Forest Appeals Commission

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DECISION NO. 2015-FRP-002(a)

In the matter of an appeal under the *Forest and Range Practices Act*, S.B.C. 2002, c. 69.

BETWEEN:	Interfor Corporation	**APPELLANT**
AND:	Government of British Columbia	**RESPONDENT**
AND:	Forest Practices Board	**THIRD PARTY**
BEFORE:	A Panel of the Forest Appeals Commission: David H. Searle, C.M., Q.C., Panel Chair Les Gyug, Member Norman E. Yates, Member	
DATE:	Conducted by way of an oral hearing held on February 29 to March 3, April 5 to 6, and April 11, 2016	
PLACE:	Victoria, BC	
APPEARING:	For the Appellant:	Mark S. Oulton, Counsel Rebecca J. Robb, Counsel
	For the Respondent:	Darcie Suntjens, Counsel
	For the Third Party:	Mark Haddock, Counsel

APPEAL

[1] Interfor Corporation ("Interfor") appeals a determination made on July 22, 2015 (the "Determination") by Mike Peters, District Manager of the Sunshine Coast Natural Resource District (the "District Manager"), Ministry of Forests, Lands and Natural Resource Operations (the "Ministry").

[2] The District Manager determined that Interfor contravened section 21(1) of the *Forest and Range Practices Act* ("*FRPA*") because Interfor did not ensure that the intended results specified in its forest stewardship plan ("FSP") were achieved with respect to a Visual Quality Objective ("VQO") of "partial retention" after its 2012 timber harvest of cutblock STU 7, Cutting Permit 557, Forest Licence A19220, on the southeast side of Stuart Island. Section 21(1) states:

21(1) The holder of a forest stewardship plan or a woodlot license plan must ensure that the intended results specified in the plan are achieved and the strategies described in the plan are carried out.

[3] The District Manager further determined that none of the defences of due diligence, mistake of fact, or officially induced error applied, and levied a penalty of $20,000 under section 71(2)(a)(i) of the *FRPA*.

[4] The Commission has the power to hear this appeal pursuant to section 82 of the *FRPA*. Sections 84(1)(c) and (d) of the *FRPA* provide that, on an appeal, the Commission may:

> (c) consider the findings of the person who made the determination or decision, and
>
> (d) either
>
> (i) confirm, vary or rescind the determination or decision, or
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> (ii) with or without directions, refer the matter back to the person who made the determination or decision, for reconsideration.

[5] Interfor asks the Commission to vary the Determination to provide, namely, that Interfor achieved the VQO set out in its FSP with respect to the timber harvest of cutblock STU 7.

[6] In the alternative, Interfor argues that it has established a defence of due diligence to the contravention.

[7] The Ministry argues that the Determination ought to be confirmed, and that the appeal should be dismissed.

[8] The Forest Practices Board was added as a party to the appeal. It did not take a position on the outcome of the appeal, but provided submissions on the considerations relevant to determining compliance with the VQO and on the general principles of due diligence with respect to VQOs, given that this is the first time that the Commission has issued a decision on VQOs.

BACKGROUND

[9] Interfor holds Forest Licence A19220, which includes the southeast side of Stuart Island. Stuart Island is one of the Discovery Islands located between Vancouver Island and the British Columbia coast. It is in the Sunshine Coast Forest District.

[10] Calm Channel, located south of Stuart Island, is aligned roughly north-south, and has a run of approximately 15 kilometers leading to Stuart Island at the head of the channel. At Stuart Island, the channel splits into two, with Bute Inlet along the southeast side of the island, and Cordero Channel to the west.

[11] There are a number of fishing lodges and other residents along Cordero Channel, either on Stuart Island, Sonora Island, or other smaller islands located within Cordero Channel.

[12] Bute Inlet is approximately two kilometers across between the southeast side of Stuart Island and Johnstone Bluff on the mainland.

[13] A map of Stuart Island and the surrounding area is shown on Figure 1, a scanned image of Exhibit 2-1 Tab 15, which is attached to this decision as Appendix "A".

The establishment of scenic areas and VQOs

[14] In May 1997, scenic areas were identified and made known to forest licensees by the then district manager of the Sunshine Coast Forest District following "extensive review and comment by the public, other agencies and industry." Stuart Island is within one of the scenic areas.

[15] When it comes to harvesting trees within a scenic area, five levels of visual objectives for alteration to forest lands (i.e., alteration by timber harvesting or roads) were developed through extensive social research to address visibility/aesthetic concerns. They are referred to as VQOs. The five VQO levels range from lowest to highest as follows: "preservation", "retention", "partial retention", "modification" and "maximum modification". According to the witnesses, the VQOs are based upon the public's perception of alterations to forests. The lower levels of VQOs are generally more acceptable to the public than the higher levels. The "partial retention" level at issue in this appeal is in the middle.

[16] Scenic areas were divided into VQO polygons. This was done after detailed assessments had been carried out by the Ministry to delineate visually sensitive areas. The areas were divided into smaller areas based upon "like attributes". The smaller areas, called visual sensitivity units, are shown on topographical maps by polygons, each with a unique number and VQO attached to it. The scenic area at the southern end of Stuart Island is divided into three polygons. All of these polygons have the same VQO of "partial retention". As these three polygons had the same VQO, they were "blended" into a single unit, which the Panel heard was common industry practice that was supported by the Ministry. None of the parties took any issue with this practice and the Panel did not consider it further.

The legislative history of VQOs

[17] The VQOs were developed and used for many years by the forestry sector before being formally incorporated into legislation. In 1996, they were incorporated into the *Forest Practices Code of British Columbia Act* (the "*Code*"). The *Code* was highly prescriptive, detailing the rules, requirements and objectives to be met by forest licensees.

[18] Under the *Code*, in order to harvest timber in a known scenic area with an established VQO, a licensee was required to undertake and submit a visual impact assessment before it could obtain certain Ministry approvals. A district manager would have to be satisfied that a licensee's operation plan would meet the established VQO. A "Visual Impact Assessment Guidebook" was published to assist licensees (the "VIA Guidebook"). The VIA Guidebook addressed the process for

establishing scenic areas, VQOs, and for planning forestry operations to achieve the VQOs. It also set out a numerical tool to help predict whether a proposed cutblock would meet a VQO, referred to as a "percent alteration". As percent alteration remains a standard tool used to assess the visual impact of a clearcut, and was frequently referred to by the witnesses in this appeal, a brief description of it is warranted.

[19] Percent alteration is described in the VIA Guidebook as "a reasonable predictor of achieved visual condition". It is determined by calculating how much visible area within a larger area will be, or has been, altered by forest harvest or by road building: the visibly altered area is described as a percentage of the larger "landform".[1] If that percentage falls within the range specified for a particular VQO, then the clearcut "should", is predicted to, meet the VQO. The ranges for each of the VQOs are set out in Table 3 of the VIA Guidebook, as follows:

Visual quality objective (VQO)	Percent alteration in perspective view per VQO
Preservation	0
Retention	0–1.5
Partial Retention	1.6–7.0
Modification	7.1–18.0
Maximum Modification	18.1–30.0

[a] *These percentages apply to the visible green portion of the landscape in perspective view. Rock and ice patches are excluded from the calculation.*

[20] In 2004, the *FRPA* came into force and marked a change in government policy. The government shifted from a prescriptive regulatory regime to a "results-based" regime for forest practices. Under the *FRPA*, scenic areas continue to be regulated for visual quality. Existing VQOs have been "grandparented" by sections 180 and 181 of the *FRPA*, but visual impact assessments are no longer required by law and the Ministry no longer approves site level operational plans. Instead, section 5 of the *FRPA* requires licensees to specify results and strategies for achieving government objectives in a FSP, and section 21(1) of the *FRPA* requires licensees to achieve those objectives.

[21] The government's objectives relevant to this case, the VQOs, are set out in the *Forest Planning and Practices Regulation*, B.C. Reg. 14/2004 (the "*Regulation*"). Section 1.1 of the *Regulation* establishes the elements that must be met for a harvested area – an "altered forest landscape" – to meet the required VQO.

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[1] The Determination defines "landform" as "A segment of the three-dimensional surface of the Earth, consisting of soil and rocks with characteristic shapes produced by natural processes. … Landforms have distinctive shapes and positions in the larger landscape that reflect their origins and geological development. These physical attributes are used to classify landscapes. (Dunster's Dictionary of Natural Resource Management (1996), at page 186).

[22] Section 1 defines "altered forest landscape" as a "forest landscape" that:

> (a) is viewable from a significant public viewpoint,
>
> (b) contains cutblocks or roads, and
>
> (c) is in one of the categories prescribed under section 1.1;

[23] The VQO category at issue in this case is "partial retention", and whether or not cutblock STU 7 meets that category or the "modification" category is an issue to be decided in this appeal. These two categories are set out in section 1.1(c) and (d) as follows:

> **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:
>
> ...
>
> (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;
>
> ...
>
> [Italics in original]

[24] In October 2008, the Forest and Range Evaluation Program[2] established a "Protocol for Visual Quality Effectiveness Evaluation - Procedures and Standards" (the "FREP Protocol"). The FREP Protocol deals with effectiveness evaluations and also provides a procedure designed to answer, among other things, the question "Did recently harvested units achieve the established visual quality objective?" (page 3). The Protocol creates a "scorecard" approach to determine whether a visual category has been met. It uses percent alteration to assess the scale of the

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[2] The Forest and Range Evaluation Program is led by the Ministry in partnership with the Ministry of Environment. One of the Program's objectives is to determine whether forest and range practices are achieving government's objectives, with a focus on biological function and social values (visual quality and cultural heritage) (see: https://www.for.gov.bc.ca/hfp/frep/about/index.htm).

alteration, adopting the percentages from Table 3 of the VIA Guidebook (above), noting that they generally achieve a specified VQO "according to past experience and visual quality studies done in British Columbia". The Protocol uses assessments of design factors to modify the percentages and determine a final VQO category.

[25] Notably, the *Regulation* makes no reference to "percent alteration", as used in the Protocol, and the Protocol makes no reference to "difficult to see", "easy to see", or "very easy to see", terms that are used in the *Regulation*.

Interfor's FSP and cutblock planning and design to achieve the VQO

[26] Interfor began drafting a FSP for its forest licence in 2005. The final version was approved by the District Manager in July, 2006.

[27] The FSP states at section 11.3.3, "If the Holder of this FSP constructs a road or harvests a cutblock within the scenic areas made known and established by the Sunshine Coast Forest District, such activities will be consistent with the Visual Quality Objectives".

[28] There is no dispute that cutblock STU 7 is within a scenic area made known and established by the Sunshine Coast Forest District, or that the applicable VQO is "partial retention".

[29] In mid-2010, Interfor commenced reconnaissance on Stuart Island, followed by the design and layout of two proposed cutblocks on the southeast side of the island: STU 7 to the east; and STU 8 to the west (see bold outlines on Appendix "A"). Both STU 7 and STU 8 are visible from Bute Inlet (see Appendix "B"), but STU 7 is the more visible cutblock, and is the only cutblock at issue in the Determination under appeal. For the remainder of this decision, the Panel will refer to the visible portions of the cutblock as "STU 7" or as the "alteration". However, where percentage alterations, elements of design, or other considerations contain a small portion of STU 8 which is visible from a viewpoint and within the landscape or landform under consideration, the reference to "STU 7" in this decision includes the portion of STU 8 that is visible. The particulars of Interfor's investigations and design with respect to these cutblocks are as follows.

[30] Ian Emery, R.F.T., Senior Area Engineer, and Bruce McClintock, R.P.F., Logging Engineer, planned the cutblock design for Interfor. They made, either individually or together, a number of reconnaissance visits to Stuart Island.

[31] In addition, Mr. Emery consulted with the Homalco First Nation, which provided a letter of support reviewing the pre-harvest visuals of Stuart Island "to ensure they conform to Homalco's vision of integrated resource management." Mr. Emery also contacted the Stuart Island Community Association ("SICA") to assist in determining the location of "significant public viewpoints", so that Interfor could carry out visual impact assessments. While visual impact assessments are no longer required by the legislation, they remain a useful planning tool to produce aesthetically designed cutblocks and achieve the relevant VQOs.

[32] In the present case, Mr. McClintock carried out several visual impact assessments of cutblock STU 7, using different scenarios for the proposed

harvesting activities. Mr. McClintock used digital terrain modeling in the visual impact assessments to estimate whether sketched designs would achieve the VQO of "partial retention" from three viewpoints. These viewpoints were (from south to north): CH-1, JB-2 and JB-1. The JB-2 viewpoint was later replaced by JB-3, approximately one kilometer southwest of the original JB-2. With the exception of JB-2, these viewpoints, and others referred to below, are shown on Appendix "A".

[33] When modelling and assessing the visual impact of its proposed harvesting, Mr. McClintock considered what landform to use and considered the southeast side of Stuart Island as a single landform because, to his mind, the broad saddle between the two hills was not a significant break that would allow him to separate the two hills into their own landforms.

[34] By November, 2010, five different cutblock design scenarios were considered for STU 7. Visualizations of the five scenarios, described as Scenarios 1 through 5, were produced from viewpoint JB-1.

[35] Between August 24, 2010 and July 18, 2011, eight visual iterations of the digital terrain modeling from either two or three viewpoints were produced.

[36] On July 18, 2011, Mr. McClintock prepared a visual impact assessment form for STU 7, based upon a single cutblock design. In the assessment he estimated, for each of the three viewpoints (CH-1, JB-1, JB-3), which VQO would be achieved based upon a numerical assessment, i.e., his calculation of the percent alteration. Mr. McClintock calculated that a VQO of "partial retention" would be achieved from viewpoint CH-1 (5.0% alteration), a higher VQO of "modification" would be achieved from viewpoint JB-1 (10.3% alteration), and a lower VQO of "retention" would be achieved from viewpoint JB-3 (1.3% alteration). In answer to the question, "which VQO would the proposed alteration … meet from all the selected viewpoints based on percent alteration only", he answered "modification". However, he concluded that the proposed alteration would meet the established VQO of "partial retention".

[37] In July of 2011, Mr. McClintock sought a peer review of his visual impact assessment of the proposed cutblocks from his mentor, Michelle Todd of Interfor, who had training and experience in visual assessment. However, Ms. Todd declined, stating on the Peer Review Form dated September 1, 2011, that "visual runs to be looked at by Visual Expert due to concerns in the area."

[38] On August 30, 2011, Mr. McClintock sought an external peer review by Dr. Kenneth B. Fairhurst from Resource Design Incorporated. Dr. Fairhurst is an RPF, holds a doctorate degree in forestry, and has significant experience with visual assessments in British Columbia.

[39] During late August and September of 2011, Mr. McClintock and Dr. Fairhurst engaged in a back-and-forth review of the cutblocks by e-mail and telephone. In emails dated September 11 and 12, 2011, Dr. Fairhurst raised a number of issues relating to the visual information provided by Mr. McClintock. In his September 11th email, Dr. Fairhurst comments that the "latest engineered boundary of STU 7 exceeds the acceptable limits of PR [partial retention] in the broader landform". Dr. Fairhurst expressed a preference for "Scenario 5", a more conservative option which did not include harvesting on the eastern extension of STU 7; harvesting

would occur mainly on the western portion of the cutblock. Each of Scenarios 1 to 4 contained more harvesting on the eastern extension of STU 7 than Scenario 5.

[40] In his follow-up email of September 12th, Dr. Fairhurst notes, among other things:

> Percent alteration … is declared to be Modification 'from all selected viewpoints'. How was this concluded? An average from the 3 transitory VPs [viewpoints] provided would be about 6% [partial retention], but the addition of a north view would raise it [to modification]. CH1 and JB-1 on their own would be in the 7.5 range.

[41] He then states:

> In the VIA Summary you indicated that despite numerical results the plan meets the VQO. The Ministry … is unlikely to ignore the large % alt [alteration] excess from VP [viewpoint] JB-1. Again, let's look at Scenario 5 which appears to balance off a lot of concerns.

[42] In response, Mr. McClintock amended the layout of STU 7 to reduce its scale and improve its shape; however, he did not adopt Scenario 5 for various reasons, including concerns with blowdown (windthrow) and economics, among other things.

[43] Mr. McClintock revised the July 2011 visual impact assessment and prepared the final visual impact assessment documents on September 26, 2011. In the final documents, Mr. McClintock explains some of the issues that were considered for the Stuart Island visuals. He states:

> Blowdown risk is considered high on Stuart Island due to the outflow winds prevalent out of Bute Inlet in the winter months, thus the use of islands of timber has been minimized.
>
> Significant Public viewpoints were selected based on consultation with local user groups. It was noted in discussions with the Stuart Island Community Association (SICA) that travel routes traditionally have been up from the South … and to the West of Stuart Island towards Big Bay and Sonora Lodge. Together we selected viewpoints along this route (CH1 & JB-1A) higher weight was put on these Viewpoints. Viewpoint JB-1 was run as a 'worst case' scenario, but its importance is ranked as minor due to the reduced boat travel, and shorter viewing period. SICA was shown the engineered shapes and digital visual runs from all three viewpoints on August 5, 2011, and on September 12, 2011, verbal support of the engineered visuals was given. Subsequently, some area was removed from the proposed harvest area, further reducing the visual impact on the landscape.

[44] With the amended layout, the percent alterations shown in the final documents changed. From viewpoint JB-3, the VQO went up from "retention" to "partial retention" (1.6%). The percent alteration for JB-1 went down from 10.3% to 8.5%, remaining in the "modification" range. However, Mr. McClintock states in the final document that the proposed alteration would meet the established VQO of "partial retention" "from all the selected viewpoint(s)".

[45] Mr. McClintock asked Dr. Fairhurst to peer review this final visual impact assessment. Dr. Fairhurst provided his written review on October 20, 2011. Dr. Fairhurst agreed with Interfor's approach of combining the polygons (visual units) into a single landform approach, given that "the eastside island landform is not clearly differentiated into individual visual sensitivity units when seen from the viewpoints", and given that the polygons all have the same VQO of "partial retention".

[46] Dr. Fairhurst outlined the five key design elements of the FREP Protocol to assess the "design quality" of the cutblocks. He addressed the first two elements stating "The final configuration exhibits considerable integration of force line influences ...", and "There is considerable evidence of the blocks having organic shapes." He did not directly address edge treatments, distance from viewpoints or position on the landform. He agreed with Mr. McClintock's statement that "effective screening has been employed in STU 8 to minimize visual impact" and that "the use of interlocking and curvilinear shapes in opening STU 7 responds well to the landform". He also agreed with Mr. McClintock's decision to minimize "islands of timber" "due to the strong outflow winds which are likely to cause blowdown in retention patches".

[47] Although Dr. Fairhurst notes that viewpoint JB-1 exceeds the percent alteration limit by 1.5%, he states:

> … this degree of 'worst–case' exposure would be temporal while travelling directly opposite the minor viewpoint, becoming less so when continuing north or south of the selected point. Significantly, the final plan reduced percent alteration by almost 2% from the 2011/07/18 configuration of 10.3%.
>
> While percent alteration is an indicator of the success of any plan in meeting the visual objectives, it is subordinate to the first two measures … [meeting the elements in section 1.1(c) of the *Regulation* and design quality] particularly where the upper range of percent alteration is indicated.

[48] Dr. Fairhurst concluded that, based upon the final visual impact assessment, the VQO of "partial retention" would be met from the significant public viewpoints "which have been identified and sanctioned through a meaningful pro-active public process."

[49] In November 2011, Interfor prepared its site plan for cutting permit 557, which includes STU 7 and STU 8.

[50] Interfor applied for and received the approved cutting permits in December, 2011. Harvesting of cutblock STU 7 began in early January, 2012, and was completed in mid- to late-April, 2012.

The Ministry's investigation of a possible contravention

[51] In June 2013, the Ministry received a complaint from the public about the timber harvesting on the southeast side of Stuart Island. Tony Carroll, Natural Resource Officer, was asked by his supervisor, Mark Scott, Senior Licensed Natural

Resource Officer, Compliance and Enforcement section of the Ministry, to inspect the cutblocks to determine if the VQO was met.

[52] On July 30, 2013, Mr. Carroll, in the company of Natural Resource Officer, Maurice Potesta, inspected the cutblocks from three viewpoints and took photographs. They chose their own viewpoints for the cutblock alterations; they did not know which viewpoints Interfor had used. They then chose the relevant landform within which the alterations were to be evaluated based upon Mr. Carroll's visual assessment, and by reference to topographical maps of the area. The landform Mr. Carroll used for his assessment included only the east hill on the southeast side of Stuart Island. He was not aware of the landform used by Interfor that included the entire southeast side of the island.

[53] One of the viewpoints chosen by the Ministry officials, C&E-1, is near Interfor's CH-1 on the southwestern side of Calm Channel. The other two Ministry viewpoints (C&E-2 and C&E-3) are in different locations than those used by Interfor; specifically, they lie to the south and to the north of Interfor's JB-1, mid-channel of Bute Inlet (see Appendix "A").

[54] Mr. Carroll filled in the FREP Protocol's "Visual Quality Effectiveness" evaluation forms assessing the visual category achieved from each of these three viewpoints. Mr. Carroll then prepared the standard form "General Inspection Report", based upon the Visual Quality Effectiveness forms. In that report Mr. Carroll states that the harvesting is not "easy to see", it is "very easy to see". He also states that the harvesting is "large in apparent scale" rather than "small to medium in scale". Based upon these observations, Mr. Carroll states that the harvesting appears to fall within the VQO of "modification".

[55] Mr. Carroll also performed a numerical assessment of the percent alteration. He described this in evidence as being a straight-forward calculation done based on the photographs. His findings in the General Inspection Report are that, from viewpoint C&E-1 (near Interfor's CH-1), the "scale of perspective landform alteration" is 16.7%, placing it at the upper end of "modification". From viewpoint C&E-2, he calculated the percent alteration as 15.1%, also at the upper end of "modification". From viewpoint C&E-3, the percent alteration was 9.02%, placing it in the lower range of "modification.

[56] In the "comments" section of the report, Mr. Carroll states that further information from Interfor is required to determine what steps it took to address the visual impact of harvesting and roads, and what efforts it took to mitigate visual impact. He concluded the report stating: "Due to the apparent non-compliance from all three viewpoints and the need for further information it is necessary to initiate enforcement action in order to investigate matter further."

[57] Mr. Carroll also assessed the cutblock STU 8 on the landform on the west hill on the southeast side of Stuart Island, and determined that it achieved the VQO.

[58] On or about August 13, 2013, the Ministry advised Interfor that there had been an alleged contravention of section 21(1) of the *FRPA*, and that it would be investigating the matter further.

Subsequent reports and investigations

[59] On September 28, 2013, Dr. Fairhurst provided a report responding to the "Visual Quality Effectiveness" evaluations prepared by Mr. Carroll. Dr. Fairhurst's main criticism of the evaluations was that the Ministry based its review on a different landform than Interfor. Interfor had calculated its percent alteration based on a view of the entire southeast side of Stuart Island, which consisted of two hills and a broad saddle between them. In contrast, Mr. Carroll had calculated the percent alteration for STU 7 on a view of just the east hill, separated by a creek draw approximately in the center of the broad saddle separating the east hill from the west hill.

[60] On October 3, 2013, Jacques Marc, Visual Resource Management Officer with the Ministry, visited the site to assess the visual quality from four viewpoints: CH-1, JB-1, JB-3 and C&E-2. On the basis of the smaller landform, i.e., just the east hill, as compared to the landform Interfor used containing both hills, Mr. Marc concluded that "the forest alteration present on Stuart Island is not consistent with Partial Retention VQO for this area and that a Modification VQO has been achieved."

[61] On March 31, 2014, Ministry employees took a group of interested members of the public as well as ecotourism stakeholders, including Ralph Keller, owner of Coast Mountain Exploration, to observe STU 7 from the viewpoints. The participants were asked to give feedback by filling out a survey indicating how they would rate the visual quality categories achieved on the southeast side of Stuart Island, specifically STU 7. Only the form filled out by Mr. Keller is in evidence.

[62] On July 14, 2014, Dr. Fairhurst travelled to the site for the first time in the company of Interfor employees, including Mr. Emery, Interfor's Senior Area Engineer. Appendix "B" is a panoramic photograph collage taken by Dr. Fairhurst on this site visit showing STU 7 in the context of the single Interfor landform from viewpoint JB-1. This tour confirmed for Dr. Fairhurst that "Interfor's overall development, and, in particular, STU 7 cutblock are able to satisfy the criteria required to meet Partial Retention."

The District Manager's decision-making process

[63] On April 29, 2015, Interfor was given an Opportunity to be Heard before the District Manager. Both Interfor and the Ministry were represented by counsel at the Opportunity to be Heard, and provided comprehensive written materials, maps, visual simulations and photographic evidence.

[64] On July 22, 2015, the District Manager made the Determination that is under appeal; namely, that Interfor contravened section 21(1) of the *FRPA* by not meeting the VQO of "partial retention" for STU 7. The Panel heard this appeal *de novo*, so a summary of the Determination is only included here because it may provide some understanding of the District Manager's decision-making process and the nature of the appeal.

[65] In the 22-page Determination, the District Manager noted that one of the main points of disagreement between the parties was how to view the landscape or viewscape; in particular, whether it ought to be viewed as one or two separate

areas (landforms). This is an important issue to resolve, he noted, because the manner in which a landscape or viewscape is divided will define the basic measurement for evaluating whether or not visual results have been achieved.

[66] The Ministry argued that the southeast side of Stuart Island constitutes two distinct landforms, and that from any of the five significant public viewpoints, STU 7 did not meet the VQO of "partial retention" on the east hill landform. Interfor argued that the appropriate landform was the entire southeast side of Stuart Island.

[67] The District Manager considered the body of evidence, photographs and documents before him, the wording of section 1.1 of the *Regulation*, as well as definitions of "landform" and "landscape". He noted that the *Regulation* describes the five VQOs in terms of "altered forest landscape", rather than landform. In his view, this wording suggested that, if it is difficult to discern between one or two landforms, and a person can "take in" the entire viewscape without turning their head, "altered forest landscape" suggests that it may be appropriate to choose the larger view and classify the area as one viewscape rather than two, depending on the particular characteristics of each case.

[68] On the facts of this case, the District Manager concluded that the single landform was appropriate because "After carefully considering the photographs from each of the five significant public viewpoints, it appears to me that the entire southern end of the island can be viewed as a single panorama without turning one's head." Further, "the depth of the saddle ... is not so prominent that it clearly breaks the landscape into two distinct landforms."

[69] At the Opportunity to be Heard, Interfor argued that two of its viewpoints to the southwest of the cutblocks (JB-3 and CH-1) were more "significant public viewpoints" because the main lodges and resorts are on the western side of Stuart Island, whereas the southeastern side, where the majority of the harvesting occurred, is infrequently seen by the public. It questioned whether the Ministry's viewpoints on the southeastern side were "significant" public viewpoints. The District Manager considered the FREP Protocol statement that, when evaluating whether a VQO is met, the evaluation must be conducted "at all important viewpoints". He concluded that, to meet the intended purpose of protecting scenic areas for the public, this means that the VQO must be achieved from *each* publicly significant viewpoint.

[70] After assessing the visual impact of STU 7 from the perspective of the entire landform, from each of the significant public viewpoints submitted by both parties, the District Manager found that the alteration from four of the five viewpoints "is very easy to see" and "large in scale", thus placing them in the "modification" category contrary to Interfor's FSP.

[71] In making this finding, the District Manager said that he also considered the post-harvest percentage alterations calculated by witnesses for both parties. He noted that Interfor considered the cutblock layout and design to have improved or lowered the percent alteration to bring it within the "partial retention" VQO. The District Manager did not agree.

[72] The District Manager then performed a detailed analysis of the evidence before him to determine whether Interfor had established any defence to the contravention, and found that it had not. Interfor's evidence was that it cut additional trees on STU 7 to address concerns about windthrow. The District Manager found that, in balancing the requirement to meet the VQO and the need to design the cutblock in such a way to ensure that harvesting could be done in an economically feasible manner, Interfor erred on the side of risk instead of on the side of caution. He found that Interfor had failed to take all reasonable care to avoid a contravention. The District Manager concluded that "A reasonable approach would have been to aim for a more restrictive cut at the planning stage while paying more attention to design features to ensure that despite the potential need to account for blowdown, the VQO would nevertheless be met." (page 18)

[73] Considering the factors set out in section 71(5) of the *FRPA*, the District Manager found that a penalty of $20,000 was warranted.

The Appeal

[74] Interfor submits that, in finding the contravention, the District Manager engaged in an improper weighing of the evidence. He relied on photographs taken from the viewpoints selected by the Ministry which did not depict the entire landform - the southeast side of the island - despite the District Manager's express finding that this was the applicable landform.

[75] Interfor also submits that the District Manager erred by relying upon the Ministry's numerical assessment (as adjusted for design factors), which was based on a smaller landform than Interfor's and Dr. Fairhurst's and, consequently, resulted in a higher percent alteration**.**

[76] Further, Interfor submits that the District Manager failed to give sufficient, or any, weight to Dr. Fairhurst's numerical assessment (percent alteration), with adjustments for design factors, which put the VQO into "partial retention" from all five viewpoints as detailed in his "Stuart Island Pre-harvest and Post-harvest Visual Assessment Comparison" of September 28, 2013. According to the VIA Guidebook, and standard industry and Ministry practice, even if the percent alteration places a clearcut into a particular VQO range in Table 3, factors such as viewer position, clearcut design (e.g., feathered edges), visual absorption capability, among other factors, can change the visual impact and move the alteration into another VQO. Based upon a proper evaluation of the evidence, Interfor submits that STU 7 met the applicable VQO.

[77] In the alternative, Interfor argues that it exercised due diligence to prevent the contravention on the grounds that it undertook all steps that could be reasonably expected to achieve the VQO including:

- engaging in consultation with a local community group and the Homalco First Nation;
- undertaking a visual impact assessment according to accepted industry practices to achieve the "partial retention" objective, including several iterations;

- engaging an independent and well respected visual quality consultant to peer review the visual impact assessment design; and
- harvesting the cutblocks in accord with the design to achieve the intended "partial retention" objective.

[78] The Ministry submits that the Determination should be upheld. It submits that Interfor failed to meet the VQO of "partial retention", as defined in the *Regulation*. Based upon its analysis, the only VQO that has been met in this case is "modification". As a result, Interfor did not meet its FSP, contrary to section 21(1) of the *FRPA*.

[79] The Ministry also submits that, despite the District Manager's finding in the Determination, the correct landform upon which to base the visual assessment is the smaller one identified by Mr. Carroll and confirmed by Mr. Marc in their respective investigations.

[80] As noted earlier, the Forest Practices Board did not take a position on the outcome of the appeal. The Forest Practices Board suggested a number of factors that may be relevant to the interpretation of the *Regulation*, and to a consideration of whether a VQO is met, as well as to the test for due diligence in the case of meeting VQOs. The overarching theme of its submissions is that the VQOs were created to benefit members of the public who travel and recreate in areas where forest practices are visible. The significance of the public perspective is evident in the wording of the legislation (e.g., "significant public viewpoint") and in the policy documents. In this regard, the Forest Practices Board submits that an assessment of compliance with a VQO should not devolve into a numerical exercise. It notes that, although there is policy guidance regarding percent alteration, the drafters of the *Regulation* "chose to focus primarily on the visual experience from significant public viewpoints rather than incorporate numerical limits". This promotes that public policy of protecting the aesthetic experience of the viewing public. In keeping with this objective, the Board suggests adopting a "reasonable person" or "reasonable viewer" test when assessing compliance with the *Regulation.*

ISSUES

[81] The main issue to be determined in this appeal is whether the harvesting of cutblock STU 7 met the VQO of "partial retention", as required by Interfor's FSP, or whether a higher VQO of "modification" was achieved instead, which would be counter to the expected result stated in the FSP. To decide the first part of this issue, each of the highlighted elements from section 1.1(c) of the *Regulation* must be met:

> (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;

[82] The Panel will address each of these elements in the following sub-issues:

a. What is an "altered forest landscape"? Specifically, does the "forest landscape" differ from "landform"?

b. What constitutes "a significant public viewpoint", and viewpoint(s) should be used in this case?

c. Is the alteration created by STU 7 "easy to see"?

d. Is the alteration "small to medium" in scale and what is the appropriate frame of reference to determine scale in this case?

e. Is the alteration "natural and not rectilinear or geometric in shape"?

[83] In determining whether the harvesting of STU 7 meets the VQO of "partial retention", the Panel also considered the alternative VQO categories that it would meet if it does not meet "partial retention". If it meets a lower VQO category (retention), there is no contravention. If it meets a higher VQO category (modification or maximum modification), then that would constitute a contravention of the FSP objective.

[84] If the harvesting of STU 7 fails to meet the VQO of "partial retention" in contravention of section 21(1) of the *FRPA*, and meets a higher VQO category of "modification" or "maximum modification", the second issue to be decided is whether Interfor has established a defence of due diligence to the contravention.

RELEVANT LEGISLATION

[85] The following legislation is relevant to this appeal.

Forest and Range Practices Act

Compliance with plans

21(1) The holder of a forest stewardship plan or a woodlot license plan must ensure that the intended results specified in the plan are achieved and the strategies described in the plan are carried out.

…

Defences in relation to administrative proceedings

72 For the purposes of a determination of the minister under section 71 or 74, no person may be found to have contravened a provision of the Acts if the person establishes that the

(a) person exercised due diligence to prevent the contravention,

…

Forest Planning and Practices Regulation

Definitions

1(1) In this regulation:

…

"altered forest landscape" means forest landscape that

(a) is viewable from a significant public viewpoint,

(b) contains cutblocks or roads, and

(c) is in one of the categories prescribed under section 1.1;

...

Categories of visually altered forest landscape

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.

[Italics in original]

EVIDENCE

[86] Interfor called three witnesses to testify: Tania Phillips, a Strategic Development Planner for Interfor, Mr. McClintock and Mr. Emery. Ms. Phillips, Mr. McClintock and Mr. Emery also provided sworn affidavits.

[87] Ms. Phillips, formerly Tania Pollock, has been a Registered Professional Forester since 1999. She explained that, as a strategic forest planner for Interfor, she prepared the text for FSPs. She provided the Panel with an overview of the FSP planning process, and how VQOs fit into the FSP process. She gave an overview of the concept of using visual sensitivity units or visual landscape inventory polygons to meet VQOs as compared to using the "landform" approach. She explained how blending of polygons became standard practice only after the FSP had been approved, as it was included in all of Interfor's later approved FSPs.

[88] Mr. McClintock and Mr. Emery provided evidence of the preparations and planning that went into cutting permit 557, which includes STU 7. Their relevant evidence is referred to in the other sections of this decision.

[89] Interfor called Dr. Fairhurst as an expert witness. Dr. Fairhurst provided several written reports. The Panel qualified Dr. Fairhurst as an expert in the areas of visual landscape design, planning and management, but not in the area of windthrow risk. He works as a consultant dealing with visual aspects of resource management, primarily related to forestry. He has a PhD in Forest Resource Management (2010). His doctorate involved developing a system to make visual resource management "a little simpler". He has devised a strategy whereby a VQO could be maintained in "primary corridors" and be less important in "secondary corridors", without compromising the VQO. Dr. Fairhurst has been a Registered Professional Forester in British Columbia since 1981. He has been doing visual impact assessments in the Province since 1996. Dr. Fairhurst's relevant evidence is referred to in other sections of this decision.

[90] Interfor also provided a written report dated April 13, 2015 by Mike Greig, a professional forest engineer working in the area of visual analysis for Enfor Consultants Ltd., but Mr. Greig did not appear before the Panel. Mr. Greig's report is cited in the Discussion section of this decision but, ultimately, his opinions were given little weight as they were general in nature, not specific to this case, and he was neither cross-examined by any of the parties nor questioned by the Panel.

[91] The Ministry called two eco-tourism operators as witnesses: Ralph Keller and Jack Springer. Mr. Keller owns an ecotourism sea-kayaking business, Coast Mountain Exploration, with two lodges in the area. In operation for 30 years, Mr. Keller described it as Canada's oldest sea-kayaking company. The company offers sea-kayaking in the Discovery Islands, which includes Stuart Island, and up Bute Inlet east of Stuart Island. It has conducted commercial kayaking tours past Stuart Island since 2004. The company does an average of four trips per year up Bute Inlet.

[92] Mr. Keller hasn't personally guided for several years but operates the boat that picks up and returns the kayakers at the end of their one-way trip. He said there is "lots of boating traffic" from the south, most of which goes up Bute Inlet, much of which goes in-and-out the same day. There are also other kayakers using the area.

[93] Mr. Keller stated that his kayak tours to Bute Inlet entail paddling in Calm Channel towards the southern end of the island. He stated that STU 7 is readily apparent for 2-3 hours as they approach Stuart Island from Calm Channel. He also provided a photo from an approach up Calm Channel. In Mr. Keller's view, the public's perception of clearcuts is, generally, not favourable. He fears that, in this age of easy internet communication, if comments are made on review websites that are unfavourable of the views on this trip, it could hurt his business.

[94] Mr. Springer is co-owner of Campbell River Whale Watching, which owns six 12-passenger boats and employs 11 people, including him. The tours involve whale watching and other eco- or adventure-type tours, one being a day-trip up Bute Inlet to the mouth of Orford River to view grizzly bears beginning August 20th through early September. His company has one of three daily three-hour time slots for grizzly watching at the Orford River, for which he pays the Homalco First Nation per client. At the Orford River, tour guides from the Homalco First Nation receive his clients and lead the tours. He stated that there have been grizzly bear tours to this area since 1998, and that there are five other similar tour operators in Campbell River that are focused on wildlife and scenery. Their tourist market "is all about beautiful BC", which he said has been promoted by the provincial government for many years.

[95] Based upon his discussions with clients during trips, Mr. Springer believes that the visual impact of STU 7 is unpopular with tourists. He believes that the visual impact of logging on STU 7 is "very apparent", and there should have been smaller cutblocks. He was personally embarrassed about STU 7's appearance, and found it difficult to explain to his clients how there could be such a failure in the system.

[96] In addition to the eco-tourism operators, the Ministry called two of its Compliance and Enforcement Section officers as witnesses: Mr. Scott and Mr. Carroll. To the extent required, Mr. Scott and Mr. Carroll's evidence regarding their investigation of the contravention has been incorporated into the Background to this decision, and need not be summarized here.

[97] The Ministry also tendered two expert witnesses: Cameron Campbell, landscape architect, and Mr. Marc. Both provided written reports. The Panel qualified Mr. Campbell as an expert in visual landscape management. He holds a Bachelor of Landscape Architecture from UBC, is a Professional Agrologist, a Registered Landscape Architect, and a member of the Canadian Society of Landscape Architects. He specializes in landscape assessment and planning, visual resource management, environmental perception, forest landscape design, geographic information system (GIS) analysis and landscape visualization. He has several publications to his credit. There are two distinct sides to his professional life: working with the Ministry, and teaching and developing standards and protocols.

[98] Mr. Marc was qualified as an expert in visual resource management and post-harvest visual assessment in British Columbia. He has 34 years of experience in forest engineering and visual resource management. He is responsible for developing the standards, policy and procedures used by the Ministry to manage visual resources ("the visual impact of altering a forested landscape"). Among other things, he was "the Provincial lead" in developing the current FREP Protocol. Mr. Marc was also the team leader in developing a poster, published by the Ministry titled "A Guide to Visual Quality Objectives, Categories of Visually Altered Forest Landscapes" (the "Poster"), which provides examples of alterations meeting different VQOs. The Poster was printed after STU 7 was harvested but many of the photos are the same as used in the VIA Guidebook. Mr. Marc's expertise focuses on the post-harvest visual impact assessments, in contrast to Dr. Fairhurst's expertise, which focuses on the planning aspects.

[99] The relevant evidence provided by these two expert witnesses is referred to in the Discussion section of this decision.

[100] The Ministry also presented an expert opinion by Lloyd Davies, a visual resource management specialist with the Ministry. Mr. Davies did not appear before the Panel and, ultimately, the Panel gave no weight to his written opinion as presented.

[101] The Forest Practices Board presented no witnesses, but did submit technical evidence through Interfor's and the Ministry's witnesses.

DISCUSSION AND ANALYSIS

1. Did the harvesting of cutblock STU 7 meet the VQO of "partial retention", as required by Interfor's FSP?

[102] The evidence relevant to this general issue came primarily from the three expert witnesses: Dr. Fairhurst (for Interfor), and Messrs. Campbell and Marc (for the Ministry).

a) What constitutes an "altered forest landscape"? Does the "forest landscape" differ from landform?

[103] Section 1 of the *Regulation* defines "altered forest landscape" as a forest landscape that

> (a) is viewable from a significant public viewpoint,
>
> (b) contains cutblocks or roads, and
>
> (c) is in one of the categories prescribed under section 1.1;
>
> [Emphasis added]

[104] Despite the inclusion of this definition in the *Regulation*, and the use of "altered forest landscape" in each of the VQO categories, the parties, and their witnesses, framed their evidence and submissions in terms of the appropriate

"landform" as opposed to the forest "landscape", and maintained that visual assessments do not, and should not, take place at a landscape level.

[105] In the Addendum to Mr. Marc's report titled "Visual Assessment of Forest Harvesting on Stuart Island in the Discovery Island Archipelago", Mr. Marc notes that:

> The term landform was used under the *Forest Practices Code* to define the unit against which to measure and evaluate forest alterations [per VIA Guidebook and a 1996 public perception study titled "Clearcutting and Visual Quality"]. Measuring perspective scale of alteration for the purposes of visual impact assessments is done relative to individual landforms as opposed to broader landscape scenes or panoramic views composed of multiple landforms. The reason for this is that the research presented in Clear Cutting and Visual Quality report determined that percent landform alteration to be a better predictor (59% confidence) as opposed to percent total scene (43% confidence).

[106] The Ministry provided the following definitions of "landscape" and "landform" from the "Dictionary of Natural Resource Management" (1996), at page 186:

> **Landscape** 1. An expanse of natural or human-made scenery, comprising landforms, land cover, habitats, and natural and human made features that, taken together, form a composite. The characteristic features of any one landscape form the basis for common classification schemes …. Some consider the extent of the landscape to be limited to what can be seen in one view by the naked human eye. Others see landscape as ranging in scale from a few hectares to large tracts of land many square kilometers in extent.
>
> **Landform** A segment of the three-dimensional surface of the Earth, consisting of soil and rocks with characteristic shapes produced by natural processes. A landscape unit (element) describing types of land surfaces or features. Landforms have distinctive shapes and positions in the larger landscape that reflect their origins and geological development. These physical attributes are used to classify landscapes.

[107] Consistent with these definitions, the three expert witnesses agreed that a landform is a physical or topographic unit, a number of which can make up a complete landscape, i.e., the landscape may be everything that may be viewed from a given point, but there are individual landforms within the overall landscape.

[108] The expert witnesses also agreed that the landform in this case, not the larger landscape, is the basis upon which this alteration should be visually assessed, and that this is consistent with the standard practice for visual assessments in British Columbia, as set out in the VIA Guidebook and the FREP Protocol. Landform was also the basis of their own assessments.

[109] In this case, Interfor argued that the landform that it used for visual assessment coincided with the landscape viewable from its chosen viewpoints; therefore, the Panel need not decide whether the landscape is different than a

landform for visual assessment. The Panel does not accept this argument. The entire landscape viewable from some of the chosen viewpoints, for example CH-1, contains mountains and hills in the background, and mountains and other hills on the sides of the photos that are clearly part of the landscape, i.e., they can be seen from that viewpoint, although not necessarily in one single view, but are not part of the landform in question.

[110] Despite the historical and technical rationale for using landform as the basis for a VQO assessment, the Panel cannot ignore the wording used in sections 1 and 1.1 of the *Regulation*. It cannot, in essence, substitute the word "landform" for the forest "landscape". It is clear from the evidence that "landform" has been used in visual quality assessments, and in Ministry guidebooks, for many years. In statutory interpretation, a change in language, or the choice of language, is presumed to be intentional. If the legislators had wanted VQOs to be assessed in the context of a "landform", it could have used that word in the *Regulation*. It was clearly a familiar and standard term used at the time.

[111] In the Panel's view, the different language clearly signals a change. That change may well have been not to *require* a larger landscape to be used in every case, but to *allow* it to be used in appropriate cases. It is, after all, intended to address aesthetics.

[112] The Panel finds that the definition of "altered forest landscape" is so general, and the natural resources definition of "landscape" is so broad, that there is significant discretion – or choice - when it comes to identifying the appropriate "forest landscape" to be evaluated. It turns on a subjective assessment based upon the viewing point. The choice of forest landscape may be large or it may be relatively small, depending on the circumstances. The section 1 definition of "altered forest landscape" only requires the landscape to be "visible from a significant public viewpoint", contain "cutblocks or roads", and be the subject of one of the five VQO categories in section 1.1. There is nothing in the definition that would prevent a landform from being used as the appropriate "forest landscape" if that is the appropriate frame of reference.

[113] This conclusion is supported by the fact that the Ministry has not removed its reliance on landform from any of its policy or guidance documents, and still relies upon landforms in its own compliance evaluations.

[114] It is also assisted by the Dictionary of Natural Resource Management definition of "landscape", which indicates that there can be different sizes of "landscape". It states: "Some consider the extent of the landscape to be limited to what can be seen in one view by the naked human eye. Others see landscape as ranging in scale from a few hectares to large tracts of land many square kilometers in extent."

[115] In the Panel's view, when determining the appropriate "forest landscape" containing the alteration, one of the main considerations ought to be the legislative purpose of this provision; that is, to promote visually sensitive forest practices in certain designated scenic areas for the benefit of the viewing public. This is why the section 1 definition requires the applicable forest landscape to be "viewable from a significant public viewpoint".

[116] Accordingly, the Panel finds that, while the use of the word "landscape" in the *Regulation* is generally broader than a landform, it does not mean that a landform, or landforms, may not be the relevant "forest landscape" in a particular case. The actual area to be evaluated will depend on the circumstances, such as the location of "a significant public viewpoint".

[117] The appropriate forest landscape to be evaluated in this case is discussed in detail in subsection "*d) Is the alteration 'small to medium in scale*' and what is the appropriate frame of reference to determine scale in this case", after consideration of the appropriate significant viewpoint and whether the alteration is "easy to see".

b) What constitutes "a significant public viewpoint", and which viewpoints should be used in this case?

[118] To be assigned a visual category, each "altered forest landscape" is to be assessed from "a significant public viewpoint".

[119] Based on its consultation with SICA, Interfor argued that any viewpoint in Bute Inlet is not significant for this alteration because the majority of community boating traffic proceeds up Cordero Channel, not Bute Inlet. Mr. McClintock stated in the final visual impact assessment documents that the JB-1 viewpoint in Bute Inlet was only used as a "worst case" scenario, i.e., where the visual impact is highest, but that its importance was "minor".

[120] Based upon the evidence presented at the hearing, the Panel rejects Interfor's argument. Firstly, the Panel heard that standard practice is to use the most direct view of an alteration to assess its visual impact, as long as that viewpoint is also a significant public viewpoint. In a channel such as Bute Inlet, in the absence of a lodge or campsite, the Panel heard from Mr. McClintock that the convention is to use a mid-channel point where the majority of boat traffic in the channel would pass. The expert witnesses Messrs. Marc and Campbell testified that the JB-1 viewpoint, located mid-channel of Bute Inlet near the centre of STU 7, is just such a viewpoint. Moreover, Dr. Fairhurst agreed that viewpoint JB-1 provides the "best view" of the alteration caused by STU 7. In his peer review, he gave it a lower rating "because it was transitional". After conversations with Mr. McClintock about the results of Interfor's community consultation, he didn't consider it to be "the best case view" or "a significant viewpoint" because people would just be passing by it. However, after hearing the testimony of Mr. Keller and Mr. Springer, Dr. Fairhurst stated that he had gained a new appreciation of the relative importance of JB-1.

[121] Secondly, Interfor's own actions are inconsistent with its argument against the significance of Bute Inlet viewpoints. If Interfor had, in the planning of timber harvesting for cutting permit 557, which includes STU 7, determined that viewpoints in Bute Inlet were not significant, it would not have pursued time-consuming visual impact assessments from within Bute Inlet at JB-1, nor have considered the results of those assessments as being relevant, and having them peer reviewed.

[122] Thirdly, while the Bute Inlet side was not important to the local community of Stuart Island, assessing a "significant public viewpoint" in this case is not limited to

the viewpoint of the residents: SICA does not represent the only "public" who will view the altered landscape. According to Mr. Keller, Bute Inlet is one of the most beautiful scenic areas in the world. He testified that there is "lots of boating traffic" from the south, most of which goes up Bute Inlet, much of which goes in-and-out the same day. Mr. Keller also testified that one of his regular kayak tours to Bute Inlet, of which he runs about four per year, entails paddling in Calm Channel along the southern end of the island and then up Bute Inlet. Since STU 7 was logged, as they pass Stuart Island they try to "tuck in" close to Stuart Island, using a route they would not normally use as it is longer, to use the shoreline trees to screen the visual impact of the logging.

[123] Mr. Springer's company took 1,800-2,000 people on tours in 2010. In 2015, his company took 1,160 people on grizzly tours up Bute Inlet, and 3,260 on other wildlife watching tours that often circumnavigate Stuart Island, and other tours in the Discovery Islands. He testified that his company has one of the three daily three-hour time slots for grizzly viewing at Orford River up Bute Inlet, where the Homalco First Nation control the viewing times and schedule.

[124] Also in evidence was a letter of support from the Homalco First Nation. In that letter, the First Nation states that, as of 2010, there were "2000+" tourists each year traveling up Bute Inlet to view grizzly bears. On this basis alone, the Panel finds that there is significant tourist traffic in Bute Inlet. The Panel notes that this figure contains grizzly-bear watching tourists from Mr. Springer's company, as well as those of other operators.

[125] Finally, the Panel finds that, to accept Interfor's argument would defeat the objective of establishing VQOs further up Bute Inlet. There must be significant public viewpoints in Bute Inlet or the government would not have gone to the trouble of protecting the aesthetics of the southeast and the eastern sides of Stuart Island.

[126] Interfor also argued that, because the *Regulation* only requires one ("a") single significant public viewpoint for an alteration to be visually classified, and because viewpoints in Bute Inlet are less important than viewpoints in Calm Channel, any viewpoint in Bute Inlet is not "significant" for the purposes of viewing the alteration.

[127] The Panel does not accept Interfor's argument. Just because one viewpoint may be significant, does not mean that there can be no other significant viewpoints. Further, the Panel does not accept that "importance" can be substituted for "significance" as it is used in the *Regulation*.

[128] The Panel agrees with the Ministry that there are a number of significant public viewpoints in Bute Inlet looking towards the southeast side of Stuart Island and, in particular, from which STU 7 can be seen. However, based upon all of the evidence, the Panel finds that there is a direct viewpoint that is also a significant public viewpoint to be used in this case for the purposes of evaluating the alteration. That is JB-1. As Dr. Fairhurst testified, on a travel route in mid-channel such as Bute Inlet, there are usually many such viewpoints in close proximity to each other, which usually do not vary much from each other in their perspective view of the alteration. Eventually, one must choose one of these to carry out visual

simulations: in this case, JB-1 has been used as a common reference viewpoint. This was the only point in Bute Inlet from which there is a direct view of STU 7, from which visual simulations were done, for which there is a photo from before 2012 in evidence, and for which there are many photos from after the harvesting of STU 7 in evidence.

c) Is the alteration created by STU 7 "easy to see"?

[129] Each visual category in the *Regulation* contains, firstly, an element addressing the difficulty of seeing the alteration from a significant public viewpoint. This element combines a sense of scale with human visual perception. The levels of difficulty in the five categories of VQOs are: "not easily distinguishable" ("preservation"), "difficult to see" ("retention"), "easy to see" ("partial retention"), and "very easy to see" ("modification" and "maximum modification").

[130] Interfor submits that STU 7 meets the visual category of "easy to see", as required by section 1.1(c) of the *Regulation* for "partial retention". In contrast, the District Manager concluded that the alteration was "very easy to see", therefore, falling within section 1.1(d), the visual category of "modification".

[131] In his evidence, Dr. Fairhurst referred to the VIA Guidebook and the Poster. He testified that, from these examples, a person can derive a sense of what alteration falls within a VQO range. He noted that they are routinely used in the field for doing visual impact assessments and determining whether an alteration will likely meet, or has achieved, a particular VQO. Dr. Fairhurst concluded in his peer review that the cutblock was "easy to see".

[132] When the Panel asked Dr. Fairhurst how he generally differentiates between "easy to see" and "very easy to see", Dr. Fairhurst answered, "Well, it's just easy", and "very easy is very easy", and that you just know it when you see it. He declined to elaborate any further.

[133] The Panel finds this to be an honest answer, but insufficient to be helpful to the Panel in its decision. Dr. Fairhurst was simply unable to put into words how he would determine the difference between "easy" and "very easy" to see.

[134] Mr. Marc testified that the alteration was "very easy to see". When asked how he generally differentiates between "easy to see" and "very easy to see", Mr. Marc described "easy to see" as something that he would clearly see; that it would be moderate in scale. He described "very easy to see" as something that is "in your face" and large in scale. He also notes that shape is also an important consideration in visual perception, as geometric shapes with straight lines or geometric shapes that are angular or rectilinear, are more eye-catching or easy to see. The Panel notes that these other considerations are included elsewhere in the *Regulation*.

[135] Mr. Marc acknowledged that there is no standard working definition of these phrases "easy to see" and "very easy to see" and, in the end, one has to see the alteration in person to determine the ease or difficulty of seeing it.

[136] Mr. Marc also described the social research conducted in this area. He said that researchers have found that the reaction time for the average person to view

an “easy to see” cutblock, or a photograph from a realistic perspective (i.e., the photo takes up the same angle of visual field that you would experience on site), is nearly instantaneous. The person takes approximately six seconds to see the cutblock and interpret it, and the person can register and produce a comment within 10 seconds. The Panel finds that this is significant because a person does not need to turn his or her head to take in something that can be seen in one glance: the reaction comes within one field of view. Ease of seeing, therefore, depends not on the scale within a landscape or landform, but on the visual impact within a normal field of view.

[137] Mr. Campbell testified that he considered STU 7 “very easy to see” because of the breaks in texture, and the contrasts in colour and texture in what was otherwise a very quiet landscape. He testified that the landscape did not have much diversity in forest textures and colour, or in topography; he described it as “very simple”. The alteration formed a strong figure against the surrounding forest and the contrasting shape drew the eye towards it. By way of contrast, Mr. Campbell described STU 8 as “easy to see”, not “very easy”, as the openings were smaller and less continuous.

[138] Mr. Campbell testified that part of his training entailed reference to example photographs. In his view, the Poster gives “ideal” examples of the VQOs, and what is “easy to see” and “very easy to see”. When he considered the photographs of the alteration resulting from STU 7, Mr. Campbell concluded that the first photograph in the “modification” category was the most similar to the STU 7 alteration. He described STU 7 as “quite a well-designed modification block”.

[139] To determine what the legislators intended by the phrases “easy to see” and “very easy to see” in the *Regulation*, the Panel consulted the Oxford Online Dictionary for definitions of the following terms:

> “To see” Verb (with an object)
> 1 Perceive with the eyes, discern visually.
>
> “Difficult” Adjective
> 1 Needing much effort or skill to accomplish, deal with, or understand
>
> “Easy” Adjective
> 1 Achieved without great effort; presenting few difficulties
>
> “Very” Adverb
> 1 Used for emphasis
> 1.1 In a high degree.

[140] The Panel finds that Mr. Marc’s evidence regarding ease of seeing is closest to the plain meaning of the words used in the *Regulation*, and closest to what the Panel believes the legislators intended. “To see” has to do with human perception and what one can discern visually. “Easy” presents few difficulties, i.e., an average person should perceive the alteration simply by looking and without making a great effort. This still implies some effort; the quickest of glances might miss it.

[141] "Very easy" is a matter of a higher degree, i.e., if little effort was required to see something that was "easy to see", then no, or almost no, effort would be required to see something that was "very easy to see".

[142] In the context of section 1.1 of the *Regulation*, the Panel finds that "very easy" means that you would not miss seeing the alteration, even in a quick glance.

[143] The Panel has carefully considered the photographs in evidence taken from JB-1 in particular. Only some of the photographs have been blown up to a sufficient size and submitted as exhibits such that they can be viewed from the correct distance to simulate the width of the on-site viewing angle and magnification. The smaller photographs, even the 11x17 fold-out pages, could not be viewed from a suitable distance to put them into the correct viewing perspective (see Appendix "B" as an example). When the Panel asked Dr. Fairhurst to determine the correct perspective and magnification distance for viewing the photographs he provided in his report, he said that they would have to be viewed from so close that one's eyes could not focus, or that one's nose would hit the page. He concluded that only large blown-up photos would work.

[144] Considering the photographs taken of the alteration from JB-1, and from a suitable distance to put them in the correct viewing distance, the Panel finds that the alteration could not be missed, even in a quick glance. The alteration is impossible to miss due to its length across the greater than 70 degree field of view, its vertical placement in the center sandwiched by green on top and bottom, and the high contrast of light brown against the otherwise green forest. Based upon the Panel's interpretation of "easy to see" and "very easy to see", the Panel finds that the alteration created by STU 7 is "very easy to see". The Panel also agrees that it is most similar to the photographs of a "modification" alteration in the VIA Guidebook and the Poster.

d) Is the alteration "small to medium in scale" and what is the appropriate frame of reference to determine scale in this case?

[145] Each VQO category in section 1.1 of the *Regulation* has a size component. This component requires an assessment of the size of the alteration in relation to the "forest landscape", i.e., a sense of scale. The size or scale of the alteration for the five VQOs ranges from "very small" through "small", "small to medium", "large" to "very large".

[146] The Panel believes that these words are intended to have their usual meanings relative to each other. For instance, the first meaning of "medium" as an adjective in the Oxford Online Dictionary is "halfway between two extremes of size, amount, length, etc., average". On a percent scale, that would imply "medium" is in the "middle" or 50%. However, understanding what the words mean does not assist to determine where a particular alteration fits within this range; rather, the consideration of scale requires an understanding of how it has been applied to the visual categories, which requires the Panel to examine standards of practice developed from social research on perception of scale.

[147] To determine the scale of something requires context. It is clear from the evidence that, where an alteration fits on the scale of "very small", "small", "small

to medium", "large" or "very large", will depend on both the background against which it is measured, and how it is perceived. While a sense of scale also enters into the previous element considered (ease of seeing), that element is not measured against a forest landscape: it is a human reaction or perception of what is in front of the person, as outlined earlier. The evidence establishes that, for ease of seeing, the scale is provided by our field of view; for a sense of size, the frame within which the alteration is being viewed is required to provide context, thereby providing scale. This leads to the question, what is the relevant "forest landscape" to be evaluated in this case for the purposes of evaluating scale.

What is the relevant "forest landscape"?

[148] The *Regulation* uses words to describe the relevant scale, whereas the VIA Guidebook and FREP Protocol both refer to scale in percentages of the "landform", rather than in words. The percentages are those set out in Table 3 of the VIA Guidebook, and adopted in the FREP Protocol, and have been listed in paragraph 19 of the Background in this decision. To repeat, Table 3 lists the size ranges of 0% visible alteration to be "preservation", 0 – 1.5% to be "retention", 1.6 - 7.0% to be "partial retention", 7.1 - 18.0% to be "modification", and anything greater than 18.0% to be "maximum modification".

[149] Dr. Fairhurst cited a *FRPA* General Bulletin, "Visual Resource Management Interpretation" of November 2009, that "through common usage, the term "landform" is most appropriate instead of the landscape term used in the Regulation." The experts agreed that when considering scale and calculating percentages of visible alterations, the landform is the base unit as the Panel has already considered in sub-issue 1a. The VIA Guidebook refers to "visual units or landforms" when percentages are calculated. The Panel finds that, in this case, through common convention, the "scale" portion of the visual category definition refers to the forest landscape as the base visual unit which, in this case, the Panel finds to be the landform.

[150] Using this method, the percentage of the forest landscape that the alteration takes up will, in essence, determine which VQO category the alteration fits within. Put another way, the percent alteration will determine where the alteration fits on the scale of small, medium, large, etc., based on the mathematical calculation. If the percent alteration fits within the "partial retention" category shown on Table 3 of 1.6 - 7%, it is considered "small to medium" in scale. However, given that the VIA Guidebook and the experts also stated that this "raw" percentage may not dictate the VQO category that is perceived by a person from a significant public viewpoints (e.g., if it is designed with feathered edges, patches of trees, takes advantage of slopes, etc.), the percent alteration alone may not be determinative of the ultimate VQO result.

[151] Mr. Marc testified that the interpretation of size is relative to visual perception. He explained that social research studies have investigated the percentage alterations that people perceive as different visual categories. Mr. Marc stated that the percentages are sometimes used interchangeably with the visual categories and that, 85% of the time, these percentages will accurately predict the visual category.

[152] There was a great deal of evidence tendered on this issue at the hearing. While the parties agree that, in the context of the *Regulation*, the "forest landscape" to be assessed in this case is a "landform", they disagree on which landform to use. Interfor contends the appropriate landform is the entire southeast side of Stuart Island, while the Ministry contends this should be split into two landforms with one hill in each landform. The Ministry's witnesses used the east hill landform to assess whether STU 7 met the VQO.

[153] As a starting point, the expert witnesses each explained their process for identifying landforms in the context of visual quality assessments, and provided the basis for their respective opinions.

[154] At page 14 of Dr. Fairhurst's Expert Report of April 13, 2015, he discusses the "landform approach" to doing visual impact assessments using topographic features such as hills, mountains and ridges that are generally defined by ridge, shorelines and skylines. He agreed that the skyline behind STU 7 consists of two distinct hills or rises with a saddle or depression between them but, in his view, the southeast side of the island is a single landform because the broad saddle between the two hills does not form a distinct break between the two hills.

[155] When referred to Mr. Campbell's report, Dr. Fairhurst was critical of the truncated landform, using the comparison of viewing a picture within a frame. He believes that the image used to depict the truncated landform is misleading. In his view, Mr. Campbell only used the "shortened landform" because he was told to do so, unavoidably influencing his perceptions about the visual impact of the alteration caused by the harvesting of cutblock STU 7. Of note, according to Dr. Fairhurst's calculations, the visible disturbance for the Ministry's "truncated landform" results in a greater percent alteration when compared with Interfor's single landform; namely, 15.1% visible alteration as compared to 7.1%.

[156] Dr. Fairhurst was referred to an Expert Report by Mike Greig, received in evidence by consent. He agreed with Mr. Greig's observation that people can have "differences of opinion when identifying landscapes and landforms" and that, "there is no right or wrong answer. There is simply a best fit based on the available information."

[157] In response to the Panel's questions, Dr. Fairhurst agreed that it was more important how the public perceives the alteration rather than how the experts categorize it.

[158] In cross-examination, Dr. Fairhurst acknowledged that he was asked to do his peer review based on the single landform approach, as compared to the truncated landform.

[159] Mr. Campbell did not attend the site: his evaluation and evidence is based on photographs, maps, and descriptive information. Mr. Campbell testified that determining what landform to use is "simple in terms of complexity" and involves textures, colours, outline (by reference to lines of force), and topography. Mr. Campbell testified that the dividing line between landforms may be subtle, i.e., it is not always obvious to an untrained observer. The landform that Mr. Campbell used, and that he believes is appropriate for this case, is the single east hill on the

southeast side of Stuart Island. It contains one hill and ends to the west at a stream at, approximately, the middle of the broad saddle.

[160] In Mr. Campbell's view, there is more than one landform in the landscape at the southeast side of Stuart Island. He explained that, not all characteristics that distinguish landforms are as strong or obvious as others, but did not waiver in his opinion that sufficient geographic features could be discerned to delineate the landform that he considered as being appropriate in this situation.

[161] Mr. Marc testified that landforms are determined three-dimensionally, and are generally defined by ridges, draws, valley, shorelines and skylines. Mr. Marc stated that his decision on the extent of the landform was based on his site visit. In Mr. Marc's view, the entire southeast side of Stuart Island viewed from JB-1 is too wide (109 degrees angle-of-view) to be only one landform. To him, it was "not on" for a licensee to dilute the effect of percentage alteration by stretching the landform used for calculations horizontally into unharvested areas. He looked for a logical place to divide the landscape into landforms, using lines of force. He used the saddle between the hills and a distinct creek draw from the skyline to the shoreline to delineate the western edges of the landform he used in his analysis. He said that he did not "need to find" more than one landform; instead, he looked for a logical way to subdivide the end of the island into more than one landform. Based upon this assessment, he concluded that STU 8 is within a distinctively different landform – the west hill - than STU 7 on the east hill.

[162] Mr. Marc testified that, in 80% of cases, the landform is easy to distinguish without controversy, i.e., there would be agreement from any expert upon what constituted a significant break in the landscape that would separate one landform from another. In 20% of the cases, the landform is not easy to distinguish. Mr. Marc acknowledges that this case appears to be one of the 20%.

[163] The Panel questioned Mr. Marc as to how he would determine landform in a relatively featureless forested hillside that extended beyond the field of vision in both directions. He responded that there is currently no answer to that question. It is acknowledged as a problem, and the Ministry is working on it. He said that the Ministry may consider limiting a landform view to 60 degrees from a given viewpoint in such a situation, but it is not yet possible to answer the question definitively.

[164] Mr. Marc and Dr. Fairhurst agreed that a landform is fixed in position and does not change, although the angle you are viewing it from may change.

[165] Mr. Campbell had a more nuanced view stating, "How landforms are identified and delineated will vary depending on the location of the significant public viewpoint relative to the landform."

[166] In Mr. Greig's report, he wrote that, "For each viewpoint, the practitioner will draw on the rendered perspective view delineating landforms as seen from that view". However, Mr. Greig, was not called as a witness at the hearing, so there is no evidence before the Panel on how he would have divided the landform in this case. As stated earlier, his report spoke of generalities, rather than this specific case.

[167] The Forest Practices Board submits that the more nuanced view of Mr. Campbell is more appropriate, i.e., that the "landform for assessment purposes" may vary from one viewpoint to another.

[168] Applying Dr. Fairhurst's interpretation of landform, the southeast side of Stuart Island is the appropriate landform because there are no significant breaks in its topography. Applying Mr. Marc's interpretation, each hill on the southeast side of Stuart Island is within a distinctly separate landform. Applying Mr. Campbell's more nuanced view of landform, the east hill on the southeast side of Stuart Island is its own landform when viewed from each of Interfor's three viewpoints.

[169] The Panel agrees with Mr. Marc that this is one of those 20% of cases where the experts do not agree on how to define the landform. The Panel also acknowledges Mr. Marc's statement that the Ministry has yet to determine if a certain maximum width-of-view can define landforms in these difficult cases.

[170] In the circumstances, the Panel has not made a finding about which landform to use because: a) the basis upon which such a finding could be made definitively was not clear; and b) ultimately, it does not need to make such a finding to decide this appeal. Instead, the Panel has considered both possible landforms.

What is the scale of STU 7?

[171] Dr. Fairhurst's calculation of percentage alteration from JB-1 was 7.93% using the single landform, based on the lines that he drew on a digital photograph taken from JB-1. Mr. Marc's calculation of percentage alteration from JB-1 was 11.1% using the east hill landform, and Mr. Campbell's was 9.6%.

[172] Despite Dr. Fairhurst's statement that the qualitative assessment (e.g., visual assessment from the viewpoint, post-harvest) would satisfy the "partial retention" requirement of "small to medium in scale" when using the single landform, the Panel disagrees.

[173] The Panel finds that, from JB-1, STU 7 is not a "small or medium" alteration in the single landform of the southeast side of the island. It appears as a large alteration, similar to those shown on the Poster and in the VIA Guidebook. This finding is supported by, but not determined by, the raw percent alteration assessments done by Interfor employees, and by its expert, Dr. Fairhurst using the single landform.

[174] Using the east hill landform only, the Panel also finds that STU 7 appears as a large alteration, and is not a "small or medium" alteration. The Panel finds that the question of which landform is the appropriate "forest landscape" does not matter in this particular case because the Panel finds that Interfor fails in its appeal, regardless of which landform is chosen.

[175] Even if the Panel is incorrect in this finding and the scale of the alteration may be "brought under" the VQO of "partial retention" as a result of good design, it must not appear as rectilinear or geometric. This will be addressed next.

e) Is the alteration "natural and not rectilinear or geometric in shape"?

[176] Except for the VQO of "preservation", each visual category in section 1.1 of the *Regulation* takes into account an alteration's form or shape ranging from "natural", to "rectilinear" and/or "geometric", or "containing angular characteristics". The VQO of "partial retention" requires the shape to be "natural"; it specifically excludes alterations that are rectilinear or geometric in shape.

[177] The Ministry's "Visual Landscape Design Training Manual" (1995) (the "Training Manual"), VIA Guidebook, and the FREP Protocol, each describe how design elements influence visual perception. Where the *Regulation* creates a dichotomy of "natural" versus "rectilinear or geometric", each of the three documents – and the experts - recognized gradations between the two. The characterization is not necessarily straight-forward. The FREP Protocol, in particular, takes into account a number of design terms in order to adjust the percent alteration, such that an alteration may be in one VQO by percentage, but be in a different category based on design criteria.

[178] Cutblock design is discussed in the Training Manual, at page 66:

> It is as important to avoid mistakes as it is to follow principles. Bad design can be reduced by eliminating ...
>
> ...
>
> - edges following contours
> - parallel sided shapes
>
> ...
>
> - long straight edges.
>
> **It is most difficult to design in landscapes with low visual absorption capability.** Units can seem to float as figures on the background of the landscape. Reducing their size does not always help. …. **The more interlocked the shape the better.**
>
> **If there is more diversity the task is much easier.** Natural openings can be emulated and other features used to anchor the shape in the landscape.
> ....
>
> [Emphasis in original]

[179] The FREP Protocol also discusses design considerations:

> Does the shape of the alteration reflect the quality of the shapes found in the natural landscape (rounded curvilinear shapes on rounded landforms; spiky more jagged shapes in more rugged terrain), and does the opening respond to natural vegetation patterns and openings in both shape and scale? (page 11)

[180] To determine whether the subject alteration is "natural", "not rectilinear or geometric" in shape, the Panel has considered the definitions of these words in the Oxford Online Dictionary:

"Natural" Adjective

1 Existing in or caused by nature; not made or caused by humankind

2 Of or in agreement with the character or makeup of, or circumstances surrounding, someone or something

"Rectilinear" Adjective

1 Contained by, consisting of, or moving in a straight line or lines

"Geometric" Adjective

1 Relating to geometry, or according to its methods

2 Characterized by or decorated with regular lines or shapes

"Geometry" Noun

1 The branch of mathematics concerned with the properties and relations of points, lines, surfaces, solids, and higher dimensional analogs

"Angular" Adjective

1 (Of an object, outline, or shape) having angles or sharp corners

[181] The Dictionary defines "natural" in two ways. In the context of a cutblock, the first definition requires the alteration to appear as if it was not human-caused. This definition has not been met by STU 7. The alteration is clearly a human-caused cut, regardless of the viewpoint. The second definition, "of or in agreement with the character or makeup of, or circumstances surrounding, someone or something", is more helpful in the context of section 1.1 of the *Regulation*. Applying this definition, the inquiry is whether the alteration agrees with its surrounding character.

[182] In his original peer review, Dr. Fairhurst concluded that the planned alteration (the proposed cutblock) would be natural in character, but he did not provide any rationale. Mr. McClintock's visual impact assessment summary simply answered the question, "Has proposed operation borrowed from the natural character of the landscape?", by checking the box "Yes". The explanation provided for this answer was that "The use of interlocking and curvilinear shapes in opening STU 7 responds well to the landform." The Panel finds that neither the original peer review, nor the visual impact assessment summary, are correct or sufficient.

[183] At the hearing, Dr. Fairhurst clarified that the alteration appeared natural in shape because it was "low and rolling", like the overall landform. However, this description is not consistent with the photographs of the alteration. The Panel finds that Dr. Fairhurst's use of the term "natural" to describe this alteration is not accurate or reasonable.

[184] Both of the Ministry experts, Mr. Campbell and Mr. Marc, testified that the alteration did not match the natural character of the surroundings. Firstly, the landform has low visual absorption capability, being a green carpet of forest with rounded and low topography. They testified that any alteration had to be carefully

planned because it will be in high contrast against the green background and, effectively, impossible to emulate the natural character with a large opening.

[185] Mr. Campbell and Mr. Marc were of the view that the overall character of the alteration from JB-1 is rectilinear; that is, a broad line across the middle of the hill. Mr. Marc stated that there is a "rule-of-thirds" in visual design that a horizontal alteration across a landform should not cross more than one-third of the landform, which STU 7 violates. Mr. Marc testified that it was more suggestive of a hydro line right-of-way because of its linear nature across a wide breadth of the southeast side of the island.

[186] The Panel agrees. The Panel finds that even considering the landform most favourable to Interfor (i.e., the single landform), when considered from JB-1, the alteration caused by STU 7 stretches horizontally across more than half of the landform (see Appendix "B") and is, therefore, visible as a broad horizontal line or band across the middle of it. This finding is supported by viewing the photos in evidence using the "squint test". The squint test was suggested by Dr. Fairhurst as a means to minimize fine details so that the figure of the alteration can be seen more readily against the background.

[187] Interfor submits that "... 'not rectilinear or geometric' means that the alteration should not include angular corners or be composed of straight or simple curved lines." In support, Interfor cites the Merriam-Webster Dictionary definition of rectilinear as "made with straight lines" or "having many straight lines". However, the Panel notes that the first definition of rectilinear in that same dictionary is "moving in or forming a straight line". The Panel concludes that there is no conflict between the Oxford Dictionary definition (cited earlier in this decision) and the Merriam-Webster Dictionary definition of rectilinear.

[188] On this issue, the Panel prefers the opinions of Mr. Campbell and Mr. Marc, and finds that the alteration formed by STU 7, as viewed from JB-1, is not natural, i.e., it does not match the character of its surroundings, and is rectilinear across the landform, being perceived as a broad line across the hillside from viewpoint JB-1. Moreover, the Panel finds this to be the case whether the forest landscape is considered one landform or two.

[189] Considering the remaining words, the Panel finds that the alteration created by STU 7 is not geometric in shape. The applicable dictionary definition of "geometric" from the Oxford Online Dictionary is "2. Characterized by or decorated with regular lines or shapes." Evidence from several witnesses (see next section) was that the actual boundaries, when examined closely, rather than in broad form, were "amoebic" in shape and irregular. The Panel agrees that most of the alteration boundaries, when viewed from JB-1, and looking at the actual boundaries not the broad effect across the landform, are irregular and not geometric, i.e., not in regular lines, polygons or in a pattern. However, the Panel finds that the determination of "partial retention" depends on "not rectilinear or geometric". Accordingly, if one of the two states is found to be present (in this case, rectilinear) the alteration will not meet the VQO of "partial retention".

Conclusion on Issue 1

[190] The Panel finds that the alteration of the forest landscape created by STU 7, whether it is Interfor's single landform or the Ministry's smaller, truncated landform, when viewed from a significant public viewpoint (JB-1) does not meet the test for "partial retention" as set out in section 1.1(c) of the *Regulation*. The alteration is not just "easy to see", it is "very easy to see". The alteration is not "small to medium in scale", it is "large in scale", being over 7% of Interfor's single landform. Finally, the alteration is not "natural" in shape, it is distinctly "rectilinear".

[191] Although the Panel has concluded that Interfor has not met the legal test for "partial retention" set out in section 1.1(c) of the *Regulation*, the Panel has also considered whether the VQO of "partial retention" has been met using the standard practice FREP Protocol. This was done because the Ministry's witnesses originally assessed the alteration on the basis of a different landform.

[192] Each of the three experts who testified was asked, in reference to a poster-sized view of a panorama photo entered as part of Dr. Fairhurst's evidence (Appendix "B"), how they would quantify the alteration of STU 7 from viewpoint JB-1 against the backdrop of the single landform used by Interfor, and to explain to the Panel how they justified each score. Dr. Fairhurst had assigned scores in his report of September 28, 2013, but was asked by the Panel to explain each score in detail. Mr. Campbell and Mr. Marc had previously done so against the truncated landform only, but were asked by the Panel to confirm or reconsider their scores on the basis of the single landform. Table 1 summarizes their responses.

Table 1. Expert Responses to the Panel's Questions using the Protocol of the effect of alterations using the single landform on the southeast side of Stuart Island in reference to the post-harvest photo taken by Dr. Fairhurst and reproduced in smaller format in Appendix "B".

Design Elements	Good (-1)	Moderate (0)	Poor (+1)	Dr. Fair-hurst	Mr. Camp-bell	Mr. Marc
1. Response to major lines of force	Strong	Force lines not apparent	Weak or no response	-1	+1	-1 (or 0)
2. Borrowing from natural character	Fully	Partially	Isolated or not at all	-1	+1	+1
3. Incorporating edge treatment	Feathering AND irregular boundaries present	Either feathering OR irregular boundaries present	Neither aspect present	-1	0	0
4. Distance between alteration and viewpoint	> 8 km	>1 and <8 km	<1 km	0	0	0
5. Position of opening on the landform	Lower down and to one side	Small opening near centre	High on the landscape or large near centre	+1	+1	+1
Sum of Design Elements (Line 1)				**-2**	**+3**	**+1**

Roads, landings and site disturbance within opening	If no roads or sidecast are visible	0	+1	+1	+1
	If roads or sidecast are visible, but subordinate in the scene	+1			
	If roads or sidecast are significantly visible, but small in scale	+2			
	If roads are sidecast dominate the scene	+3			
Tree retention	Less than 15% tree retention (rated Poor)	0	0	0	0
	Tree retention levels between 15 and 22% (rated Moderate)	+1			
	Greater than 22% tree retention (rated Good)	+3			
Sum (Line 1 + Roads + Tree Ret.) (Y)			**-1**	**+4**	**+2**
% Alteration (X)	[A given as calculated by Dr. Fairhurst.]		7.93%	7.93%	7.93%
Adjusted % alteration X*(1+0.14*Y)	Mr. Campbell and Mr. Marc did not perform the exact calculations while on the stand, but indicated the approximate % and the VQC that would be met after adjustments. These calculations have been checked and inserted by the Panel.		6.82%	12.37%	10.15%
Basic VQC*			Modifi-cation	Modifi-cation	Modifi-cation
Adjusted VQC			**Partial Reten-tion**	**Modifi-cation**	**Modifi-cation**
Visual Quality Effectiveness Rating	Assigned by the Panel according to FREP Protocol		**Border-line**	**Well Met**	**Well Met**

* Visual Quality Category

[193] Interfor argues that Mr. Campbell's and Mr. Marc's responses to the Panel's questions did not change much from their original submissions based on the smaller landform, and therefore, their opinions should not be given much weight. The Panel finds otherwise. In response to a question from the Panel, Dr. Fairhurst clarified that the success of STU 7 lay in the details of how it was designed, notwithstanding that a raw alteration of 7.93% exceeded the allowable range for "partial retention". He agreed that "but for" the adjustments associated with the design features, the result would have been in the "modification" category. The differences in design elements were at issue, not the relative scale based on the landform. Given the disparity and range of ranking of design elements by different experts, the Panel's questions tested the rationale for each expert's rating to assist the Panel in making its decision.

[194] Firstly, in examining Table 1, the Panel notes that Dr. Fairhurst, in his post-harvest analysis of September 28, 2013, indicated that "partial retention" was "met". His testimony was not challenged during cross-examination. However, in reviewing Table 1, the evidence, and the FREP Protocol, the Panel notes that Dr. Fairhurst's basic visual quality category and adjusted visual quality category straddled the visual quality category boundary, and therefore, should have been considered "borderline", not "met". This is a significant discrepancy. In his reports and in his evidence, Dr. Fairhurst repeatedly concluded that Interfor achieved the VQO. However, when applying the FREP Protocol to his basic visual quality category and adjusted visual quality category, his conclusion should have been presented as a "borderline" case using the FREP Protocol wording. The Panel finds that, despite his report and his evidence, Dr. Fairhurst's opinion that Interfor had achieved the "partial retention" should not have been as definitive as he presented.

[195] The Panel finds that the expert opinions differ in only three of the design elements (Table 1). Dr. Fairhurst considered STU 7 to have a strong response to the major lines of force along the skyline, shoreline and some smaller ridges, as shown in the diagram that he presented in his September 28, 2013, assessment. Mr. Campbell had a contrary opinion; namely, that the broad horizontal form of STU 7 crosses vertical lines of force creating a "tension line". Mr. Marc saw some response to visual force lines, but was uncertain what overall effect it had, although he ultimately decided it was "good" in this case.

[196] Dr. Fairhurst, in response to the category of "borrowing from natural character", concluded in this report that the alterations were "pleasing to the eye and in proportion to the Partial Retention landscape"; conclusions which the Panel finds do not actually address the natural character. In response to the Panel's questions, Dr. Fairhurst clarified that the alteration borrowed from the low and rolling natural character of the landform and scored it as "good". However, both Mr. Campbell and Mr. Marc disagreed (as previously outlined), and scored it as "poor". The Panel prefers the interpretation of Mr. Campbell and Mr. Marc, as previously discussed.

[197] All of the experts agreed that irregular boundaries were present, but disagreed on edge treatments. Mr. Campbell and Mr. Marc concluded that there were inadequate or ineffective edge treatments. Dr. Fairhurst concluded that edge treatments were present but "not perfect". Mr. McClintock referred to some helicopter topping of trees to reduce post-harvest windthrow effects on edges, but did not indicate where or how much of the boundary over which this was performed. In any case, the overall effect was insufficient, and was, therefore, not an effective visual tool over the majority of the block. The Panel prefers the opinions of Mr. Campbell and Mr. Marc with respect to edge treatments.

[198] The overall quantitative scores (Table 1) shows that Dr. Fairhurst considered Interfor "borderline" effective at achieving "partial retention", while Mr. Campbell and Mr. Marc considered "modification" to be "well met" (using the wording of the FREP Protocol).

[199] In conclusion, the Panel prefers the evidence of Mr. Campbell and Mr. Marc, and finds their evidence more reliable. However, as each of the experts pointed out, the FREP Protocol is meant as a guide. In this case, considering the whole of the evidence, the Panel has concluded that the alteration caused by cutblock STU 7, against the backdrop of the forest landscape consisting of the single landform comprising the southeast side of Stuart Island, fails to achieve the visual category of "partial retention". Accordingly, Interfor did not achieve the intended results specified in its FSP, in contravention of section 21(1) of the *FRPA*.

[200] Moreover, after hearing extensive evidence from experts and other witnesses called by both Interfor and the Ministry, the Panel also finds that, whether it views the altered forest landscape of the southeast side of Stuart Island as Interfor's single landform, or the Ministry's two landforms with STU 7 on the east hill landform, the alteration still fails to meet the VQO of "partial retention" set out in the *Regulation*. Instead, it better meets the definition of "modification", being "very easy to see" and "large in scale".

[201] To be clear, the Panel finds that the contravention of section 21(1) of the *FRPA* does not turn on which landform is used to determine relative scale, because the achievement of a "partial retention" VQO fails regardless of which landform is used to represent the altered forest landscape. In addition, the Panel finds that STU 7 is "very easy to see" and "rectilinear" in shape, both of which do not depend on scale relative to landform, so the achievement of "partial retention" fails on these counts as well, regardless of which landform is considered. Instead, the Panel finds a VQO of "modification" has been met by STU 7 in this case, again, no matter which landform is used.

2. If the harvesting of STU 7 fails to meet the VQO, has Interfor established a defence of due diligence to the contravention?

[202] The defence of due diligence is a statutory defence set out in section 72 of the *FRPA*. The relevant parts of section 72 are reproduced as follows:

Defences in relation to administrative proceedings

72 For the purposes of a determination of the minister under section 71 or 74, no person may be found to have contravened a provision of the Acts if the person establishes that the

(a) person exercised due diligence to prevent the contravention,

…

[203] The defence of due diligence has been considered by this Commission on a number of occasions. Although there are more recent cases considering the defence of due diligence, in *Charles E. Kucera v Government of British Columbia*, (Decision Nos. 2011-FOR-001(a), 2011-FOR-002(a), October 6, 2011), the Commission provided a helpful review of the relevant case law, which bears repeating:

> [28] The leading case from the Commission's perspective on the test for the defence of due diligence is *Pope & Talbot Ltd. v. British Columbia*, [2009] B.C.J. No. 2492, a judgment of Madam Justice Fisher. In that case, the Court was considering the Commission's interpretation of the statutory defence as found in section 72 of the *FRPA*. The following are, for the purposes of this matter, the relevant comments by the Court:
>
> 11 The Commission has interpreted this statutory defence in accordance with common law principles, following *The Queen v. Sault Ste. Marie*, [1978] 2 S.C.R. 1299, and *R. v. MacMillan Bloedel Ltd.*, 2002 BCCA 510. Its leading decision on the application of the defence under the *Forest and Range Practices Act* is *Weyerhaeuser v. The Government of British Columbia* (Decision No. 2004-FOR-005(b), January 17, 2006). The Commission has applied the interpretation in

> > *Weyerhaeuser* in subsequent decisions, including the decision in this case.
>
> 12 *Sault Ste. Marie* established "strict liability offences" as offences where the doing of the prohibited act *prima facie* imports the offence but the accused may avoid liability by proving that he took all reasonable care. At p. 1326, Dickson J. (as he then was) set out the defence of due diligence as follows:
>
> > The defence will be available if the accused reasonably believed in a mistaken set of facts which, if true, would render the act or omission innocent, or if he took all reasonable steps to avoid the particular event.
>
> 13 In *MacMillan Bloedel*, a majority of the B.C. Court of Appeal concluded that the company had established the defence of due diligence on the basis of a mistaken set of facts. The court described the defence, as set out in the above passage from *Sault Ste. Marie*, as having two alternative branches:
>
> > [47] ... The first applies when the accused can establish that he did not know and could not reasonably have known of the existence of the hazard. The second applies when the accused knew or ought to have known of the hazard. In that case, the accused may escape liability by establishing that he took reasonable care to avoid the "particular event".
>
> [29] Consequently, he may only escape liability by establishing that he took reasonable care to avoid the particular event.

[204] The parties agree that what constitutes reasonable care or reasonable steps to avoid the contravention requires an objective examination of the circumstances. They also agree that what is required to meet the standard of care will vary on a case-by-case basis.

[205] Interfor submits that, if it fails to meet the VQO of "partial retention", then it exercised due diligence by taking all reasonable steps to avoid the contravention. Interfor submits that it was duly diligent because it:

- engaged in consultation with a local community group and the Homalco First Nation;
- undertook extensive planning by conducting a visual impact assessment according to accepted industry practices with the objective of achieving "partial retention", including simulated perspective views, as well as site visits;
- engaged an independent and well respected visual quality consultant to peer review the visual impact assessment design;
- incorporated design changes consistent with the consultant's recommendations; and

- harvested in accordance with the design to achieve the intended "partial retention" objective.

[206] Interfor argues that the District Manager imposed an improper and onerous standard when he considered whether Interfor had established the defence of due diligence. It argues that, had the District Manager used the proper test, he would have found that Interfor had made out that defence in the circumstances.

[207] The Ministry submits that Interfor was not suitably diligent because:

- there is no evidence that it attempted to consult with anyone other than SICA and the Homalco First Nation;
- Interfor tasked Mr. McClintock, a relatively junior employee with little or no formal training in visual impact assessment, to plan the cutblocks and perform the visual impact assessment;
- there is no evidence that Mr. McClintock received anything more than minimal assistance from more qualified Interfor employees, particularly Ms. Todd, who apparently declined to review Mr. McClintock's work product; and
- Mr. McClintock's focus when doing the visual impact assessment appeared to be on completing the process, rather than objectively determining what the public would see.

[208] Importantly, the Ministry also argues that Interfor retained Dr. Fairhurst to review the visual impact assessment scenarios, but then ignored his recommendation to use Scenario 5, which would have been physically feasible, but less profitable. Instead, Interfor "tweaked" the design of a different scenario, reducing the planned percent visible alteration from 10.3% to 8.5%. The Ministry submits that, to address the risk of windthrow, Interfor made openings larger – and more visible – instead of smaller and potentially less prone to windthrow.

[209] Ultimately, the Ministry submits that Interfor did not take all reasonable steps, nor did it take a conservative approach, to plan a cutblock that would meet the required VQO.

[210] The Forest Practices Board did not take a position on whether Interfor exercised due diligence, but proposed that the Commission assess several factors to make this determination, including:

- whether a visual impact assessment was carried out in a diligent fashion by a qualified person;
- whether the visual impact assessment warrants peer review by a more qualified expert in visual resource management and, if so, whether the peer review was carried out in a diligent fashion with appropriate information and instructions;
- whether the road and cutblock design follow the conclusions of the visual impact assessment and the advice of the peer reviewer, if any;
- if the visual impact assessment and/or peer reviewer's advice is not followed, are there sound reasons for doing so;

- whether consultation with Ministry visual resource managers is warranted in the circumstances;
- the level of effort to consult with the primary users of the area to determine significant public viewpoints and use levels; and
- the level of effort taken to monitor harvesting and road construction to ensure visual quality objectives are met, and if issues arise, whether corrective actions are taken in a timely and effective manner.

The Panel's findings

[211] In this particular case, one of the main arguments made by Interfor to establish "reasonable care" is the "peer review" undertaken by Dr. Fairhurst. In the Panel's view, Dr. Fairhurst's review of the final visual impact assessment and design (of September 26, 2011) was not a proper peer review because of his earlier involvement with Interfor in the design of the cutblock. Nor was Dr. Fairhurst "independent". He expressed a preference for Scenario 5, but when Interfor objected to Scenario 5 for reasons of windthrow risk, he resiled from his earlier position, saying that windthrow risk is outside of his area of expertise. In the Panel's view, Dr. Fairhurst should have acquired the necessary expertise, for example, through a sub-consultant, to gauge the windthrow risk. Instead, he seems to have simply accepted Interfor's view.

[212] The evidence presented to the Panel from Interfor's witness, Mr. McClintock, was that windthrow risk was not the reason that Scenario 5 could not be adopted, the reasons were primarily economics. The primary difference between Scenarios 1-4 and Scenario 5 was that Scenario 5 contained very little timber harvesting in the eastern portion of the final block layout.

[213] Interfor's witness, Mr. Emery, told the Panel that windthrow, synonymous with blowdown, was a key concern for logging on Stuart Island because of strong outflow winds from Bute Inlet in the winter. He said that he had observed indications of wind effects, such as trees with forked and broken tops and trees that had been blown over, that gave rise to riparian management considerations, visual considerations, and issues related to worker safety.

[214] Mr. Emery expressed the view that there would have been a greater concern for blowdown if there had been more retention of standing timber, particularly with islands of timber retention within the cutblock, or if the cutblock had been wider, thereby allowing wind speed to build up within the block. Mr. Emery acknowledged that if Scenario 5 had been selected, this would not have affected windthrow in the remainder of STU 7, i.e., the western portion of the block where there were very few differences between any of the scenarios.

[215] In cross-examination, Mr. Emery agreed that choosing Scenario 5 was "not impossible". He also agreed that economics was one factor in the decision, among a number of other factors, about which he failed to provide specifics. Later, Mr. Emery seemed to contradict himself, saying that he did not have any knowledge of why Scenario 5 was not selected; he had trusted Mr. McClintock's judgment on that selection. He could not say what the actual development cost was. He responded

that he "would have done" a cost analysis as part of the planning process taking into account the various expenses associated with logging, such as engineering, transportation, supplies, overhead, administration, harvesting, log-dump reconditioning and booming, towing the logs, and silviculture (including edge treatment and replanting). He agreed that the commercial objective would have been to make money by at least recouping the costs within this particular cutting permit, without spreading those costs over any other cutting permits.

[216] Based upon this evidence, the Panel finds that blowdown risk was not as critical to the choice of design as argued by Interfor.

[217] Dr. Fairhurst's evidence is that he told Interfor that he preferred Scenario 5 and gave his reasons to Interfor. He still believes that Scenario 5 was the better option, and that it would have "most conservatively met the VQO of partial retention". He understood that Interfor did not want to use that scenario because of blowdown concerns, although acknowledged, after hearing the evidence of Mr. McClintock and Mr. Emery at the hearing, that did not appear to be the case. He testified that he did not feel his role was to do more than offer his opinion. That being the case, it would seem that Interfor chose not to accept that opinion.

[218] Consequently, the Panel finds that the defence of due diligence fails.

[219] With failure on this point, the Panel need not consider the other points put forward by Interfor.

DECISION

[220] In making this decision, the Panel has considered all of the evidence and arguments provided, whether or not they have been specifically reiterated herein.

[221] Based upon the evidence before the Panel, including evidence not before the District Manager, the Panel confirms the Determination of the District Manager and dismisses the appeal.

[222] As to the administrative penalty of $20,000 imposed by the District Manager, since Interfor did not appeal the penalty (indeed all parties expressed contentment with same), the Panel confirms the penalty at $20,000 without expressing a view on the adequacy thereof.

"David H. Searle"

David H. Searle, C.M., Q.C., Panel Chair
Forest Appeals Commission

"Les Gyug"

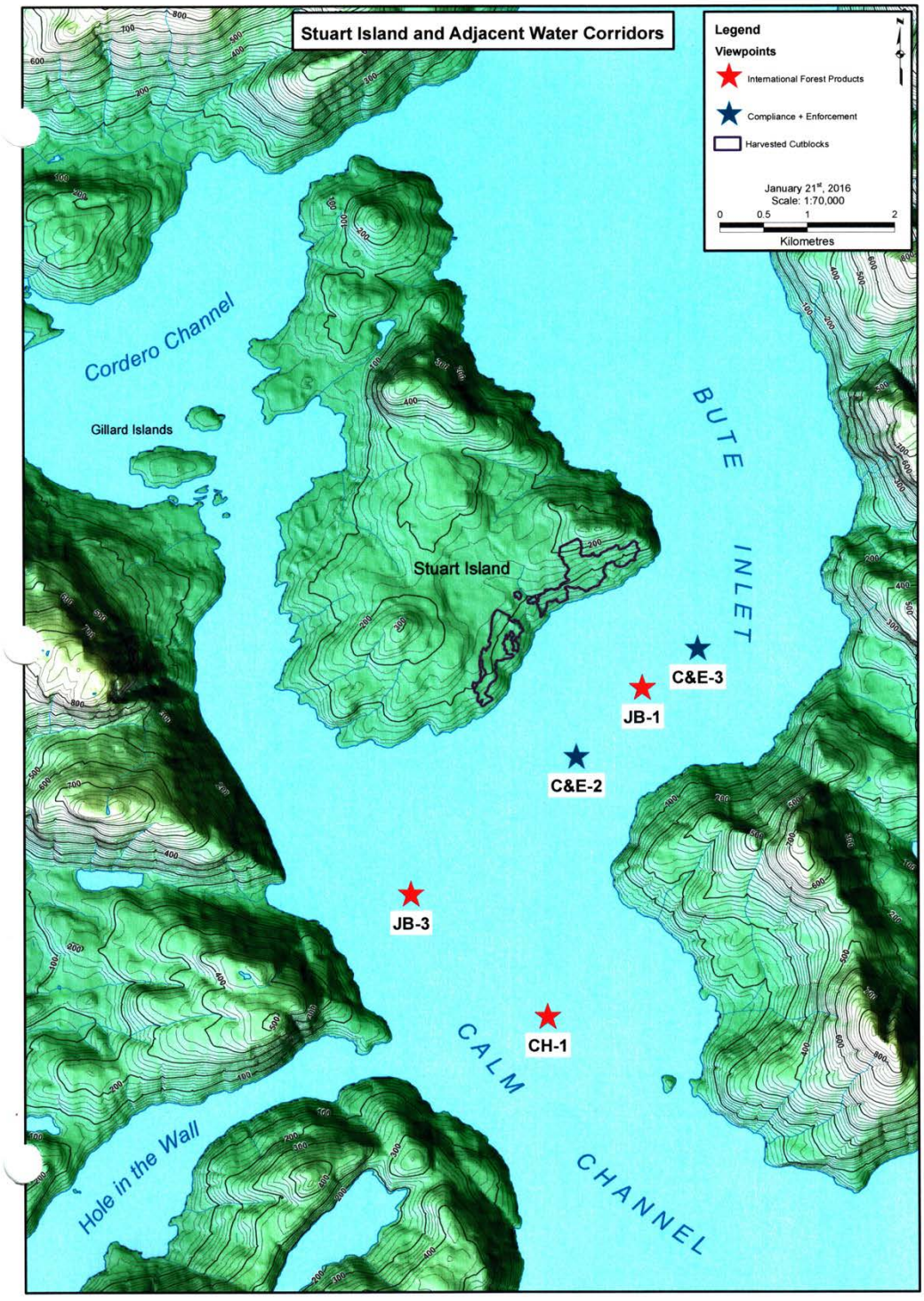
Les Gyug, Member
Forest Appeals Commission

"Norman E. Yates"

Norman E. Yates, Member
Forest Appeals Commission

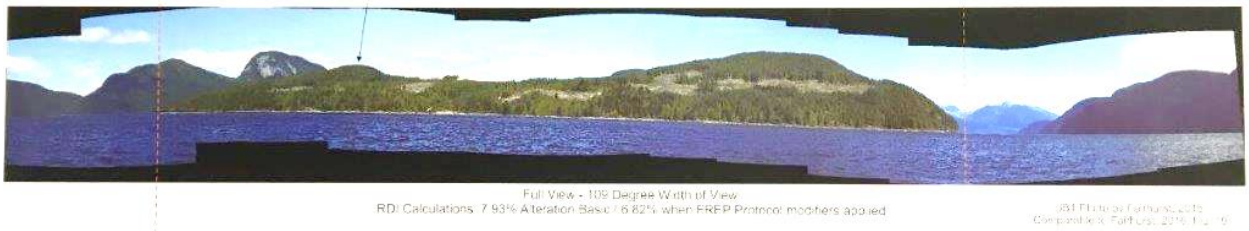
July 29, 2016

APPENDIX "A"



Scanned image of Exhibit 2-1 Tab 15, map of Stuart Island area showing viewpoints used to assess visual quality of cutblocks STU 7 (dark outline to the right of the words "Stuart Island" and STU 8 (dark outline below the words "Stuart Island").

APPENDIX "B"



Scanned image of the central panoramic photo of Exhibit 1-11 showing the southeast side of Stuart Island from viewpoint JB-1. Cutblock STU 8 shows to the left of the photo as two openings on either side below the hill to which the arrow points. The remainder of the openings on the right side of the photo are part of STU 7. The photo was taken by Dr. Fairhurst, Resource Design Inc. (RDI), on his site visit of July 14, 2014.

The Panel notes that to view this photo at a realistic distance to simulate the viewing experience from JB-1, the ratio of the distance from edge to edge of the red-dotted lines (~3.25 km) and the perpendicular distance of JB-1 to the center of STU 7 (~1.4 km) is about 0.31. For a 10.5-cm width from red-dotted line to red-dotted line on the printed page, that viewing distance would be about 3 cm. It is virtually impossible to focus one's eyes at only 3 cm to the page, so this photo is only a general impression of what would be viewed from JB-1, or how the full size exhibit would be viewed. If this page is viewed electronically, one can increase the magnification on screen, and thereby increase the viewing distance to a more suitable focusing distance.