where necessary. Once a system has been chosen, this should be well documented so that subsequent monitoring and follow up can evaluate the silviculture and visual objectives.

## 7.11. Time Horizons and Meeting Visual Quality Objectives

Evaluation of whether or not an alteration has met a VQO occurs soon after harvest, often within two years of the alteration. Forest professionals need to appreciate that this is a very narrow window in the context of a full rotation. The intent is to capture the "worst case" of the visual impact created and sets



the bar high for achieving a VQO. That is, achievement is at completion of harvesting, and not 3-5 years post-harvest.

The ability of an alteration to blend back into the landform is influenced by the amount of VRM design elements applied, combined with the establishment of healthy forest regeneration. Forest professionals need to consider the ecology of the forest in the context of their VRM design decisions, as this will dictate the recovery timeline for the landform.

The temporal aspect of visual impacts is addressed in the 1994 publication “A First Look at Visually Effective Green-up in British Columbia”. Visually effective green-up (VEG) is a concept that Forest Professionals can use as a guideline. Other factors to consider are the viewing angle, distance and site index for an area.

When a VQO has been fully utilized, then re-entry for a forest practice activity on the landform can be predicted using the slope/tree height table in the Forest Practices Code Green-up Guidebook. It is a simply, determining the tree height needed to achieve VEG and then considering the site index (SI Table) for the area to predict how long it will take for the specified tree height to be achieved.

Forest professionals planning cutblocks with long term visual management as a key consideration. The question is “how can I meet the visual quality objectives over time while maximizing the long term timber opportunities?” Currently, many cutblocks are designed without this thought process and limit future harvesting opportunities while extracting only a portion of the timber that thoughtful and long term visual management planning would have allowed.

## **7.12. Viewpoints**

### **7.12.1. Viewpoint Selection and Significance**

Significant public viewpoint is part of the legal definition for each of the VQOs. That is, the VQO has to be achieved from locations, which are significant public viewpoints. The term is not defined anywhere in FRPA, but it is a key part of the definitions of the VQOs in the FPPR section 1.1. The ministry of FLNRO has been using the following definition in recent workshops and training. The ABCFP recommends this definition to provide a current and workable tool for forest professionals.

**A Significant public viewpoint** - *is a place or location on the water or land that is accessible to the public, provides a viewing opportunity, and is relevant to the forest landscape being assessed.*

This definition does not specifically indicate where significant public viewpoint should be located; it simply provides guidance on what variables to assess when making the choice.

*A word of caution: a recent Forest Appeal Commission finding emphasized that it is not necessarily the location with the most viewers. So what does a forest professional do? The forest professional relies on the code of conduct and standards of professional practice to inform the choice, including, a duty of care, due diligence, consultation, investigation, most likely location tested by other pressure point locations.*

The selection of viewpoints for the purpose of a visual impact assessment (VIA) is not necessarily the same as a viewpoint used to complete a visual landscape inventory (VLI). Viewpoints used to assess a proposed alteration should include the most direct view of the proposal from an important location. This will give a sense of the “worst case” scenario and often require more than one location. When on waterbodies, it is common to use the center of the water body for the VLI. To assess a forest harvesting proposal use the centerline on major waterbodies, but the furthest shoreline on small lakes and rivers. Where the water body is a travel corridor, it is most logical to use the most travelled route. This is often the channel centreline in coastal inlets. This is also true of lakes where recreational fishing is important.

Good examples of appropriate and significant public viewpoints are:

- a long stretch of highway leading toward the harvest unit
- a rest stop
- a recreation site
- a boat launch
- a group of homes
- a settlement or community gathering site (shopping center, ball park, hall, church, etc)
- a tourist-related commercial enterprise

It is important to keep in mind that viewpoints change overtime, particularly the significance of them. The VIA guidebook recommends seeking advice/input from the public and the district on viewpoint determination. Working together cooperatively to provide an understanding of viewpoint locations in a VIA between the Visual Specialist, district expertise and the forest professional, would improve the results on the land. This is an opportunity to emphasize the importance of a community of professional engagement regarding a public resource, the betterment of that resource, and in meeting objectives on the land.

### **7.12.2. Viewpoint Importance**

The FPPR are stated in a way that the VQO is met regardless of the importance of the viewpoint. Forest professionals should weigh the relative importance of a viewpoint (or series of viewpoints) in the context of the viewpoint significance.

There are many other factors in determining importance of a particular viewpoint. For example: access to locations, numbers of uses, cost to the public (high end, exclusive resorts), timing and season of viewpoint, safety for observation (e.g. unsafe highway pullout), probability for change, to name but a few. The degree of sensitivity should be balanced between the importance of a view and the duration in which an alteration is viewed. Either way, what is important is seeking advice and providing a rationale for the selected viewpoints in the VIA.

## **7.13. Forest Health Factors**

### **7.13.1. Landscape Level Natural Disturbance**

Landscape level natural disturbances such as bark beetles, wind, or forest fire have brought about a unique challenge within VRM. Economic recovery of impacted timber is an important factor at both local and provincial levels. Maintaining VRM values is important to other forest users like Wilderness Tourism Operators. For example, following the mountain pine beetle epidemic, forest professionals have worked hard towards meeting economic, social and environmental values. A frequent conversation for communities at the height of the infestation was the question of mid-term timber supply. In some areas, the requirement to achieve visual quality objectives was waived by the DDM; and unfortunately, the application of landscape design was often not applied in the planning regime, resulting in poor outcomes. In other cases, tenure holders were given cutting permit approvals for a larger scale of alteration with a visual design plan. Meaning the openings were larger but better designed. Forest professionals have learned, through public perception studies, that areas of dead trees, while rated poorly, were preferred to the widespread harvest of beetle-damaged forests. The MPB epidemic created a seemingly impossible task of balancing a diminishing economic wood value, safety of users in the future, value of a future wood supply and visual values.

When landscape level natural disturbance occurs, the key is to acknowledge that the situation exists and come up with a strategy that incorporates VRM principles but addresses the “scale” of alterations. Where a change in the scale of alteration requires a change in the objective, it will be the government’s role to modify the objective, or provide exemptions (DDM) and the role of forest professionals to coordinate and develop the planning, implementation and monitoring of visual design outcomes. Forest professionals will need to leverage their local knowledge, public engagement processes and VRM specialists to come up with a plan.

Depending on the visual polygon, forest professionals are uniquely qualified to gather information at the local level and come up with different options to consider for management. This can be brought to the DDM in a way that broadens the opportunities for improved visual quality in the long run.

Emphasis and discussion should be around the longer-term vision of the landscape. At a bare minimum, hard lines and right angle corners are avoided. The impact of the natural disturbance is at a landscape level, so the scale of alterations should reflect this too.

Retention of patches of dead standing timber is an appropriate strategy and tactic to mitigate visual impacts and satisfy other resource requirements. However, this is applied cautiously and in full awareness of viewing distance, importance and significance. Once dead standing trees start falling over, especially in the foreground, they will appear “messy” and less visually attractive over time.

When plans are been decided upon, implementation should include ongoing monitoring by both forest professionals and the public. This will provide a feedback loop into the process and encourage accountability for all involved.

The preceding guidance is useful for the beetle salvage, and may not be appropriate for fire-impacted landscapes, or for widespread wind throw of forests. A one-size fits all approach would fail to

incorporate all the factors associated with a particular area for the forest professional when making a decisions in a scenic area that has landscape natural disturbance issues. It is not as simple, as asking the question 'does this look nice?'

### **7.13.2. Windthrow**

Windthrow is a factor for consideration in every visual impact assessment. This is particularly important for sites with restrictive VQOs like Retention where it is obvious that Visual Quality is of high concern. In the event of a post-harvest windthrow event, not only is the visual impact at risk of being expanded, but subsequent blowdown and adjacent standing timber is possible.

Ensure that retention strategies are robust enough to withstand some loss over time, particularly within the first 5 years of harvest. This includes both internal and external of the proposed alteration.

In situations where windthrow does occur it is important to clean it up as soon as possible.

Where recovering windthrow on visually sensitive landscapes it will be important to limit the cutblock opening size to the minimum area required to remove the blowdown and no more than one tree length beyond the blowdown stems.

### **7.13.3. Root Disease**

Root disease is a forest health factor that must be professionally assessed. It is not recommended to retain extensive amounts of root rot susceptible species in a known root disease area, particularly in visually sensitive areas. Trees retained to mitigate visual impact will only serve the purpose for a short term and potentially exacerbate the situation.

As forest professionals, we need to be clear on our understanding of the current stand conditions and how root disease will be treated. If stumping is required, how visible will this be by the public? What species are being reforested? Are there secondary forest health considerations in the area such as windthrow or bark beetles.

Stocking standards in root rot areas that are also visually sensitive need to be considered. For example in some locations, larch or cedar is used in a mixed-species planting strategy; however, for larch, the deciduous nature of the species will influence visual conditions.

## **7.14 Influence of Non Forest Sector activities**

Private land, utility corridors, mining operations, and wind farms are all examples of outside influences that are beyond the control of forest professionals managing the landscape within the FRPA. At present, there is no memo, or Government policy to direct forest professionals and their clients or employers. While the impacts of these activities will not contribute 'officially' to the visual disturbance, they should not be ignored during the visual impact assessment. The existence of these kinds of impacts form part of the conversation with the tenure holder on the land.

This is problematic when forest professionals advise or direct forestry operations that add to the altered views. The public may not easily distinguish between the two types of land uses related to the visual impact, or be aware of administrative boundaries. Ideally, forest professionals can use the impacts of outside influences to design their own alterations by looking for opportunities to improve upon the EVC.

In cases where the outside influence creates a situation in which the EVC is greater than VQO, the appropriate qualified VRM forest professionals should proactively communicate to acknowledge the situation, come up with a plan of management and agree to a monitoring.

## **7.15 Professional VRM Work**

Bylaw 10.2 applies to Professional VRM work and means all written or oral communications that contain the practice of professional forestry or other professional work, including, advice; estimates; specific actions; reports; letters; memoranda; documents; plans; and all such other materials containing professional opinion or work product in any format used for transmitting information.

### **SIDE BAR**

A visual simulation is an excellent example of technical support but it is not a professional document. A visual impact assessment that uses a visual simulation is professional work.

In the case of the FSP, forest professionals are responsible for the development of results or strategies for visual quality. FRPA Section 5 (1.1) requires that these be consistent with objectives set by government to the extent practicable and that the results or strategies be measurable or verifiable. This is professional forestry work.

FPPR 25.1 enables the writing of practicable statements to deal with specific localized issues. However, there are specific tests that must be satisfied. A DDM will need evidence to know what the issue or problem is, where it is, why it is not practicable to meet an objective, and what the alternative result will be. The alternative result must be measurable and verifiable. The rationale is a professional document containing professional work.

Section 12(7) of FPPR is an exemption from the requirement to specify intended results or strategy in an FSP. It provides authority to the DDM to grant an exemption from the requirement where it is not practicable, given circumstances or conditions applicable to a particular area, and specify a result or strategy consistent with and established objective. Conditions are often attached to the exemption using FRPA s112. It is likely that where conditions are provided that they will be written to deal with public concerns for the area. The content of the conditions that are applicable, is professional forestry work.

Professional work within the FSP occurs in all of the above-mentioned examples. Similar instances of professional work and documents occur in VIA's, in Compliance Visual Inspections and FREP Visual

Effectiveness Evaluations. The management of forests is for visual quality is complex and complicated. It is not possible to identify all of the instances requiring professional forestry work in Visual Resource Management.

## **7.16 Quality Management Processes**

Quality management for members is the implementation of suitable protocols to ensure that the professional work is technically correct and meets the standards of practice established by the profession. The Standards of Professional Practice contain competence and due diligence direction to ensure quality of professional work. Competence requires professional practice to include the essential elements of knowledge, completeness and correctness, professional care, and measurement/verification of work. Quality management processes support professional work related to VRM prepared by members and will include the following:

- Peer reviews of projects. In some cases for legal compliance, and in most cases for technical correctness, assumptions, and other aspects of the VIA. (peer review can be internal or external )
- Storage and retention of project documentation, correspondence, reports and other supporting documents
- Documentation and evidence of regular investigations, field reviews or supervision
- Ensuring communication of necessary professional work to responsible persons
- The member has made a proper assessment of risks and outcomes.

ABCFP members exercise due diligence in professional practice by being prudent and doing all work with constant and careful attention. An ABCFP member can exercise due diligence in professional practice by satisfying himself or herself of the following (ABCFP Bylaw 12.5):

- All relevant legal requirements have been met;
- The member has a clear understanding of the objectives and how they relate to other values or interests which are relevant to the work or may impact it;
- The member is personally familiar with all relevant characteristics of the area affected by the work;
- All appropriate background information has been gathered and incorporated;
- The member has consulted with all appropriate experts or specialists for those areas for which the member is not qualified to practice or express an opinion;
- When external advice is sought from a specialist, that specialist is qualified and competent to give that advice and the advice given makes sense based on the member's own personal knowledge;
- When data is collected by another person, that person is qualified and competent to collect that data and the data collected makes sense based on the member's own personal knowledge;
- Sufficient data was collected as per required standards;

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