

# **Visual Quality**

along

## **Babine Lake and the Babine River Corridor**

### **Final Report**

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## **1.0 INTRODUCTION**

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Maintaining visual quality in scenic areas is one of the goals identified in the Babine Watershed Monitoring Trust's (BWMT) knowledge base. The Babine Watershed Monitoring Framework document has identified that land use plans for both the Kispiox and Bulkley Forest Districts (now the Kispiox and Bulkley Timber Supply Areas [TSAs] of the Skeena-Stikine Forest District) include goals to maintain the visual quality of Viewscapes in scenic areas (Price and Daust 2005).

This is the final report for the project entitled Visual Quality along the Babine Lake and Babine River Corridor, undertaken by McElhanney Consulting Services Ltd. (McElhanney) for the Ministry of Forests and Range (now Ministry of Forests, Lands and Natural Resource Operations), Skeena-Stikine District (MoFR) and the BWMT. There were three principal objectives for this project.

1. To compile existing mapping and photo information for established Viewpoints both along the Babine Corridor (within the BWMT area) and in the areas of Nilkitkwa and Babine Lake;
2. To update photo panoramas if necessary; and
3. To compare and contrast qualitative (survey relevant stakeholders) vs. quantitative (Forest and Range Evaluation Program protocol) methodologies for determining if Visual Quality Objectives are being met within these areas.

This project was completed using resources allocated by the Babine Watershed Monitoring Trust (BWMT) and the MoFR Skeena Stikine District, as previously agreed to by both project partners (MoFR and BWMT).

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## **2.0 METHODS**

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The first task completed for this project was data compilation. Visual Landscape Inventory maps (digital) completed in 2008, as well as negatives and reports from 1998–2000 (completed by LA West Landscape Architects and Environmental Planners) for the Kispiox portion of the Babine Corridor were obtained from Glen Buhr, Stewardship Forester at the MoFR. Panoramas for the Babine and Nilkitkwa Lake areas were not available. Previous discussions with MoFR led to an agreement that the Forest and Range Evaluation Program (FREP) Visual Quality Effectiveness Evaluation (2008) protocol would not be undertaken for any of the Nilkitkwa Lake and Babine Lake Viewpoints. Panoramas for these Viewpoints were essential, however, as the boundaries of some of the Visual Quality Objective polygons are under contention.

Information collected during the first task of this project was used to determine:

- the location and number of Viewpoints on Babine Lake, Nilkitkwa Lake and along the Babine River Corridor (within the BWMT area), and

- correlation between the negatives contained in past reports, previous Visual Sensitivity Unit information and the Viewpoints recorded within the more recent Visual Landscape Inventory (VLI) database.

The first issue that arose was that both major and minor Viewpoints were on the VLI maps, but with no coding to differentiate between the two. Discussions with MoFR determined which Viewpoints were of primary interest. At this time it was also decided that if no harvest was present within the Visual Quality Objective polygons observed from the selected Viewpoints, it would not be necessary to conduct the FREP protocol for those Viewpoints. Glen Buhr released the harvest information which was then overlaid with the VLI layer by William Elliott at Azimuth Geospatial.

As the Viewpoint numbers recorded in the previous work by LA West were not included in the more recent VLI database, it was not possible to reproduce digital prints from the negatives without cross-referencing all of the latitudes and longitudes of the selected Viewpoints. As the cost was quite minimal, all of the negatives for the Babine River area were converted to digital photos. Of these, the ones most likely to be associated with the desired Viewpoints were made into panoramas using Canon Utilities PhotoStitch Version 3.1. Several more issues were noted at this time:

- the photos for the Kispiox side of the Babine Corridor were taken with a 28 mm lens (not 50 - 55 as stipulated by FREP);
- there were significant changes in exposure/lighting within the panoramas;
- the overlap wasn't always a minimum of 25%.

These issues were raised with Glen Buhr at MoFR. He felt that the photos should be adequate as 24 - 28 mm is recommended over 50 - 55 mm as the clarity of detail is better for landscape shots. The photo panoramas were then printed and the quality assessed regarding visibility of potential alterations. All of the previously compiled panoramas were taken into the field for comparison purposes. Panoramas for several of the Viewpoints (Vpt #3 and #9 - 12) in the Kispiox portion of the Babine River corridor were retaken in the field.

A survey was sent out to stakeholders to determine the public's perception of how well Visual Quality Objectives for the Babine River Corridor, Babine Lake and Nilkitkwa Lake areas have been met. The survey included a set of maps with all the viewpoint locations (see Appendix 1). Participants were asked to identify which viewpoints were important to them and then, for the viewpoints they identified, each one was rated using a scale of 1 through 10 with respect to how successfully they have been managed as an important visual landscape. A score of 1 represented the least successfully managed and 10 very successfully.

A list of potential stakeholders and interest groups was compiled. This list included people from: the MoFR, Ministry of Environment, Fisheries and Oceans Canada, fishing lodges, Fort Babine councillors, river rafting companies, the Gitxsan Treaty Office, Smithers sporting goods stores and resident angler representatives. Survey packages were forwarded email, mail or hand-delivered to those without email. After the first



deadline had passed, stakeholders were contacted either by phone or email to try and recruit further responses. An advertisement was also placed in the Smithers Interior News, inviting the general public's participation in the survey and giving directions where survey packages could be picked up.

As part of the collection of survey results, McElhanney representative Ralph Kossman, B.Sc., R.P. Bio., attempted to meet with or contact the following stakeholders (all angling lodge owners) to determine the location of Viewpoints important to them along the Babine River Corridor for the Bulkley TSA portion of the BWMT area.

- Pierce Clegg, Babine Norlakes Lodge and Babine Norlakes Steelhead Camp
- Barry and Wendy Chanasyk-Managers, Babine Steelhead Lodge Ltd.
- Brian Schneider-General Manager, Silver Hilton Steelhead Lodge

Mr. Kossman successfully contacted both Pierce Clegg and the Chanasyks. Multiple attempts were made to contact Brian Schneider and in the end we were able to contact him briefly and outline this portion of the project to him. Unfortunately, no further contact occurred so McElhanney selected the Viewpoints in Silver Hilton Steelhead Lodge's operating area. Several photo panoramas were taken around the Silver Hilton Steelhead Lodge and the Shelagyote/Babine confluence (Viewpoints #9-13) during the field day.

The above activities resulted in a total of 27 Viewpoints. They are located in numerical order, starting at the west border of the BWMT area in the Kispiox TSA and finishing at Smithers Landing on the west shoreline of Babine Lake. FREP information was compiled in the office for all Viewpoints in the BWMT area prior to the helicopter flight undertaken on April 28, 2009.

Photo panoramas were taken in the field for the majority of the Viewpoints, with the exception of some on the Kispiox side of the Babine Corridor where the visual landscape remained unchanged from the original panoramas. Photos were taken with a Nikon Coolpix 8 Megapixel camera (equivalent 28 mm). The programming within the camera ensured that there was a 1/3 overlap between frames. Panoramas were assembled using software specific to Nikon for this purpose. Figure 1 is the panorama for Viewpoint #3.



**Figure 1. Panorama for Viewpoint #3. (April, 28, 2009)**

In addition to the panoramas, the width and height of the field of view were recorded (both in degrees) for those viewpoints with new photo panoramas. Additional photos were taken each time any harvesting was visible, and the bearing to the middle of the alteration recorded.

## **2.1 Results and Deliverables**

The results and deliverables for this project are as follows:

1. Panoramas for the Kispiox side – all Viewpoints have panoramas assembled from negatives; Viewpoints 3, 9, 10, 11 and 12 all have new panoramas as well (taken from helicopter on field day);
2. Information obtained for each Viewpoint visited during the helicopter flight undertaken on April 28, 2009 (Table 1);
3. Information from stakeholders regarding where they feel the important Viewpoints are along the Babine River Corridor;
4. The initial office and field portions of the FREP VQEE protocol completed for Viewpoint 3 as this was the only Viewpoint in the BWMT area with visible harvesting;
5. Panoramas for the remainder of the Viewpoints;
6. Results from a short public perception survey conducted for stakeholders and the general public;
7. Completed the FREP VQEE for Viewpoint #3 assessing the Initial and Adjusted VQC in the office;
8. Digital layers and maps with VQO polygons, Viewpoints, harvesting information and Public Perception Survey results; and
9. A final report and presentation for delivery to the BWMT Board of Directors and Glen Buhr from the MoFR.

**Table 1. Notes from field visit to each Viewpoint on April 28, 2009.**

Vpnt No.	Location	Width (degrees)	Height (degrees)	Harvest Visible	Notes
1	Babine Corridor - Kispiox	--	--	No	only fire to west visible
2	Babine Corridor - Kispiox	--	--	No	incised; foregrounds cut off mid-long viewscapes
3	Babine Corridor - Kispiox	310 to 330	-1 to +8	Yes (see notes)	no harvest @ 135 or 202 degrees; harvest @ 318 degrees
4	Babine Corridor - Kispiox	--	--	No	deeply incised; bedrock banks
5	Babine Corridor - Kispiox	--	--	No	deeply incised
6	Babine Corridor - Kispiox	--	--	No	foreground blocks mid-long viewscapes
7	Babine Corridor - Kispiox	--	--	No	foreground blocks mid-long viewscapes
8	Babine Corridor - Kispiox	--	--	No	foreground blocks mid-long viewscapes
9	Babine Corridor - Kispiox	90 to 275	-1 to +14	No	Silver Hilton Lodge; foreground blocks mid-long viewscapes
10	Babine Corridor - Kispiox	112 to 255	-2 to +16	No	trees block mid to long viewscapes
11	Babine Corridor - Kispiox	125 to 250	-1 to +9	No	Can't see beyond foreground
12	Babine Corridor - Kispiox	120 to 280	0 to +20	No	
13	Babine Corridor - Bulkley	115 to 305	-3 to +25	No	Silver Hilton Satellite Camp
14	Babine Corridor - Bulkley	85 to 290	-3 to +19	No	Clegg's Satellite Camp; foreground blocks further viewscapes
15	Babine Corridor - Bulkley	150 to 295	-6 to +27	No	Babine Steelhead Satellite Camp; foreground blocks further viewscapes
16	Babine Corridor - Bulkley	333 to 140	-3.5 to +28	No	Babine Steelhead Camp (front of main cabin); foreground blocks further viewscapes
17	Babine Corridor - Bulkley	28 to 160	-4 to +20	No	Clegg's Camp (front of dining room); can't see beyond banks of river
18	Babine Corridor - Bulkley	235 to 310	--	No	DFO Fish Wier Camp (between radio tower and cabin in compound)
19	Nilkitkwa Lake	180 to 315	0 to +6	No	
20	Nilkitkwa Lake	180 to 345	0 to +4	Yes (208 degrees)	middle of Lake
21	Nilkitkwa Lake	180 to 360	0 to +6	Yes	south end; see harvesting to the south-west
22	Ft. Babine	160 to 355	-5 to +4	Yes (see notes)	old church; harvesting at 250, 225 and 294 degrees
23	Ft. Babine	155 to 15	0 to +8		cabins; approx 15-20m out from bank; slope of foreground blocks further viewscapes
24	Babine Norlakes Lodge	180 to 325	0 to +4	Yes (see notes)	harvesting visible @ 178 degrees (straight south down lake very distant; 248 degrees (somewhat angular); 268 degrees (some retention); 301 degrees (some retention - directly behind Ft. Babine Cabins) and 307 degrees (some retention, portion of road visible)
25	Babine Lake	180 to 360	0 to +3	Yes (see notes)	one small block blends in with ridge line (long skinny sliver)
26	Babine Lake	180 to 360	0 to +4	No	
27	Babine Lake	110 to 320	0 to +3	Yes	on top of buoy; harvesting in far distance to the south & north

### 3.0 PUBLIC PERCEPTION SURVEY

In order to determine the public's perception of visually sensitive areas, it was felt that a survey would provide the most cost effective means of obtaining this information. Overall, response to the survey was underwhelming. Five responses were received at McElhanney's office, four from stakeholders (one was verbal by phone) and one as a result of the newspaper advertisement. Two of the respondents made general comments about visual impacts rather than rating individual viewpoints. Refer to Appendix 2 for the full summary of the survey responses. In order to map the public's perception of visually sensitive areas, the survey results were tabulated and an average rating per viewpoint calculated. The rating scores were converted into classes as per the Effectiveness Evaluation Ratings in section 2.3.6 on the FREP form (see Appendix 3). The following table summarizes how the numerical survey scores were converted to the FREP Effectiveness Evaluation ratings used on the final maps.

**Table 2. Summary of how numerical survey scores were converted to the FREP rating classes and subsequent map symbols.**

Public Opinion Survey Rating Score	FREP Effectiveness Evaluation Rating Class	Map Symbol
0 (no response)	No Response	NR
1 – 2	Clearly Not Met	CNM
>2 – 4	Not Met	NM
>4 – 6	Borderline	B
>6 – 8	Met	M
>8 – 10	Well Met	WM

As mentioned previously, both Pierce Clegg and the Chanasyks were contacted directly through phone interviews. Both commented on the fact that their views were limited to the banks of the river, and that in general you do not see anything beyond the top of the escarpment into the Babine River due to the river being fairly incised in the upper reaches where their camps and operations are located. This was also observed during the field day conducted for this project. From the river, the visual impact in the Babine River corridor is not detectable as the river banks limit the views to the immediate foreground, particularly in the upper and lower reaches of the river. The top of the river escarpment prevents viewing any harvesting beyond the escarpment. The single exception to this is the harvesting visible from Viewpoint 3. This harvest unit is visible from the river as the river flows directly toward it for approximately 1 km. If one was floating or paddling this section of the river, the harvested area would be visible for several minutes until disappearing behind the top of the river escarpment. Even in the middle reaches where the river valley is wider and more open, such as near the confluence with the Shelagyote River and the Silver Hilton Steelhead Lodge, there was no harvesting visible.

There were no survey responses for Viewpoints 1 to 12 (the Kispiox TSA portion of the Babine River corridor). Survey responses indicated that the views and Visual Quality Objectives have been well or reasonably managed in the Bulkley TSA portion of the Babine River Corridor. Responses were much less favourable for the Babine and Nilkitkwa Lake areas; some respondents cited issues with the views that are visible when approaching the Babine River by air. It was also noted that maintaining the quality of the views in the Babine River corridor and along Babine and Nilkitkwa Lakes was very important for the tourism industry.

**Table 3. Results from the Public Perception Survey**

<b>Public Opinion of how well Viewscapes have been Managed</b>							
<b>Rating Score (1= Least successfully, 10= Very successfully)</b>							
<b>View Point</b>	<b>Response 1</b>	<b>Response 2</b>	<b>Response 3</b>	<b>Response 4</b>	<b>Response 5</b>	<b>Mean Score</b>	<b>Effectiveness Evaluation Rating Class</b>
1	No response	No response	No response	No response	No response	0	NR
2	No response	No response	No response	No response	No response	0	NR
3	No response	No response	No response	No response	No response	0	NR
4	No response	No response	No response	No response	No response	0	NR
5	No response	No response	No response	No response	No response	0	NR
6	No response	No response	No response	No response	No response	0	NR
7	No response	No response	No response	No response	No response	0	NR
8	No response	No response	No response	No response	No response	0	NR
9	No response	No response	No response	No response	No response	0	NR
10	No response	No response	No response	No response	No response	0	NR
11	No response	No response	No response	No response	No response	0	NR
12	No response	No response	No response	No response	No response	0	NR
13	No response	10	No response	No response	No response	10	WM
14	No response	10	No response	No response	No response	10	WM
15	No response	No response	No response	No response	No response	0	NR
16	No response	9	No response	No response	No response	9	WM
17	No response	8	No response	No response	No response	8	M
18	3	9	2	No response	No response	4.67	B
19	8	No response	8	No response	No response	8	M
20	3	No response	8	No response	No response	5.5	B
21	8	9	7	No response	No response	8	M
22	8	No response	2	No response	No response	5	B
23	3	No response	9	No response	No response	6	B
24	1	8	No response	No response	No response	4.5	B
25	1	8	7	No response	No response	5.33	B
26	4	8	8	No response	No response	6.67	M
27	4	10	No response	No response	No response	7	M



## 4.0 FOREST AND RANGE EVALUATION PROGRAM PROTOCOL

As previously mentioned, the FREP Visual Quality Effectiveness Evaluations were only to be completed for the Babine River corridor under this project. The only harvesting visible along the corridor was from Viewpoint 3 on the lower Babine. Consequently, only one FREP evaluation was completed. The FREP analysis was based on photos taken during the April 2009 helicopter flight. Snow and ice were still present along the entire flight path, from Smithers Landing on Babine Lake to the confluence of the Babine River with the Skeena River. The snow tended to emphasize the impact of the harvesting on the viewscape. While the observers visual impression might have been lessened had the FREP analysis been completed in the summer without snow to increase the contrast between harvested and non-harvested areas, the FREP results should still be the same as it is a comparison of the harvested area to the non-harvested area within the landform visible from the viewpoint.



**Figure 2. Viewpoint 3 – FREP Analysis – Line of sight, Plan view.**

The FREP analysis involves three components: assessing the Basic Visual Quality Class (VQC) in the field (Section 2.2.3), assessing the Initial and Adjusted VQC in the office (Sections 2.3.2 and 2.3.3), and determining the Effectiveness Evaluation Rating by comparing the basic VQC from the field with the adjusted VQC from the office.

Assessing the Basic VQC in the field (Section 2.2.3) entails classifying the alteration of the landform (or viewscape) according to the definitions of the Visual Quality Classes in *2.2.3 Table 1 – Definitions of Visual Quality Classes* on page 2 of the FREP Effectiveness Evaluation form. Office assessment of the Initial VQC is an area-based analysis of the landform alteration in perspective view (see Figure 4). The outside polygon is the full extent of the landform visible from Viewpoint 3. The

smaller polygon along the bottom of the larger one is the alteration from harvesting. A small natural opening is visible on the right side of the landform. The FREP protocol when mapping landforms adjacent to waterbodies includes mapping to the top of the foreground trees when the landform is less than 1km from the Viewpoint.



**Figure 3. Viewpoint 3 – FREP Analysis – Pre-harvest, perspective view. (circa 1998-2000)**



**Figure 4. Viewpoint 3 – FREP Analysis – Post-harvest, perspective view. (April, 28, 2009)**

The Initial VQC assessment for the landform alteration visible from Viewpoint 3 is 12.7% which equates to an Initial VQC of Modification (7.1-18% alteration). Assessment of the Adjusted VQC allows for the incorporation of design elements, tree retention and the impacts of roads, sidecast etc. on the Initial VQC. Tree retention in the visible opening was poor, and no roads or sidecast were visible. These features therefore had no effect on the Initial VQC. Field observations of the design elements resulted in an adjustment factor of -1 for design and a subsequent adjusted alteration of 10.9% which equated to an Adjusted VQC of Modification. The established VQO for the landform was Partial Retention (PR). The FREP analysis for Viewpoint 3 resulted in a field assessed Basic VQC of Partial Retention, an office Adjusted VQC of Modification, and an Effectiveness Evaluation (EE) rating of Borderline (one method indicates VQO achievement, one does not).

For quality control purposes the completed VQEE form was referred to Lloyd Davies, Visual Landscape Forester for the Coast Forest Region and one of the contributors to the *FREP Protocol for Visual Quality Effectiveness Evaluation - Procedures and Standards*. Mr. Davies, who participated in the original VLI inventory on the Babine River in 1997 reviewed the FREP Effectiveness Evaluation for Viewpoint 3 and believed it to be completed correctly with one minor exception. He noted that he *"would of rated 'Borrows from natural character' as moderate or 'M' and given it a '0' adjustment factor. The landforms relatively low VAC simply doesn't have a lot of natural openings or vegetation patterns from which to borrow in terms of cutblock design. Had the cutblock contained sufficient in-block tree retention, then perhaps a 'G' good rating could be justified. This would give a total design adjustment of '0' or neutral. Scale of alteration would there by remain at the original 12.7% and be indicated on the Adjusted VQC scale bar as mid Modification. This would not change your conclusion of 'Borderline'."* Mr. Davies' full comments can be found in Appendix 5.

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## 5.0 COMPARISON OF VQO POLYGON RATING, FREP ANALYSIS AND PUBLIC PERCEPTION SURVEY

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The Established Visual Quality Objective (EVQO) for the landform visible from Viewpoint 3 is Partial Retention (PR). The FREP analysis results are a Basic VQC of Partial Retention and an office Adjusted VQC of Modification. This resulted in an Effectiveness Evaluation (EE) rating of Borderline whereby one method indicates VQO achievement and the other method does not.

None of the returned surveys specifically rated any of the viewpoints on the lower Babine River so no indication of the public's perception of how well the viewsapes have been managed could be drawn. The only exception to this is Survey Respondent 3 who noted *"In general, Babine River is okay with exception of oversight below Kitsegas Canyon where visual quality objective has been violated (Skeena Cellulose clearcut with MoFR approval)"*. Comparison of the FREP results and the established VQO is limited to Viewpoint 3, so observations or trends are limited to this Viewpoint. For Viewpoint 3, the FREP analysis resulted in a field assessed Basic VQC of Partial Retention, and an office Adjusted VQC of Modification and an Effectiveness Evaluation (EE) rating of Borderline.



The reason for the differences in the assessed VQC between the field assessed Basic VQC method (Section 2.2.3) and the office Adjusted VQC method (Section 2.3.3) may simply be that under the existing FREP protocol the Basic VQC seems to be a more qualitative assessment while the office Adjusted VQC assessment is a more quantitative assessment. The basic definitions of the Visual Quality classes (Table 1 of the form) used to determine the Basic VQC in the field leave room for subjective interpretation by the viewer, while the area-based office Adjusted VQC method has much less capacity for interpretation.

It was observed during this project that public perception surveys, while very important, are subject to differing individual values and can therefore elicit a wide range of results. Rating of viewsapes is subjective and depends upon individual values, so while one person may feel the viewscape objectives are being met, another may not.

The limited response to the survey did not allow us to determine if the public perceived that Visual Quality objectives are being met within the Babine River corridor. In the one instance where harvesting was clearly visible, the FREP methodology gave a much better indication of whether the Visual Quality Objectives were being met for the given viewpoint. Of the two FREP methodologies, the Adjusted VQC assessment appears to be more objective (more quantitative) than the Basic VQC assessment that is done in the field. The Adjusted VQC assessment also seems to be the most scientific method of determining whether Visual Quality Objectives are being met for a given viewpoint as the assessment methodology is area-based. As such, the results should be replicable irrespective of the assessor. No matter which method is used, it is critical that assessments be carried out from the same vantage point each time if the results are to be compared.

## **6.0 DISCUSSION OF PUBLIC PERCEPTION SURVEY RESPONSE**

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There could be a variety of reasons for the lack of qualitative data obtained through the public perception survey distributed in this project. One possibility commented on during the presentation to the BWMT Board, is that the survey form and maps were overly complicated and therefore not conducive to encouraging participation in the survey. However, upon receiving the survey package, approximately half of the stakeholders and interest groups indicated that they wanted to be part of the survey process. Email and/or phone reminders were made at least once to those who we could contact, but more persistent follow up may have encouraged a few more responses. The survey was distributed to MoE and MoFR representatives; there was no negative feedback on the complexity of the survey form at that time.

It is unclear if including viewpoint photographic panoramas as part of the survey package would have elicited additional responses. For example, if the public's perception of how well a viewscape is being managed was solicited by showing them a photograph of harvesting in a partial retention zone, the additional explanation required may lengthen and overly complicate the survey form. At the time the survey was distributed, it was felt that the map showing the viewpoints would be sufficient as all of the target stakeholders are very familiar with the project area. Also, the map provided a context for each viewpoint. A survey package that included maps and photos is likely to be the best combination, and may be a consideration for further work.

The response time to the survey may also have been a factor in the number of responses received, although most stakeholders/interest groups that we sent or emailed the survey to had approximately four weeks to respond. The newspaper advertisement soliciting participation in the survey only ran for one edition, therefore it may be understandable that it did not generate much public response. Also, due to the cost the advertisement was kept to black and white and a comparatively small size, perhaps making it easy to overlook. Although a more prominent advertisement may have caught more people's attention, it should be noted that the users of the Babine River Corridor are overall a very small proportion of the general public.

The small number of stakeholders identified in this project means that all information obtained through the survey would be qualitative, and not provide enough data for any degree of statistical confidence, even if all of them had sent in responses to the survey package. We sent/emailed approximately 15 surveys out and had 4 responses and one other response to the newspaper advertisement. The combination of the high level of variance in the responses received and the low population size make it very hard to achieve a reasonable level of statistical accuracy.

Improving the information obtained from the small group of project stakeholders could be accomplished with a variety of methods. One tactic used by pollsters to increase the number of survey respondents is to offer a form of reward for completing the survey. Another is to make the survey simpler and more engaging by including viewpoint

photographs with the maps. Further research into successful survey composition may assist in creating a simpler and more engaging survey package.

The most effective (and expensive) method of getting good information is to individually interview stakeholders and interest groups with map, survey form and photograph(s) in hand. This could be used to get feedback from the general public as well. Spending a few days at the Babine River parking lot at the Babine River bridge in August/September interviewing anglers could result in good feedback. Combining this technique with a modest reward for completing the survey may encourage the participation of the anglers and other stakeholders. This survey method would certainly be more expensive and time consuming, but would increase the amount of qualitative information with respect to public perception of management of the current viewpoints in the project area. Directly comparing this information with the results from the FREP protocol would still be complicated by the variance observed in the survey responses that were received in this project.

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## **7.0 RISK ANALYSIS**

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At this time, all the identified important viewpoints in the Babine River corridor are located right on Babine River or the river's edge. The Babine River is sufficiently incised in both its upper and lower reaches so that views are limited to the immediate foreground from the river's edge to the top of the river bank or escarpment. As this area is within the boundaries of the park and therefore not harvestable, the risk of the views in the upper and lower reaches to visual impacts is low, as is the risk to the Visual Quality Objectives for these areas.

Risk to the views in the middle reaches of the Babine River is greater as the river valley is wider and more open here, allowing viewing beyond the immediate foreground and the park boundaries. To date no harvesting is visible in the middle reaches of the Babine River. This could change, however, as a result of future harvesting pressures. The Atna-Shelagyote Special Management Zone (SMZ) which is deferred from commercial timber harvesting, but not exempt from other natural resource industries, would provide considerable protection to the views in the middle reaches of the Babine River on the north bank of the river.

Another risk to the present Visual Quality Objectives is the potential for change with respect to the public's value systems regarding acceptable scenery. Over time as societal values change this could have an impact on the recreational businesses that operate along the Babine River. For example, as unaltered landscapes become rarer, or as access to previously inaccessible areas becomes more available, a societal shift in the value of unaltered views may occur, resulting in an increase in the value of a particular view.

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## 7.0 REFERENCES

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1. Jacques Marc, MFR Forest Practices Branch. 2008. *Protocol for Visual Quality Effectiveness Evaluations Procedures and Standards*. Forest and Range Evaluation Program, B.C. Min. For. Range and B.C. Min. Env., Victoria, B.C.
2. Lloyd F. Davies, RPF., Visual Landscape Forester. April, 8, 2010. Personal communication. Coast Forest Region, 2100 Labieux Road, Nanaimo, BC, V9T 6E9. Contact information: Ph: (250) 751-7112, Fax: (250) 751-7192, e-mail: [Lloyd.Davies@gov.bc.ca](mailto:Lloyd.Davies@gov.bc.ca).
3. Price, K. and D. Daust. 2005. Babine Watershed Monitoring Framework. Unpubl. Prepared for Babine Watershed Monitoring Trust - Governance Design Group.
4. Pierce Clegg, 2009. Personal communication. Babine Norlakes Lodge and Babine Norlakes Steelhead Camp, P.O. Box 1060, Smithers, British Columbia, Canada, V0J 2N0. Phone: 250-847-6160, Fax: 250-847-3444, e-mail: [clegg@babinenorlakes.com](mailto:clegg@babinenorlakes.com)
5. Barry and Wendy Chanasyk, 2009. Personal communication. Babine Steelhead Lodge Ltd, Box 245, Pritchard, B.C., Canada, V0E 2P0. Phone: 250-577-3108, Fax: 250-577-3104, e-mail: [fishbabine@hotmail.com](mailto:fishbabine@hotmail.com)
6. LA West Landscape Architects and Environmental Planners, March 2000. Visual Landscape Inventory and Integration of Existing Visual Landscape Inventories for portions of the Kispiox Forest District. 104 – 416 Sixth Street, New Westminster, British Columbia. Phone: (604) 524 – 3834.

## **APPENDIX 1: Public Perception Survey Form**

Name: \_\_\_\_\_

Group: \_\_\_\_\_

Address: \_\_\_\_\_ Phone or E-mail: \_\_\_\_\_

A Visual Quality Project is currently underway for the Babine Watershed and along the Babine River up to Babine Lake. The project is being jointly funded by the Babine Watershed Monitoring Trust and the Ministry of Forests and Range. McElhanney Consulting Services has been hired to carry out this work. Photo panoramas have been taken at several points previously identified as having visually important landscapes.

Please take a few minutes to look at the maps and then answer the following questions. Your information will be included in the mapping layers that are part of the final report for this project. Please have your responses back to our office by **February 5, 2010** if possible.

1. Which Visual Quality Viewpoints (please identify them by number) are important to you?
2. We are very interested in your opinion of how well these viewsapes have been managed. For the viewpoints you identified above, please rate each on the scale below with respect to how successfully they have been managed as an important visual landscape. On a scale of one through ten, one is the least successful and 10 very successful.

Vpt. No.	Rating	Comments
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	
	1 2 3 4 5 6 7 8 9 10	

3. Are there any other areas that you would identify as being visually important that are not already labelled on the map?
4. Do you have any other comments or suggestions with respect to the maintenance of the visually sensitive and/or important viewsapes along the Babine River corridor? (please continue on back if necessary)

Please send the survey back in the envelope we have provided. If you have any questions or need more information please contact Ralph Kossman at the McElhanney office in Smithers:

**Ralph Kossman, R.P.Bio.: 250-847-4040 ext. 25**

**Email: rkossman@mcelhanney.com**

## **APPENDIX 2: Summary of the Public Perception Survey Responses**



View Point	Response 1		Response 2		Response 3	
	Score	Comments:	Score	Comments:	Score	Comments:
1 to 12	No response	All viewpoints 17 to 1 should	No response		No response	In general, Babine River
13	No response	receive highest VQO rating and no	No response		No response	is okay with
14	No response	logging or further development	No response		No response	exception of oversight
15	No response	should occur.	No response		No response	below Kitsegas Canyon
16	No response		No response		No response	where visual quality
17	No response		No response		No response	objective has been
18	3	Fly Only Section at Babine River!	2	New parking lot an eye sore	No response	violated (Skeena Cellulose
19	8		8	Glimpse of Blks to West	No response	clearcut with MOFR
20	3		8	Glimpse of Blks to West	No response	approval). Kispiox LRMP
21	8		7		No response	direction for Upper
22	8		2	Blk across lake on hill	No response	Skeena not in
23	3	Fort Babine Lodge & Fort Babine	9	Can't see to west.	No response	compliance
24	1	Right Behind our Trout Lodge and in violation of Morice LRMP	No response		No response	
25	1	Terrible job over the years cutblock #552 Public Mtg	7		No response	
26	4	VQO Plan West Arm Babine Lk? Still should be in effect and not altered	8		No response	
27	4	Smithers Landing Tukii Lodge			No response	
Other Comments:	No development of VQ's period. What about VQO's for float planes and choppers... looks pretty bad from that point of tourism view. We need to see better logging practices even from air.		Rainbow Alley, Pinetree Lake Doris Lake should be labelled		Must consider continuous nature of Babine River, not just specific viewpoints. Better modelling from multiple viewpoints for every block proposed to avoid slip-ups of the past	

View Point	Response 4		Response 5	
	Score	Comments:	Score	Comments:
1 to 12	No response		No response	Noticed no real changes
13	10		No response	in visual impact within
14	10		No response	the river corridor itself
15	No response		No response	over the time they have been
16	9		No response	there, other than beetle
17	8		No response	kill trees, natural sloughing
18	9		No response	of banks/claybanks and
19	No response		No response	other natural changes to the
20	No response		No response	watercourse over time from
21	9		No response	scour and erosion.
22	No response		No response	
23	No response		No response	
24	8		No response	
25	8		No response	
26	8		No response	
27	10		No response	
Other Comments:	Maintain the quality of viewscapes. Extremely important to maintain viewscapes for our tourism industry.		Did not return survey, made general comments over phone which McElhanney summed up above.	

## **APPENDIX 3: FREP Visual Quality Effectiveness Evaluation Form**


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<b>2.1.2 Site Information (Office)</b>				
Forest District _____	Sample Code _____			
Licensee _____	Date of Field Evaluation <span style="border: 1px solid black; padding: 0 5px;">MM/DD/YYYY</span>			
Licence No. _____ CP No. _____	Block _____			
General Location _____	Results Opening ID _____			
<b>2.1.3 VLI Information (Office)</b>				
Date of Update <span style="border: 1px solid black; padding: 0 5px;">MM/DD/YYYY</span>	VAC _____ Established VQO _____			
Polygon No. _____	VSC _____ Date of Establishment <span style="border: 1px solid black; padding: 0 5px;">MM/DD/YYYY</span>			
EVC _____	Recommended VQC _____ Source Document _____			
<b>2.2.1 Viewpoint (Field)</b>				
Viewpoint No. _____	GPS Latitude _____ Viewing Direction _____			
GPS Longitude _____	Elevation (m) _____ Viewing Distance _____			
<b>2.2.2 Photography (Field)</b>				
Roll No. _____ ID Nos. _____	Viewpoint Importance (low 1 2 3 4 5 (high) _____			
Digital Photo ID Nos _____	Viewpoint Description _____ Field of View Height(degrees) _____			
<b>2.2.3 Assess Basic VQC (Field)</b>				
Alterations meet with Basic VQC definition? Circle where in the range for that VQC. Notes:				
Basic VQC <span style="display: inline-block; width: 150px; border-bottom: 1px solid black; position: relative;"> <span style="position: absolute; left: 0; top: -5px;">P</span> <span style="position: absolute; left: 10%; top: -5px;">R</span> <span style="position: absolute; left: 20%; top: -5px;">PR</span> <span style="position: absolute; left: 40%; top: -5px;">M</span> <span style="position: absolute; left: 60%; top: -5px;">MM</span> </span>				
<b>2.2.4 Design Observations (Field)</b>				
Design Elements	G (-1)	M (0)	P (+1)	
Response to visual force lines	_____	_____	_____	
Borrows from natural character	_____	_____	_____	
Edge treatments incorporated	_____	_____	_____	
Distance from the viewpoint	_____	_____	_____	
Position on the landform	_____	_____	_____	
<b>Total Design</b>	_____	_____	_____	
<b>2.3.2 Assess Initial VQC (Office)</b>				
a) % of landform altered by recent openings _____ b) % of landform with site disturbance outside openings _____ c) % non veg contribution of old openings _____ X = (a+b+c) = _____ % alteration <b>Initial VQC</b> _____				
<b>2.3.3 Assess Adjusted VQC (Office)</b>				
d) Impact of roads, side cast, etc. (within openings) _____ <input type="checkbox"/> None <input type="checkbox"/> Subordinate <input type="checkbox"/> Significant <input type="checkbox"/> Dominant   Adj. Factor _____ e) Tree retention _____ <input type="checkbox"/> Good <input type="checkbox"/> Moderate <input type="checkbox"/> Poor   Adj. Factor _____ f) Design (enter total from 2.2.4 above)   Adj. Factor _____ <b>Total adjustment</b> Y = (d+e+f)   Adj. Total _____ Calculate adjusted % alteration $X \times (1 + 0.14 \times Y) =$ _____ <b>Adjusted VQC</b> <span style="display: inline-block; width: 150px; border-bottom: 1px solid black; position: relative;"> <span style="position: absolute; left: 0; top: -5px;">P</span> <span style="position: absolute; left: 10%; top: -5px;">R</span> <span style="position: absolute; left: 20%; top: -5px;">PR</span> <span style="position: absolute; left: 40%; top: -5px;">M</span> <span style="position: absolute; left: 60%; top: -5px;">MM</span> </span> Adjusted % alt <span style="display: inline-block; width: 150px; border-bottom: 1px solid black; position: relative;"> <span style="position: absolute; left: 0; top: -5px;">0</span> <span style="position: absolute; left: 10%; top: -5px;">1.5</span> <span style="position: absolute; left: 20%; top: -5px;">4</span> <span style="position: absolute; left: 30%; top: -5px;">7</span> <span style="position: absolute; left: 40%; top: -5px;">12</span> <span style="position: absolute; left: 50%; top: -5px;">18</span> <span style="position: absolute; left: 60%; top: -5px;">24</span> <span style="position: absolute; left: 70%; top: -5px;">30</span> <span style="position: absolute; left: 80%; top: -5px;">++&gt;</span> </span>				
<b>2.3.4 Partial Cut Alterations</b>				
Partial cutting % removed _____  Average tree height (m) _____  Clearcut equivalent _____% alteration as read from Table 4. Record this value on line 2.3.2 a.				
<b>2.3.6 Determining EE Rating for the Landform by Comparing Basic VQC with Adjusted VQC (Office)</b>				
1 <input type="checkbox"/> <b>Clearly not met</b> (Neither method indicates VQO achievement, both are far from class boundary) 2 <input type="checkbox"/> <b>Not met</b> (Neither method indicates VQO achievement, but both are close to class boundary) 3 <input type="checkbox"/> <b>Borderline</b> (One method indicates VQO achievement, one does not) 4 <input type="checkbox"/> <b>Met</b> (Both methods indicate VQO achievement, but one or both are close to the high end "maximum % alteration limit.") 5 <input type="checkbox"/> <b>Well met</b> (Both methods indicate VQO achievement and are on the lower % alteration limit or mid-range for the class)				
<b>2.3.7 Allowance for Over-ride</b>				
Over-ride EE _____ Rationale for over-ride _____ _____ _____ _____				
Evaluated by _____ Signature _____				

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2.2.2 Viewpoint Importance

(1) glimpse view, less than 10 seconds

(2) sustained side view

(3) sustained focal view, travelling toward the alteration for more than one minute

(4) viewpoint is at a rest stop, campsite, or other static short-term view location

(5) viewpoint is the location of a community, commercial tourist-related enterprise, or other static long-term view location

2.2.3 Table 1 – Definitions of Visual Quality Classes

Visual Quality  
(Class Symbol)

Basic Definition

Preservation  
(P)

"preservation" means an alteration of a forest landscape resulting from the presence of cutblocks or roads, such that when assessed from a viewpoint that is representative of significant public viewing opportunities, the alteration

(a) is very small in scale, and

(b) is designed to be indistinguishable from the pre-harvest landscape.

Retention  
(R)

"retention" means an alteration of a forest landscape resulting from the presence of cutblocks or roads, such that when assessed from a viewpoint that is representative of significant public viewing opportunities, the alteration

(a) is difficult to see,

(b) is small in scale, and

(c) has a design that mimics natural occurrences.

Partial Retention  
(PR)

"partial retention" means an alteration of a forest landscape resulting from the presence of cutblocks or roads, such that, when assessed from a viewpoint that is representative of significant public viewing opportunities, the alteration

(a) is easy to see,

(b) is small to moderate in scale, and

(c) has a design that appears natural and is not angular or geometric.

Modification  
(M)

"modification" means an alteration of a forest landscape resulting from the presence of cutblocks or roads, such that, when assessed from a viewpoint that is representative of significant public viewing opportunities, the alteration is very easy to see and is either

(a) large in scale with a design that is natural in its appearance, or

(b) small to moderate in scale but with a design that has some angular characteristics.

Maximum Modification  
(MM)

"maximum modification" means an alteration of a forest landscape resulting from the presence of cutblocks or roads, such that, when assessed from a viewpoint that is representative of significant public viewing opportunities, the alteration is extremely easy to see and one or both of the following apply

(a) the alteration is very large in scale, or

(b) the alteration is angular and geometric.

2.2.4 Table 2 – Design Observations (Field)

Design Elements

Good (-1)

Moderate (0)

Poor (+1)

1. Response to Major Lines of Force

Strong

Force Lines Not Apparent

Weak or No Response

2. Borrowing from Natural Character

Fully

Partially

Isolated or Not at All

3. Incorporating Edge Treatment

Feathering and Irregular Boundaries Present

Either Feathering or Irregular Boundaries Present

Neither Aspect Present

4. Distance between Alteration and Viewpoint

> 8 km

> 1 and < 8 km

< 1 km

5. Position of Opening on the Landform

Lower Down & To One Side

Small Opening near Center

High on the Landscape or Large near Center

2.3.2 Table 3 – Percent Alteration Ranges for Visual Quality Classes

Visual Quality Class

Alteration percent of landform in perspective view

P – Preservation

0

R – Retention

0 – 1.5

PR – Partial Retention

1.6 – 7.0

M – Modification

7.1 – 18.0

MM – Maximum Modification

18.1 – 30.0

2.3.4 Table 4 – Visual Equivalent to Clearcut Percent Alteration Factors for Partial Cut Alterations

Mean height (m) of residual trees

5

10

15

20

25

30

35

40

45

50

10

0.1

0.2

0.4

0.6

0.7

0.8

1.0

1.2

1.8

2.2

20

0.3

0.4

0.7

1.0

1.2

1.4

1.8

2.2

3.3

4.4

30

0.7

0.9

1.2

1.4

2.0

2.4

3.3

4.2

5.0

6.5

40

1.2

1.4

2.0

2.4

3.4

4.3

5.2

6.1

6.7

7.8

50

1.8

2.3

3.4

4.3

5.2

6.2

6.8

7.7

8.4

9.0

60

3.5

4.3

5.0

6.2

6.7

7.7

8.4

9.2

10.0

11.5

70

4.9

5.5

6.5

7.7

8.4

9.2

10.0

11.4

12.7

14.0

80

6.0

6.6

8.3

9.2

10.0

11.0

12.0

13.2

14.4

15.5

90

8.0

9.0

10.0

11.0

12.0

13.0

14.0

15.0

16.0

17.0

Retention

Partial Retention

Modification

2.3.3 Adjustment Factors

c) Roads:

0 = None

1 = Subordinate

2 = Significant

3 = Dominant

d) Tree Retention:

-2 = Good > 22%

-1 = Moderate 15 - 22%

0 = Poor < 15%

e) Design:

Record Total from 2.2.4

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Partial Cutting Photos Showing Removal Levels and Resulting Texture



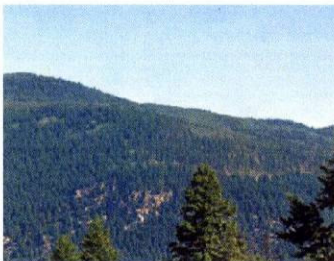
Tree Ht 20M Vol Rem 44% Stems 45%



Tree Ht 34M Vol Rem 64% Stems 71%



Tree Ht 25M Vol Rem 73% Stems 7%



Tree Ht 27M Vol Rem 46% Stems 7%



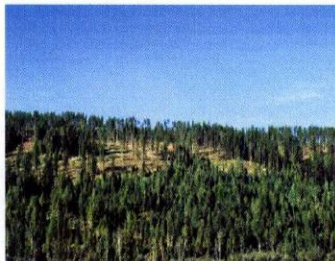
Tree Ht 24M Vol Rem 64% Stems 86%



Tree Ht 21M Vol Rem 80% Stems 81%



Tree Ht 23M Vol Rem 50% Stems 53%



Tree Ht 30M Vol Rem 65% Stems 91%



Tree Ht 23M Vol Rem 88% Stems 91%



Tree Ht 28M Vol Rem 56% Stems 67%



Tree Ht 31M Vol Rem 72% Stems 77%



Tree Ht 20M Vol Rem 88% Stems 96%



Tree Ht 28M Vol Rem 60% Stems 80%



Tree Ht 28M Vol Rem 72% Stems 85%



Tree Ht 29M Vol Rem 88% Stems 96%

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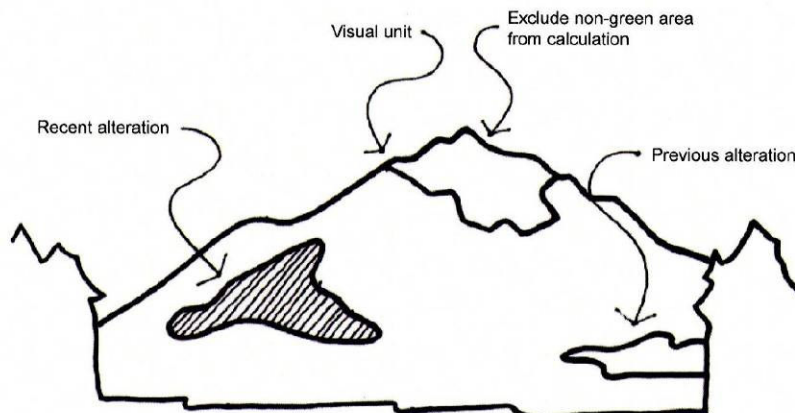
Visual Quality Effectiveness Evaluation  
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#### Calculating Percent Alteration in Perspective View

Example of site photograph showing altered landscape



- Step 1** On an enlarged version of the site photograph, define and outline the visual unit or landform. Exclude those portions of the landform screened by vegetation and non-green areas, such as mountain tops, rock, snow, and ice.
- Step 2** Measure the visible unit or landform using a manual or electronic planimeter or a GIS application (e.g., middle ground visual unit = 37.5 cm<sup>2</sup>).
- Step 3** Measure visible ground area of previous alteration that have not yet achieved visually effective green-up (e.g., current alteration = 1.8 cm<sup>2</sup>).



- Step 4** Measure visible ground area of recent alteration (e.g., = 4.7 cm<sup>2</sup>)
- Step 5** Add previous non-VEG alteration and recent alteration figures together to get total area altered. Divide this figure by the visual unit figure to get percentage of unit altered (e.g.,  $[(1.8 + 4.7) \div 37.5] \times 100 = 17.3\%$ ).
- Note:** Repeat the above calculation for each of the viewpoints selected for evaluation. Enter the percent alteration figure derived from each viewpoint on the Visual Quality Effectiveness Evaluation form (Page 2).

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## **APPENDIX 4: Completed FREP VQEE Form for Viewpoint 3**




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<b>2.1.2 Site Information (Office)</b>			
Forest District <u>Skeena-Stikine (Kispic TSA)</u>	Sample Code _____		
Licensee _____	Date of Field Evaluation <u>04/28/2009</u>		
Licence No. _____ CP No. _____	Block _____		
General Location <u>KITSEGAS - BABINE R.</u>	Results Opening ID _____		
<b>2.1.3 VLI Information (Office)</b>			
Date of Update <u>05/15/1997</u>	VAC <u>L</u>	Established VQO <u>PR</u>	
Polygon No. <u>288</u>	VSC <u>3</u>	Date of Establishment <u>1/1/1997</u>	
EVC <u>R</u>	Recommended VQC _____	Source Document _____	
<b>2.2.1 Viewpoint (Field)</b>			
Viewpoint No. <u>3</u>	GPS Latitude <u>55° 42' 36.42" N</u>	Viewing Direction <u>320°</u>	
GPS Longitude <u>127° 36' 12.51" W</u>	Elevation (m) <u>(1130ft) 345 m</u>	Viewing Distance <u>2300 m</u>	
<b>2.2.2 Photography (Field)</b>			
Roll No. _____ ID Nos. _____	Viewpoint Importance (low) 1 2 <u>3</u> 4 5 (high)	Field of View Width(degrees) <u>310°-330° (20°)</u>	
Digital Photo ID Nos <u>126P-026</u> <u>0350 0001</u>	Viewpoint Description <u>Gravel bar on N. bank of Babine River</u>	Field of View Height(degrees) <u>-1° to +8° (9°)</u>	
<b>2.2.3 Assess Basic VQC (Field)</b>			
Alterations meet with Basic VQC definition? Circle where in the range for that VQC. Notes: <u>Brg. to center of opening is 318°. Alteration is easy to see, small to mod. in scale &amp; appears natural in design. Not angular, follows ridge line contours.</u>			
Basic VQC	<u>PR</u>	<u>M</u>	<u>MM</u>
<b>2.2.4 Design Observations (Field)</b>			
Design Elements	G (-1)	M (0)	P (+1)
Response to visual force lines		<u>M (0)</u>	
Borrows from natural character	<u>G (-1)</u>		
Edge treatments incorporated		<u>M (0)</u>	
Distance from the viewpoint		<u>M (0)</u>	
Position on the landform		<u>M (0)</u>	
<b>Total Design</b>	<u>-1</u>		
<b>2.3.2 Assess Initial VQC (Office)</b>			
a) % of landform altered by recent openings	<u>12.7%</u>		
b) % of landform with site disturbance outside openings	<u>0</u>		
c) % non veg contribution of old openings	<u>0</u>		
X = (a+b+c) = <u>12.7</u> % alteration	Initial VQC <u>M</u>		
<b>2.3.3 Assess Adjusted VQC (Office)</b>			
d) Impact of roads, side cast, etc. (within openings) <u>0</u>			
<input checked="" type="checkbox"/> None <input type="checkbox"/> Subordinate <input type="checkbox"/> Significant <input type="checkbox"/> Dominant Adj. Factor			
e) Tree retention			
<input type="checkbox"/> Good <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Poor Adj. Factor <u>0</u>			
f) Design (enter total from 2.2.4 above) Adj. Factor <u>-1</u>			
<b>Total adjustment Y = (d+e+f) Adj. Total <u>-1</u></b>			
Calculate adjusted % alteration $X \cdot (1 + 0.14 \cdot Y) = 12.7 \cdot (1 + 0.14 \cdot (-1)) = 10.9$			
<b>Adjusted VQC</b>	<u>PR</u>	<u>M</u>	<u>MM</u>
Adjusted % alt	0 1.5 4 7 12 18 24 30 ++>		
Evaluated by <u>Ralph Kessman</u>			
Signature <u>R. Kae</u>			
<b>2.3.4 Partial Cut Alterations</b>			
Partial cutting % removed _____			
Average tree height (m) _____			
Clearcut equivalent _____ % alteration as read from Table 4. Record this value on line 2.3.2 a.			
<b>2.3.6 Determining EE Rating for the Landform by Comparing Basic VQC with Adjusted VQC (Office)</b>			
1 <input type="checkbox"/> <b>Clearly not met</b> (Neither method indicates VQO achievement, both are far from class boundary)			
2 <input type="checkbox"/> <b>Not met</b> (Neither method indicates VQO achievement, but both are close to class boundary)			
3 <input checked="" type="checkbox"/> <b>Borderline</b> (One method indicates VQO achievement, one does not)			
4 <input type="checkbox"/> <b>Met</b> (Both methods indicate VQO achievement, but one or both are close to the high end "maximum % alteration limit.")			
5 <input type="checkbox"/> <b>Well met</b> (Both methods indicate VQO achievement and are on the lower % alteration limit or mid-range for the class)			
<b>2.3.7 Allowance for Over-ride</b>			
Over-ride EE _____			
Rationale for over-ride _____			

FS1252 2008/04 **NOTE:** For Assessed Initial VQC, landform taken to top of escarpment above Babine R. not to shoreline. VP 3 is 700m from the top of the escarpment in the foreground and 400m to the edge of water in the foreground. As per RREP protocol, the land form starts at the top of the escarpment.


**McElhanney**



## **APPENDIX 5: FREP VQEE Comments from Lloyd Davies for Viewpoint 3**

**From:** "Davies, Lloyd F FOR:EX" <Lloyd.Davies@gov.bc.ca>  
**To:** <RKossman@mcelhanney.com>  
**CC:** "Roberge, Luc FOR:EX" <Luc.Roberge@gov.bc.ca>  
**Date:** 4/8/2010 1:04 pm  
**Subject:** FW: FREP VQEE protocol for viewpoint on Babine River near Kitsegas  
**Attachments:** VP\_3\_Line of Sight.pdf; VP3\_FREP\_FORM001.pdf; VP3\_FREP\_VQEE\_Landform.pdf

Hi Ralph,

It has been a long time since I conducted the original VLI inventory on Babine River (1997) but the photograph brought back some pleasant memories of whitewater rafting. It was a time when field mapping was sketched on old 1:50,000 NTS topographic maps.

I believe you have correctly delineated the landform unit for the purposes of calculating percent alteration. It is consistent with the FREP Visual Quality Effectiveness Evaluation Protocol which suggests that foreground areas (less than 1 km) be excluded from the calculation. The MOFR realizes the foreground is an important and obvious part of the viewing or recreational experience. It is simply a way to give us a more reliable measure in terms of scale of perspective alteration.

I had a quick review of your draft Visual Quality Effectiveness Evaluation form and believe it to be completed correctly. The only exception being that I would of rated "Borrows from natural character" as moderate or "M" and given it a "0" adjustment factor. The landforms relatively low VAC simply doesn't have a lot of natural openings or vegetation patterns from which to borrow in terms of cutblock design. Had the cutblock contained sufficient in-block tree retention, then perhaps a "G" good rating could be justified. This would give a total design adjustment of "0" or neutral. Scale of alteration would there by remain at the original 12.7% and be indicated on the Adjusted VQC scale bar as mid Modification. This would not change your conclusion of "Borderline".

You are free to use the "Allowance for Over-ride" to note any circumstances to give more weighting to the two evaluation methods. For example, noting "PR" for Over-ride EE. And providing rationale something to the effect "River foreshore and tree screening is constraining a narrow view width of landform. Resulting in abnormally high scale of landform perspective alteration. Greater emphasis should be given to basic VQC definition based on design and short viewing duration".

You are correct that the residual snow only serves to make the block more obvious. The vast majority of recreation use on Babine River is restricted to summer and fall for fishing and rafting. To these viewers the cutblock would appear less obvious with the lack of contrasting snow cover. I'm not sure of the camera lens used, but it looks like it may be slightly telephoto given the compression? We generally attempt to capture images in the normal lens range (50-55mm) and document particular features with telephoto lens ranges.

I provide these comments given my familiarity with the landscape having completed the original VLI inventory. However, my counterpart for the NIFR is Luc Roberge. I have therefore cc'd this note to him.

Regards,

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Lloyd F. Davies, RPF  
Visual Landscape Forester

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Website: <http://www.for.gov.bc.ca/hfp/values/visual/index.htm>

**From:** Ralph Kossman [mailto:RKossman@mcelhanney.com]  
**Sent:** Thursday, April 8, 2010 11:38 AM  
**To:** Davies, Lloyd F FOR:EX  
**Subject:** FREP VQEE protocol for viewpoint on Babine River near Kitsegas

Hello Lloyd,

Thanks for taking my call. Here are a couple of pictures to look at. The VP3\_FREP has the landform delineated with the foreground excluded. The other picture shows the view point relative to the block and indicates the line of site. Any comments would be helpful. Please call me if you have any questions. Based on the landform we have delineated, 86.9% is forested, 0.4% is non-vegetated and the block (alteration) is 12.7%. I have also included a pdf of the VQEE for this viewpoint.

Thanks,

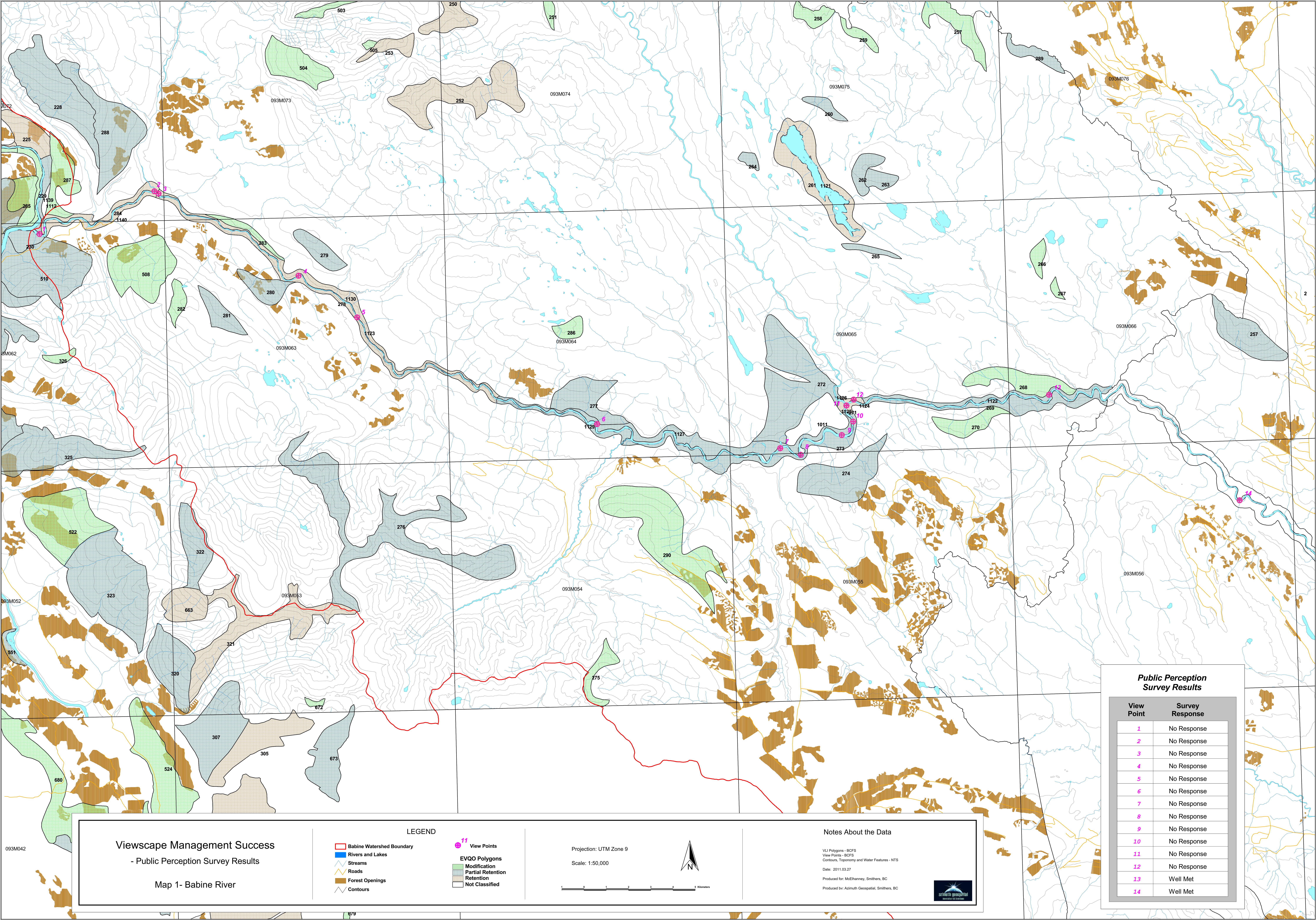
Ralph Kossman, BSc., RPBio.,

McElhanney Consulting Services Ltd.,  
PO Box 787, 3907 - 4th Ave,  
Smithers, BC, V0J 2N0

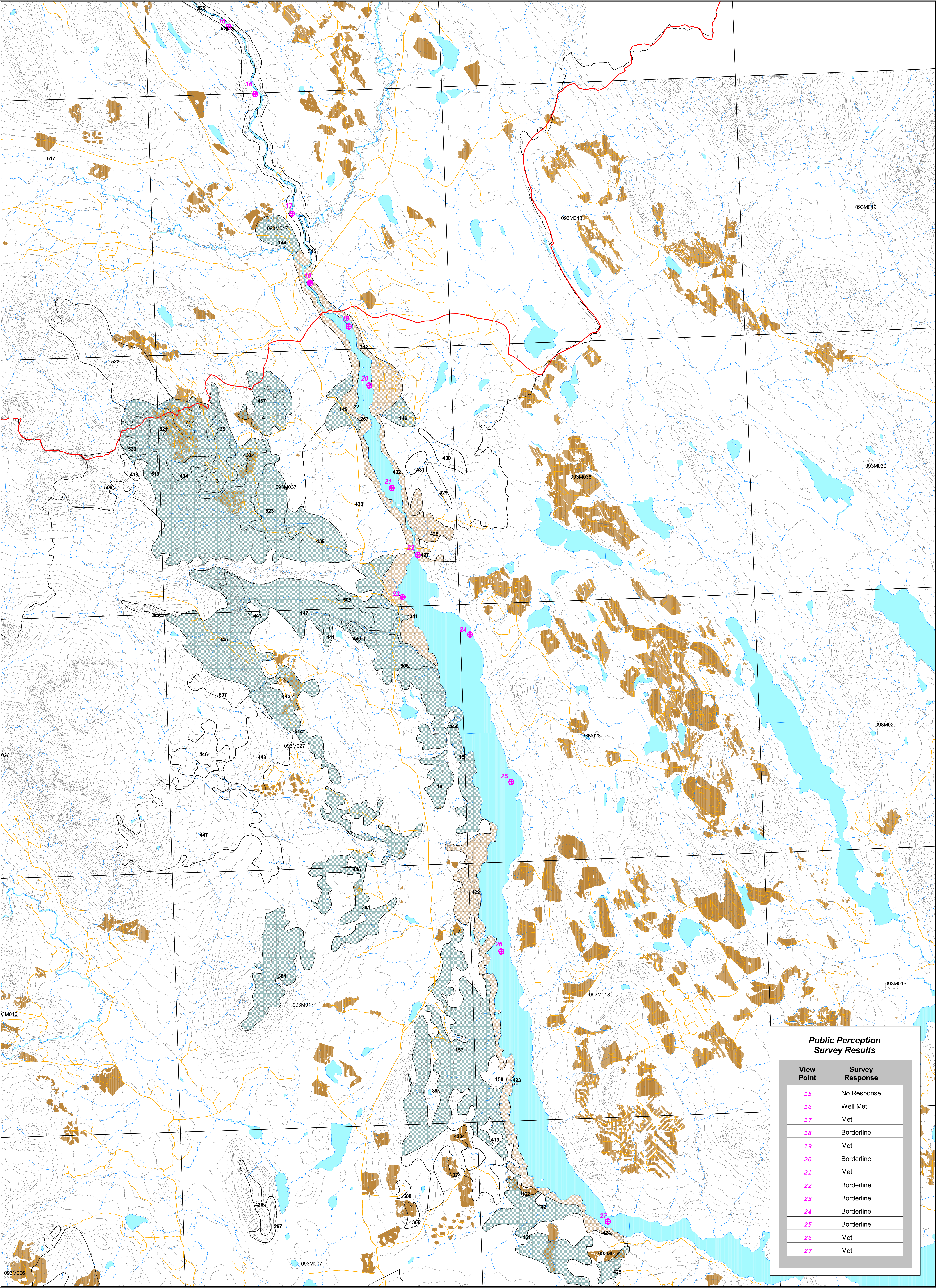
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## **APPENDIX 6: Maps**









Viewscape Management Success  
- Public Perception Survey Results  
Map 2 - Babine Lake (North)

**LEGEND**

Babine Watershed Boundary

Rivers and Lakes

Streams

Roads

Forest Openings

Contours

View Points

EVQO Polygons

Modification

Partial Retention

Retention

Not Classified

Projection: UTM Zone 9  
Scale: 1:50,000



**Notes About the Data**

VLI Polygons - BCFS  
View Points - BCFS  
Contours, Topography and Water Features - NTS  
Date: 2011.03.26  
Produced for: McEharnney, Smithers, BC  
Produced by: Azimuth Geospatial, Smithers, BC

