



**Forest
Practices
Board**

Logging and Visual Quality near Lillooet

Complaint Investigation #15085

FPB/IRC/215

May 2018

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Executive Summary

In September 2016, a resident of the Moha area near Lillooet filed a complaint with the Forest Practices Board. The resident, representing a local community group, was concerned that planned logging by Aspen Planers Ltd. (Aspen) would cause visual disturbance greater than allowed under the visual quality objective (VQO) for the area. He could not understand why the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRO) district manager could issue a cutting permit under these circumstances. He also thought that the compliance and enforcement branch (CEB) of FLNRO should have investigated Aspen's plans. The logging took place during the course of the investigation.

The complainant also made an official complaint to CEB regarding his concerns about the visual quality relating to CP 715. CEB staff decided to wait until logging was complete to assess compliance with the VQO.

Aspen has an approved forest stewardship plan (FSP) that includes a result and strategy designed to be consistent with these visual quality objectives. Aspen had applied for a cutting permit (CP) with several blocks that would be visible from the Moha area. Prior to logging, Aspen completed visual simulations and consulted with area residents, including representatives of the community group, to design logging to comply with the VQOs for the area. During logging, Aspen continued to consult and made modifications to logging plans in an attempt to improve the final visual quality results.

The Board considered two questions in the investigation:

1. Did the licensee comply with the *Forest and Range Practices Act* (FRPA) visual resource management requirements when it planned and logged the portions of CP 715 visible from Moha?
2. Was government's enforcement of FRPA visual resource management requirements appropriate?

To answer these questions, the Board retained visual quality specialists to review visual management in the area, including the assessment of achieved visual quality from relevant viewpoints after logging. The Board also interviewed staff with CEB and Aspen.

In regard to the question of whether Aspen complied with FRPA's visual resource management requirements when it planned and logged the portions of CP 715 visible from Moha, the Board concludes that Aspen did not comply with FRPA's visual resource management requirements when it planned and logged the portions of CP 715 visible from Moha. The Board found that Aspen worked with local residents prior to and during logging and made changes to cutblock design in efforts to meet the visual quality objective. In the end, the changes were not sufficient to meet the VQO.

In regard to the question of whether government's decision not to investigate the complaint about visual design was appropriate, the Board concludes that the result and strategy for meeting government's objective for visual quality in Aspen's FSP was not written in a way that could be enforced prior to logging completion. This is because 'design' was not defined, nor were there steps or times specified in the FSP where the design would be judged.

Introduction

The Complaint

In September 2016, a resident of the Moha area near Lillooet lodged a complaint with the Forest Practices Board. The resident was representing the forestry committee of the Yalakom Community Council. The forestry committee was concerned that:

1. planned logging by Aspen Planers Ltd. (Aspen) in the Bridge River Valley would cause visual disturbance greater than allowed under the visual quality objective (VQO) for the area;
2. the district manager should not have issued a cutting permit because of potential disturbance to visual quality; and
3. compliance and enforcement branch (CEB) of the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRO) should have investigated Aspen's plans prior to logging to prevent a potential visual quality problem.

The complainant wanted the completed logging to clearly comply with the VQO.

Background

The Moha area is located north of Lillooet, BC. There is a minor highway along the valley (officially named Lillooet Pioneer Road 40, but often referred to as Bridge River Road) that provides access to several communities, including Gold Bridge and rural areas along the Bridge River and Carpenter Lake. About 32 kilometres north of Lillooet along this highway, the Yalakom River joins the Bridge River. At this point, there is a prominent road junction and a rural area known as Moha. The junction is a stop and viewpoint for visitors to the valley and has a kiosk with information about the area. It is from here and nearby viewpoints that the Yalakom Community Council's concerns are centred. The Yalakom Community Council represents residents of Moha and the surrounding rural area.

The complainant told the Board that the scenic quality of the Bridge River area is important for tourism-related businesses as well as many local residents, some of whom settled here because of the scenic quality. The VQOs were set after extensive visual landscape inventory work and public consultation in the mid 1990s. A VQO of partial retention¹ was set for this area.

Visual Quality Management— Where to go for More Information

FLNRO maintains an informative website on visual resource management at:

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

For a description of VQO classes, this poster is particularly useful:

<https://www.for.gov.bc.ca/hfd/pubs/docs/mr/Rec044.htm>.

The Board report entitled *Visual Quality on Alberni Inlet* has a description of visual quality management in BC. It is available at:

<https://www.bcfpb.ca/reports-publications/reports/visual-quality-alberni-inlet/>.

¹ Under partial retention, changes are easy to see, they can be small to medium in scale, and natural not rectilinear or geometric in shape.

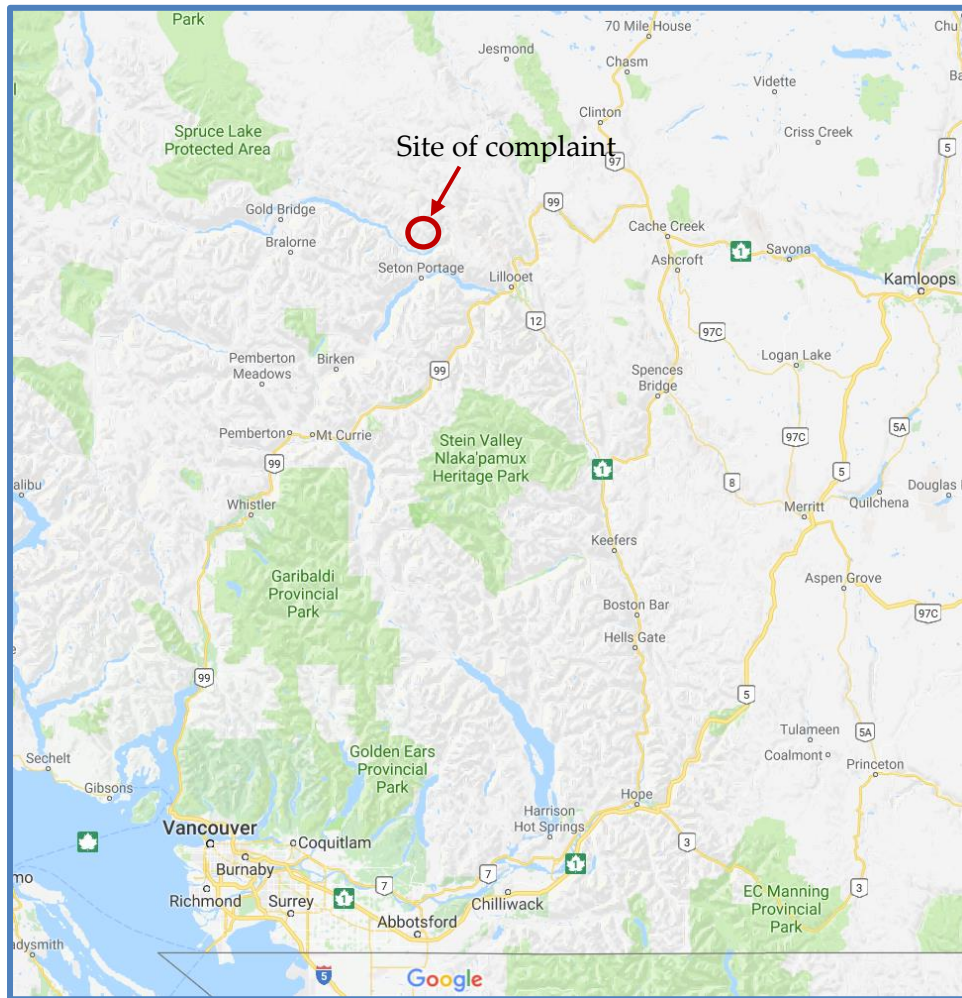


Figure 1. Location of complaint.

Aspen is the main forest licence holder in this area, operating under FL A18700. FL A18700 is held by 0866740 B.C. Ltd., which is owned by Aspen. Aspen was issued a new cutting permit under FL A18700 in June 2015. This cutting permit (CP 715) included 20 cutblocks along the southwest side of the Bridge River. Logging on CP 715 commenced in mid 2016 and was completed in early 2017.

Aspen realized that many of the cutblocks in CP 715 would be visible from scenic viewpoints and pullouts along the Bridge River Road or from a moving vehicle travelling along the road. Of the 20 cutblocks, 8 would be visible from the Moha area and were of particular concern to the complainant. Because of the VQO set for this area, and the fact that the blocks could be highly visible, Aspen completed visual simulations from selected viewpoints, portraying what the cutblocks would look like after logging. Aspen told the Board that the simulations indicated that the visual quality objectives would be met. Aspen also said that it intended to leave more individual and small groups of trees standing within the cutblocks to further reduce visual impacts and that it was not technically feasible to portray all of these leave trees in the simulations.

Aspen, in collaboration with representatives from the Yalakom Community Council, selected four viewpoints. These included views from Moha, the road junction and a site called the “horseshoe” because of a sharp river bend.

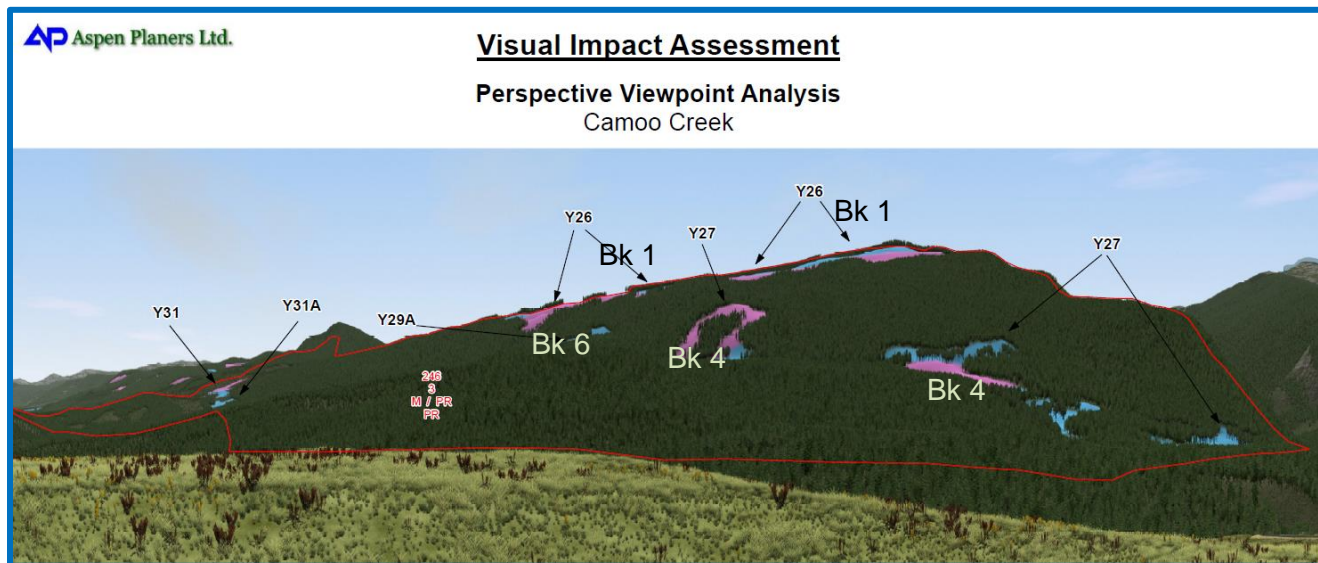


Figure 2. Aspen Planers' simulation of proposed logging as viewed from the road junction kiosk viewpoint. Pink represents planned cable logging areas, blue represents ground skidding. Note that several cutblocks can be seen.

Aspen met with the complainant and other representatives of the Yalakom community several times prior to and during logging to discuss the plans and review progress. Early in this process, Aspen provided copies of the simulations for the representatives to view. Aspen thought that the VQO of partial retention would be met, but the complainant did not agree and hired a consultant to independently complete simulations and predict what the visual quality would be. The consultant's work reaffirmed the complainant's opinion that the logging would not meet the VQO. Aspen continued to work with representatives of the Yalakom community through this process and made many changes to logging plans as a result.

The complainant made an official complaint to the compliance and enforcement branch of FLNRO regarding his concerns about the visual quality relating to CP 715. Compliance and enforcement branch staff did not immediately investigate. They decided to wait until logging was complete to assess compliance with the VQO.

Logging commenced in CP 715, in a cutblock located on the lower slopes near the north end of the permit (see cutblock 4, Figure 2). Aspen made extensive changes to its plans as logging progressed, to reduce the visual impact. These included boundary changes and increased retention of trees within several cutblocks, including cutblocks 4 and 6. The remaining cutblocks were logged during the winter of 2016/17.

Board staff visited the site in September 2016 with a visual quality specialist and completed some initial analysis of the visual disturbance resulting from the logging up to that point. They revisited the site in May 2017 after logging completion to conduct a visual impact assessment. Later in 2017, the Board had another visual impact assessment completed by a second visual quality specialist.

Investigation Results

The Board considered two questions in this complaint investigation:

1. Did the licensee comply with FRPA's visual resource management requirements when it planned and logged the portions of CP 715 visible from Moha?
2. Was government's enforcement of FRPA visual resource management requirements appropriate?

To answer these questions, the Board contracted two visual quality specialists to independently review visual management in the area, including assessing the achieved visual quality from relevant viewpoints after logging. The Board also interviewed CEB and Aspen staff.

The Board did not investigate the concern about the FLNRO district manager's (DM) decision to issue the cutting permit. This is because the district manager can only withhold issuance of a cutting permit in very limited circumstances. A concern, however well founded, that logging under the authority of the cutting permit would break laws or fail to meet government objectives is not one of those limited circumstances. The Board has commented on this lack of authority in the past.ⁱ

Did the licensee comply with FRPA's visual resource management requirements in CP715?

Legal Framework

Government has set visual quality objectives for the landforms where CP 715 lies. For the portions visible from the Moha area, the visual quality objective is *partial retention*.

Under FRPA, a licensee must prepare a forest stewardship plan (FSP). The FSP must specify results or strategies to achieve the VQOs relevant to the FSP area. Forest practices, including cutblocks and roads, must be consistent with these results or strategies. Section 21(1) of FRPA says "the holder of a forest stewardship plan must ensure that the intended results specified in the plan are achieved and the strategies described in the plan are carried out."

Aspen's FSP states:

...within an area in the FDU that is in a Scenic Area with established Visual Quality Objectives, prior to cutting permit or road permit application, the Holder will conduct a **Visual Impact Assessment** and design harvesting to be consistent with the visual quality objectives established in the District Managers' letters dated July 28th, 1994 and December 15th, 1997.

The visual impact assessment is defined in Aspen's FSP as an assessment "conducted by a Qualified Registered Professional that examines, on a site-specific basis, the potential visual impact of proposed primary forest activities on the scenic landscape."

Prior to logging, Aspen completed simulations of the post-harvest visual condition from four viewpoints and concluded that the logging would meet the VQO of partial retention

Viewpoints

Selection of viewpoints is one of the most important decisions to make when completing visual impact analyses. Government discusses this extensively in its' literature on visual impact analysis.ⁱⁱ A Forest Appeals Commission decision also discusses the term "significant public viewpoints."ⁱⁱⁱ

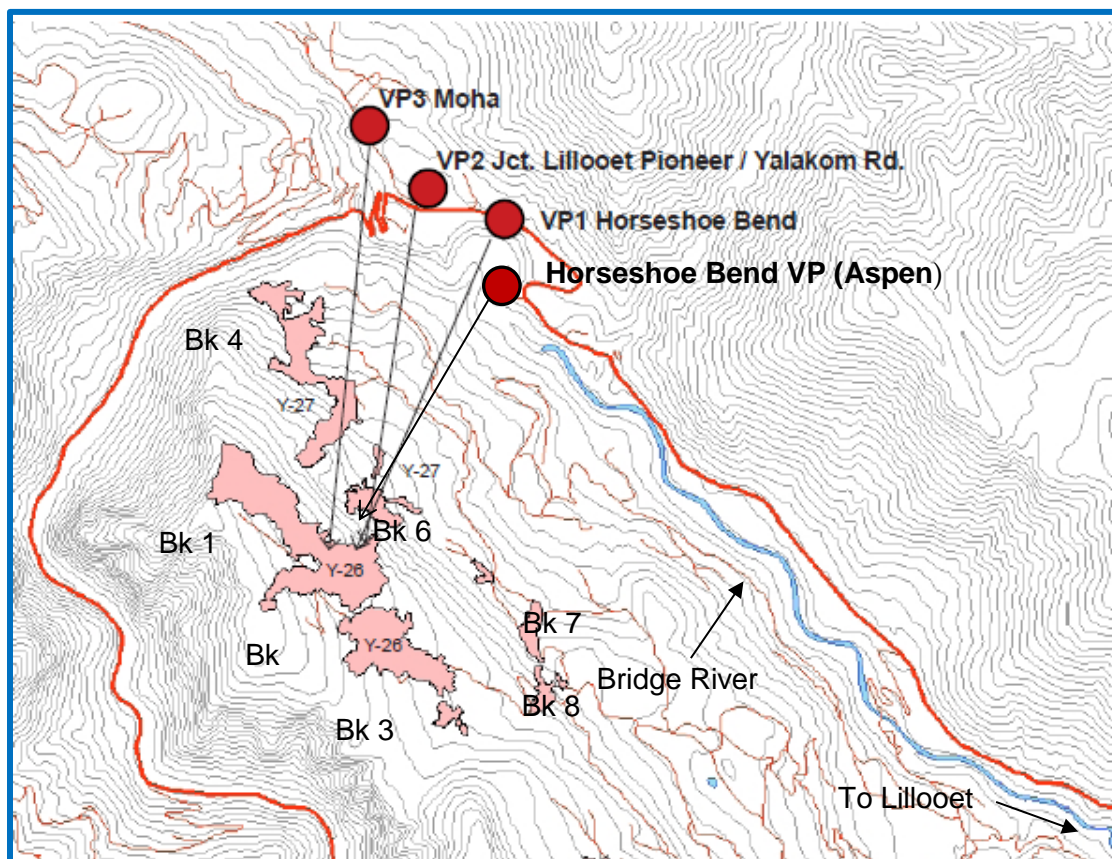


Figure 3. Location of cutblocks and viewpoints

Aspen's choice of viewpoints was reasonable and commendable. It was based on consultation with local residents and observations of where the views are direct and the public is likely to have extended viewing opportunities. One of the Board's contracted visual specialists did choose a different point near the Horseshoe Bend. This point was higher on the hillside at Horseshoe Bend and provided a more direct view of the logging. However, it was at a point on the road that was used less as a pullout and viewpoint than the spot chosen by Aspen. The two other viewpoints were approximately the same as two of the four viewpoints that Aspen used. The Board did not examine the fourth viewpoint because the three chosen viewpoints provided the best and most direct views. The other visual specialist contracted by the Board assessed the view from both sites at Horseshoe Bend and the two other viewpoints. The results are shown in Table 1.

Visual Impact Analysis (VIA)

Another important decision is VIA content and methodology. An ideal VIA should include:

- A description of viewpoints and how they were chosen.
- An analysis of landforms (lines of force, visual sensitivity and other factors) based on current detailed photography.
- Simulations of what the post-logging landscape will look like.
- A description of the post-logging and road building visual condition and a classification of the category of visually altered landscape as defined in the FPPR section 1.1.
- A plan for monitoring during logging and procedures for changing as a result of monitoring.
- Signature of a qualified professional.

The VIA process is often iterative, with modifications being made to plans to ensure that VQOs are met. VIAs should be completed by visual quality specialists who are forest professionals or who are working under the direction of forest professionals.

The VIA completed by Aspen had very well-done simulations of the post logging conditions, but fell short on the other aspects of an ideal VIA. The definition of a VIA in the FSP is not very specific. It does not rule out the inclusion of the points listed above for an ideal VIA, but it does not require them.

Aspen's Efforts During Logging

Aspen began logging a low elevation cutblock (cutblock 4) at the north end of the CP 715 area in July 2016. As logging progressed, Aspen continued to consult with residents and made changes to its logging plans based on those consultations and its own observations. Changes included leaving more groups and individual trees standing within the cutblock. The resulting visual disturbance in cutblock 4 was considerably less than projected in Aspen's simulations. The visual disturbance on the landform easily met the definition of partial retention (Figure 4).

In January 2017, Aspen returned to log cutblock 1 (Figure 2). This cutblock was on the same landform, higher in elevation, and visible from the same viewpoints as cutblock 4. During logging, Aspen periodically monitored progress from the viewpoints and made some changes as a result. The changes were not as effective at reducing visual disturbance as those in cutblock 4. When completed, cutblock 1 closely resembled Aspen's simulations from all three viewpoints.

Forest Practices Board Assessments

Board staff and contracted visual quality specialists visited the site three times. The first visit was in September 2016 after logging was completed on cutblock 4. Board staff were impressed with the efforts Aspen made in consulting with residents and in making changes to meet the VQOs. Board staff were aware that there were more cutblocks within CP 715 to log that would be visible from these viewpoints, and made plans to return when these were completed.

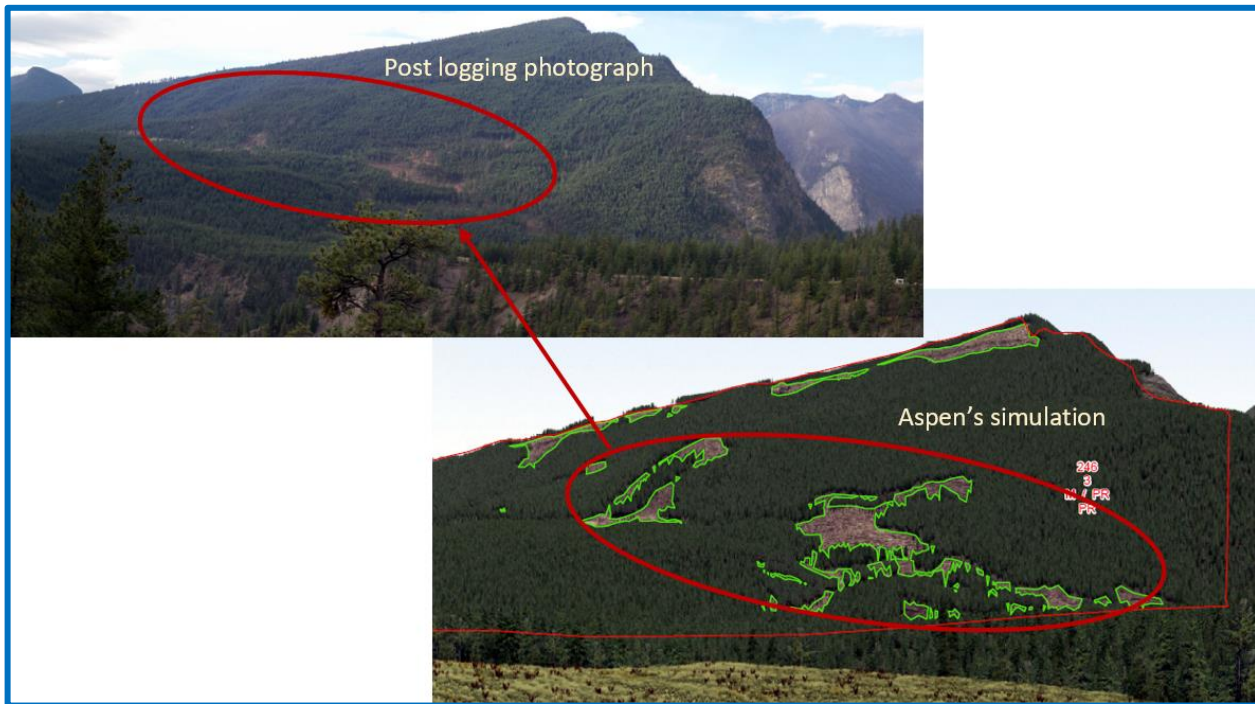


Figure 4. This illustration compares the post logging appearance of cutblock 4 (but prior to completion of cutblock 1) with the modelled appearance. Additional tree retention reduced the visual disturbance.

The Board investigator and contracted visual management specialist returned in May 2017 after logging was finished on all cutblocks to complete a post-logging visual impact assessment. This assessment found that the category of visually altered landscape was modification,² exceeding the VQO of partial retention.

The Board contracted a second visual management specialist to provide an independent second opinion. This specialist visited the site in October 2017. The results of this assessment were similar to the first specialist's assessment, although the second specialist stressed that the results were not far from meeting the VQO. In general, it was the unnatural appearance of the upper cutblock that pushed the classification from partial retention to modification.

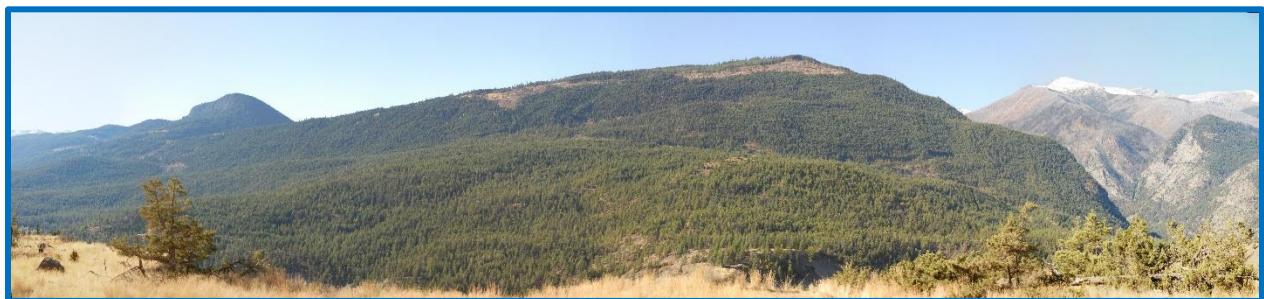


Figure 5. Completed logging viewed from upper Horseshoe Bend viewpoint.

² The *Forest Planning and Practices Regulation* definition of modification is: Alteration is very easy to see and is either 1) large in scale and natural in appearance; or 2) small to medium in scale but with angular characteristics.

Finding

Aspen worked with local residents and its logging contractor extensively when logging cutblock 4, in an effort to minimize visual disturbance. The results were well within the partial retention category of visually altered landscape upon completion of cutblock 4. When logging shifted to cutblock 1, more modifications were made to logging plans, but they were not as effective. The landform, which includes cutblock 4, cutblock 1 and other less visible and more distant cutblocks, does not meet the criteria in the definition of partial retention. It is primarily the unnatural appearance of cutblock 1, along the horizon, that pushes the alteration into the classification of modification. Further changes, relatively minor in nature, could have been made during logging of cutblock 1 to meet the criteria.

Table 1. Analysis of visual quality from significant public viewpoints.

Viewpoint	VQO*	Pre-logging Licensee Analysis*	Achieved Category (Specialist 1)	Achieved Category (Specialist 2)
Horseshoe Bend (FPB)	PR	PR	Modification Easy to see, moderate scale, unnatural in appearance	Modification Borderline between Partial retention and modification, but unnatural appearance of openings along the horizon push the alteration into modification
Horseshoe Bend (Aspen)	PR	PR	Not Assessed	Modification Borderline between Partial retention and modification, but unnatural appearance of upper openings along prominent position push this into modification
Road junction / Kiosk	PR	PR	Modification Easy to see, moderate scale, unnatural in appearance with some geometric characteristics	Modification Borderline between Partial retention and modification, but unnatural appearance in a prominent position on the landform push the alteration into modification
Moha	PR	PR	Modification Easy to see, moderate scale, unnatural in appearance with angular characteristics	Modification

*PR is Partial Retention

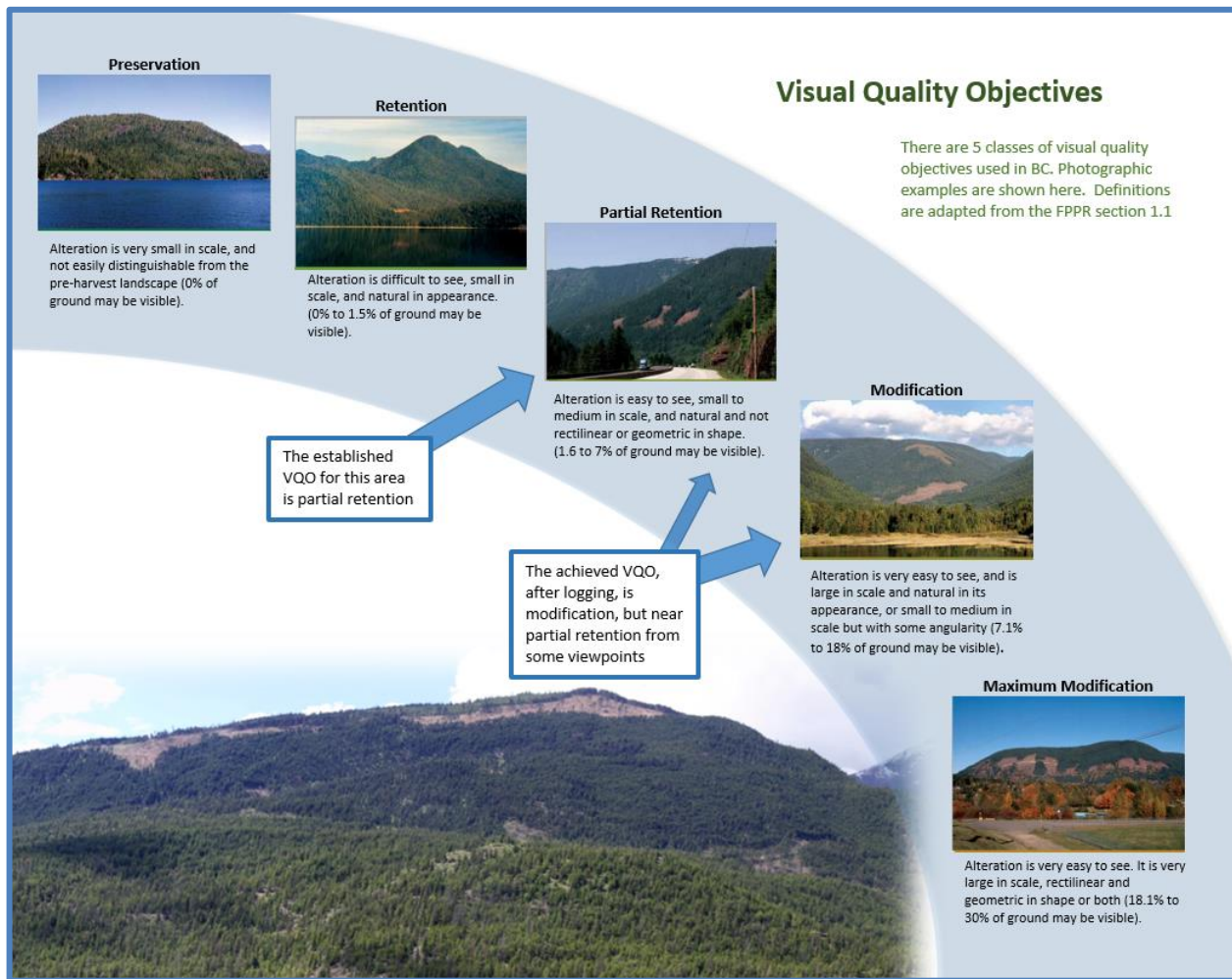


Figure 6. Provincial visual quality objectives and how they relate to this area.

Was government's decision not to investigate the complaint about the visual design appropriate?

Prior to logging, a resident of the Moha area, who represented the Yalakom Community Council, made a complaint to CEB. According to the complainant, the complaint to CEB was based on a concern that the design of the cutblocks, as viewed from Moha, did not meet the VQO of partial retention. The resident said that the FSP stated that "the Holder will... design harvesting to be consistent with the visual quality objectives" but the design did not meet the VQO. The resident wanted CEB to investigate the design and felt that such an investigation might prevent harvesting that would not meet the VQO. The CEB investigator told the Board that they would assess the completed logging for compliance with the VQO.

FSPs are very important documents because they contain many of the rules that licensees must abide by. It is, therefore, very important that these rules, expressed as results, strategies or measures within the FSP, be written clearly, be consistent with government objectives, and be measurable or verifiable so that they can be enforced. The Board wrote about issues with FSPs in 2015 and made several recommendations to improve FSPs.^{iv} This FSP was written prior to the Board report.

In its FSP Aspen committed to conducting a VIA, and then to designing logging to meet the VQO. CEB created a bulletin to aid in assessment of FSP results and strategies.^v In the bulletin, CEB provides some basic rules to assess enforceability. To be enforceable, the result or strategy must state who is carrying out the actions, what will be done, as well as when and where it will be done. This FSP is unclear on *what* will be done (what is a 'design'?) and when it will be done (when is the design complete, or are there benchmarks in the process?). This lack of clarity makes it difficult to enforce the design prior to logging completion.

The initial design may not have met the VQO, but Aspen was actively changing the design as logging progressed. This is apparent in the logging progression in cutblock 4—leave trees were added as logging progressed. This process continued through logging in cutblock 1.

Finding

The FSP wording is clear in that the design of the logging is to meet the VQO. What is not clear is when the design is completed or when it should be judged. The practice exhibited at CP 715 was to change the design as logging progressed and Aspen's staff reassessed the visual disturbance. The 'design' becomes a moving target that is not stationary until logging is complete. Therefore, the decision not to investigate the design prior to logging was appropriate.

Conclusions

The complainant was concerned about how visual quality might be affected by Aspen Planers Ltd.'s logging operations in the Moha area, north of Lillooet, and about government's enforcement relating to this concern. Aspen had a cutting permit to log several cutblocks in the Moha area where the VQO was *partial retention*. The Board examined the licensee's compliance with the VQO and also CEB's decision to not investigate the visual design prior to logging.

In regard to the question of whether Aspen complied with FRPA's visual resource management requirements when it planned and logged the portions of CP 715 visible from Moha, the Board concludes that Aspen Planers Ltd. did not comply with FRPA's visual resource management requirements. The Board found that Aspen worked with local residents prior to and during logging and made changes to cutblock design in an effort to meet the visual quality objective. In the end, the changes were not sufficient to meet the objective.

In the Board's opinion, the use of a visual quality professional or specialist through the design and logging processes could have prevented this non-compliance.

In regard to the question of whether government's decision not to investigate the complaint about visual design was appropriate, the question was brought to the Board because the complainant could not understand why a FSP that specified that the design must comply with the VQO could not be investigated prior to logging. In this case, the result and strategy for meeting government's objective for visual quality in Aspen's FSP was not written in a way that could be enforced prior to logging completion because 'design' was not defined, nor were there steps or points specified in the FSP where the design would be judged. Therefore, the decision not to investigate the complaint was appropriate.

CEB is currently investigating the outcome of the logging and that is not part of the Board investigation.

ENDNOTES

- ⁱ Forest Practices Board, [Special Report: Opportunities to Improve the Forest and Range Practices Act](#), 2017 and Forest Practices Board, [District Managers' Authority Over Forest Operations](#), 2015.
- ⁱⁱ Visual Resource Management website, <https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/visual-resource-management>. Accessed January 2018.
- ⁱⁱⁱ Forest Appeals Commission, [Interfor Corporation v. Government of British Columbia](#), 2016.
- ^{iv} Forest Practices Board, [Forest Stewardship Plans: Are They Meeting Expectations?](#), 2015.
- ^v C&E Program Staff Bulletin #12, [Guidance to C&E Program Staff on the Assessment of Measurable or Verifiable Results or Strategies Within a Forest Stewardship Plan \(FSP\)](#), 2006