



June 10, 2020

The following is an update of CP 405 – Salisbury Creek to Bulmer Creek Face Unit.

Attached is the final *Cutting Permit 405: Visual Impact Assessment (VIA)* for your review. CCC previously referred preliminary VIAs via LINKS in October 2019 and November 2019. Since the preliminary VIAs were referred, CCC has finalized the tree retention in the specific blocks and has dropped a block which has resulted in a reduction in the visual impact of the cutting permit from the visual impact assessed in the preliminary VIAs. The final VIA shows the *Visual Quality Objective of Partial Retention* for the visual landscape unit for the area encompassed by CP 405 is met with the current cutting permit design.

The VIA is being referred for information purposes. The community is welcome to comment on the CP 405 VIA, but there is no formal referral & comment period.

On March 27, 2020 CCC referred:

- Detailed Terrain Stability Field Review, Proposed Harvesting and Road Construction in the Salisbury Face Area (Blocks 405 – 1, 2, 4, 5, 6 and 7: Spurs 1-3, 4-1, 6-1 and 6-3), for Cooper Creek Cedar Ltd. – W.Halleran P.Geo, L.Eng
- Karst Potential Assessment Lower Salisbury Face For Cooper Creek Cedar Ltd. – W. Halleran P.Geo, L.Eng

CCC's following comments generally addressed the general concerns voiced by concerned stakeholders for the TSFA:

Following the referral of the TSFA CCC, Will Halleran, P.Geo., L.Eng. (Will only attended one field trip), the AJL Liaison Committed and the Ad Hoc Committee have participated in two field trips. As a result of the discussions in the field trips and Will's further clarification of his terrain assessment, CCC has made the following changes to the original cutting permit plan:

- Block 1: cable area on N-E unit of the block. To eliminate continuing the proposed road to the north end of the block to minimize the cut on the steeper slopes:
  - The timber will be yarded down to a forwarding trail above the WTRA. The wood will be yarded using a cable/winch assist system – there will be no skid trails in the cable area.
  - A forwarding trail/backspar trail will be constructed in block 1 along the top of the block from the landing at the south end of the block – no additional road will be constructed beyond the landing. This trail will be used to forward wood to the landing and will serve as the backspar trail for the yarding system. The trails will be fully rehabilitated following harvesting. The cut for the trail will be minimal – the terrain is steeper, but does not exhibit rock concerns.
  - Prescribed retention of 21-m<sup>2</sup>/ha BA will be met in this area in a combination of groups & single tree retention.
- Block 6:
  - To address Will's assessment that the area in block 6 will have a residual *high likelihood of landslide initiation*, CCC has dropped block 6 from CP 405

- Climate Change:

- Currently there is no empirical data on Climate Change that professionals can implement in their assessments to address the concerns mentioned in “absolute terms”. However; in discussions with Will, he contends climate change is considered in the TSFA and subsequent report – assumptions of climate return periods are conservative (ie 1-10 return period of an extreme event as opposed to a 1-50 return period for the extreme event). The existing road drainage culverts are sufficiently large enough to handle the road drainage for the next 60-80 years. Culverts at stream crossings are site specific and CCC defaults to installing larger stream culverts than suggested in stream flow measurements to ensure the culverts can handle increased flow due to extreme weather events.

Additionally, in a response to a previous email regarding Climate Change, CCC provided the following comment:

- CCC indicated in a previous email that Will/CCC does manage for climate change by ensuring stream culverting will be large enough to handle sudden increased stream water flow that is expected to occur more regularly due to increased extreme weather events. Will’s assessment/report manages for climate change by being conservative in predicting quicker return periods of the extreme weather conditions which relates to installation of “oversize” stream culverts. Although Will’s report may not have a separate section on climate change, Will does consider climate change. FYI – CCC inspected the Salisbury road on Monday, June 1<sup>st</sup>, following the recent extreme weather event that caused flooding throughout the region and there was no evidence of water breaching the existing drainage on the road.

On April 23, 2020 CCC referred:

- Proposed Cutting Permit 405 on the Salisbury Face, east side of Kootenay Lake: Assessment of habitat and risks for mountain caribou and other wildlife – prepared by Brenda Herbison, MSc. R.P.Bio.

In April 2020 Brenda’s report was referred to the BC Caribou Recovery Team for their professional “peer review”. To date they have not made any comment to Brenda’s report. Additionally, in August 2019, CCC & Brenda met with the *BC Caribou Recovery Team* to discuss CCC’s caribou management plan in Salisbury Creek and to see if they had any professional input. Although they did not give any concrete suggestions, the Recovery Team did comment there were other caribou habitat areas in the Region that ranked as higher priorities for allotted additional full protection than the area CCC/Brenda were managing. The BC Caribou Recovery Team did commend CCC for undertaking special planning and management for caribou in an area in which there was no legal requirement to do so.

For you information, CCC staff and the forest development contractor, who discovered the caribou tracks in 2019, surveyed the entire caribou management area in early May 2020, approximately the same time as the caribou tracks were discovered in 2019, and there were no caribou tracks found. Also, of the 80.5-ha that has been designated as the caribou management area, 46.3-ha is full timber reserve, 5.0-ha is existing roads & 26.3-ha (33% of the management area) is harvest area. 15.7-ha of the harvest area is approximately 30% retention.

CCC will manage CP 405 consistent with the recommendations in Brenda Heribson’s wildlife report and will proceed with harvesting in block 7 as per the recommendations in Brenda’s report.

### CP 405 Submission

Cooper Creek Cedar Ltd is nearing completion of the development of CP 405, including the commitments & engagement responsibilities required to stakeholders, government agencies and First Nations prior to submitting the cutting permit. CCC will refer the final CP 405 Site Plans (SP) to the community, for information purposes, a minimum of two (2) weeks prior to submitting CP 405 to MFLNRO for issuance. The SPs are generally the final documents in the development process. The SPs generally state all of the assessments, cutting specifications, leave tree specification, etc and silviculture plans and stocking standards for each cut block.

Submitted by:  
Bill Kestell, RPF  
Cooper Creek Cedar Ltd  
Woodlands Manager

# **Cooper Creek Cedar Ltd.**

Visual Impact Assessment  
CP405  
Salisbury

Prepared by:



**June 3, 2020**

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# Cooper Creek Cedar

## Visual Impact Assessment – Project Information

CP: 405 (Salisbury) blocks 1, 2, 4, 5, 7  
 Proposed Year of Harvest: 2020/21

Proposed Silviculture System: CC/RES

Type of Proposed Operation: Logging

Block Area ha (No WTRAs/Reserves):

- Block 1: 13.1
- Block 2: 26.9
- Block 4: 17.1
- Block 5: 6.2
- Block 7: 31.3

Visual Resource Management	VLI	VSC:	VAC:	EVC:	EVQO:
Block 1: 13.1 ha	382	2	M	PR	PR
Block 2: 26.9 ha	382	2	M	PR	PR
Block 4: 17.1 ha	382	2	M	PR	PR
Block 5: 5.2 ha	382	2	M	PR	PR
Block 5: 1.0 ha	381	3	M	P	PR
Block 7: 31.3 ha	382	2	M	PR	PR

Kootenay-Boundary Higher Level Plan Order	VSU#	Class: _
	381	2
	382	3

Foreground = 0-1km      Midground = 1 – 5km      Background = 5 –12km

Date Visual Landscape Inventory Completed: Nov 2016	DOES EVC EXCEED ESTABLISHED VQO?	Yes ___	No <u>X</u>
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## VIEWPOINTS & PHOTOGRAPH INFORMATION

Number and name of viewpoints from which the proposal is visible and photos are taken	<b>VP #1</b> Davis Creek (campground)	<b>VP #2</b> Lost Ledge (campground)	<b>VP #3</b> Marine Beach	<b>VP #4</b> Schroeder Creek
Viewpoint importance (Major/Minor/Potential)	Major	Major	Minor	Minor
Viewpoint co-ordinates (Lat./Long. or UTM inc. elevation (m))	x- 503727 y- 5554452 z-536m	x- 504461 y- 5549984 z-536m	x- 505192 y- 5548011 z-536m	x- 506927 y- 5542465 z-536m
Viewing distance (Foreground/Midground/ Background)	3.7 Km (Mid)	3.0 Km (Mid)	3.8 Km (Mid)	8.2 Km (Background)
Viewing duration from viewpoint (High/Moderate/Low)	High	High	High	High
Focal length of camera lens (digital equivalent mm)	50	50	50	50
Direction of view (degrees true)	140 <sup>0</sup>	70 <sup>0</sup>	40 <sup>0</sup>	30 <sup>0</sup>

## 1. ASSESSING BASIC VQO DEFINITION

Describe the level of impact that the proposed alteration, in combination with any existing non-VEG alterations, will have on the landscape from each viewpoint, using one of the following terms: <i>Not visible, Not visually evident, Subordinate, Dominant, Out of scale</i>	<b>VP1</b> <i>Not visually evident</i>	<b>VP2</b> <i>subordinate</i>	<b>VP3</b> <i>subordinate</i>	<b>VP4</b> <i>subordinate</i>		
Which basic VQO definition would the proposed alteration, in combination with any existing non-VEG alterations, meet from all the selected viewpoints and taking into account viewpoint importance, viewing distance and viewing duration? P ___ R ___ PR <u>X</u> M ___ MM ___						
If applicable, state reasons why the proposed alteration(s) does not achieve the basic definition of the established VQO from any of the selected viewpoints. <b>Not applicable – PR is achieved.</b>						

## 2. ASSESSING VISUAL DESIGN

Have major lines of force been identified and used to develop the size and shape of the proposed operation? (If Yes, attach visual force analysis to this form.)	Yes ___ No <u>X</u>
Has the proposed operation borrowed from the natural character of the landscape? <b>Blocks, WTRAs, and Reserves have been designed to follow natural landscape patterns. The natural viewscape is visually diverse and includes natural and rock openings, subalpine and alpine terrain, and high elevation chutes.</b>	Yes <u>X</u> No ___
Have edge treatments been incorporated into the design of the proposed operation (feathered edges, irregular cutblock design, etc.)? <b>Blocks, WTRAs, and Reserves have been designed to have irregular boundaries that blend and follow natural landscape patterns.</b>	Yes <u>X</u> No ___
Have "islands," or patches of trees, been maintained to mitigate visual impacts and other resource management objectives? <b>WTRAs, Reserves, and/or individual leave trees have been established within blocks to help mitigate visual impacts as well as maintaining biodiversity.</b>	Yes <u>X</u> No ___
Are there any existing human-made alterations visible in the unit that exhibit poor design? - Existing older cutblocks that are visible have met visually effective green-up based on slope, stocking, tree heights and appearance. - Private land (and rock) areas were removed from the gross Visual Landscape Unit area to calculate the net Visual Landscape Unit area. Any human-made alterations in private land areas are therefore not considered, though appear to be minimal at this time regardless.  If Yes, describe design deficiencies below: N/A	Yes ___ No <u>X</u>
If applicable, list any additional design techniques used and/or state reasons why certain design techniques could not be employed. <b>Un-naturally straight timber harvest boundary lines and rectangular shapes / corners (in perspective view) have been avoided or kept to a minimum.</b>	



### 3. ASSESSING NUMERICAL DATA

Complete either the clearcut or partial-cutting section below depending on the silviculture system used.

#### Percent Alteration Worksheet for Clearcutting

Use photograph or computer simulation output from each viewpoint for percent alteration calculations. See Appendix 8 of Visual Impact Assessment Guidebook (2 <sup>nd</sup> edition, Jan 2001) for example of calculation.	VP1	VP2	VP3	VP4		
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1. Total area of landform/VSU in perspective view as seen from each viewpoint (measured in cm <sup>2</sup> ) net of private land and rock.	144.0	276.0	128.0	68.3		
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2. Visible ground area of <i>proposed</i> alteration(s) in perspective view as seen from each viewpoint (measured in cm <sup>2</sup> )	1.9	10.7	4.4	0.5		
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3. Visible ground area of all <i>existing</i> alterations in non-VEG state in perspective view as seen from each viewpoint (measured in cm <sup>2</sup> )	0.0	0.0	0.0	0.0		
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4. Total % alteration of the viewshed in perspective view as seen from each viewpoint	1.3%	3.9%	3.4%	0.7%		
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Identify for each viewpoint which VQO will be achieved based on % alteration. See Table 3 in VIA Guidebook for % alteration guidelines.	R	PR	PR	R		
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Which VQO would the proposed alteration, in combination with any existing non-VEG alterations, meet from all the selected viewpoints based on percent alteration only?  
 P \_\_ R \_\_ PR X M \_\_ MM \_\_ or Other \_\_\_\_\_


#### Partial-cutting Evaluation – Not applicable to CP 405

What percent volume or stems retention is proposed?	% Volume Remaining	% Stems Remaining
<b>Which VQO would the proposed alteration, in combination with any existing non-VEG alterations, meet from all the selected viewpoints based on volume or stems remaining?</b> (See Table 4 in VIA Guidebook (2 <sup>nd</sup> edition, Jan 2001) for partial-cutting guidelines, if applicable) P __ R __ PR __ M __ MM __		

## VIA Summary - CP 405 blks 1, 2, 4, 5, 7

Does the proposal, in combination with any existing non-VEG alterations, achieve the basic definition for the established VQO? <b>Activities are visible, but remain subordinate.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Have visual design concepts and principles been incorporated into block/road design? <b>Block Boundary and WTRA Design, Reserves, and dispersed leave trees work in concert to ensure Visual Impacts will be minimized.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Does the proposal, in combination with any existing non-VEG alterations, fall within the numerical ranges for the established VQO? <b>Less than 7.0 percent alteration.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Given the three criteria listed above, does the proposal meet the established VQO from all the selected viewpoint(s)? <b>The proposal meets the established VQO based on the basic definition of PR, percent alteration, and the size, shape and design of proposed blocks.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Completed By: Timberland Consultants (2001) Date Completed: June 3, 2020.

	
	Robert Borhi, RPF    June 3, 2020 <i>I certify that the work described herein fulfils standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.</i>

**NOTES:**

1. Proposed alterations are assessed using three criteria (the first two being the most critical ones): (1) meeting basic definition and intent of VQO, (2) quality of design, and (3) scale of alteration.
2. Silvicultural systems leaving significant tree cover will be assessed using volume or stems remaining rather than by scale of alteration as outlined in *Visual Impacts of Partial Cutting* (1997).
3. Visual quality objectives must be achieved from all selected viewpoints.

**ADDITIONAL CONSIDERATIONS**

Has this visual impact assessment incorporated all known alterations proposed in the scenic area for the next 5 years (i.e., all operations proposed by the same or different licensees)? [ In scenic areas where operating areas are shared among licensees, there should be co-ordination between licensees in preparing VIAs (i.e., existing and proposed cutblocks/roads, if visible from the same viewpoints, must be shown for all licensees). Potential benefits are that one VIA may satisfy the requirements of several licensees, and/or digital data may be shared between licensees when preparing the VIAs.] **Yes  No**

Comments: \_\_\_\_\_



Photography provided by Timberland Consultants(August 2019)  
Camera: Canon EOS Rebel 2Ti, Fixed 50mm Lens

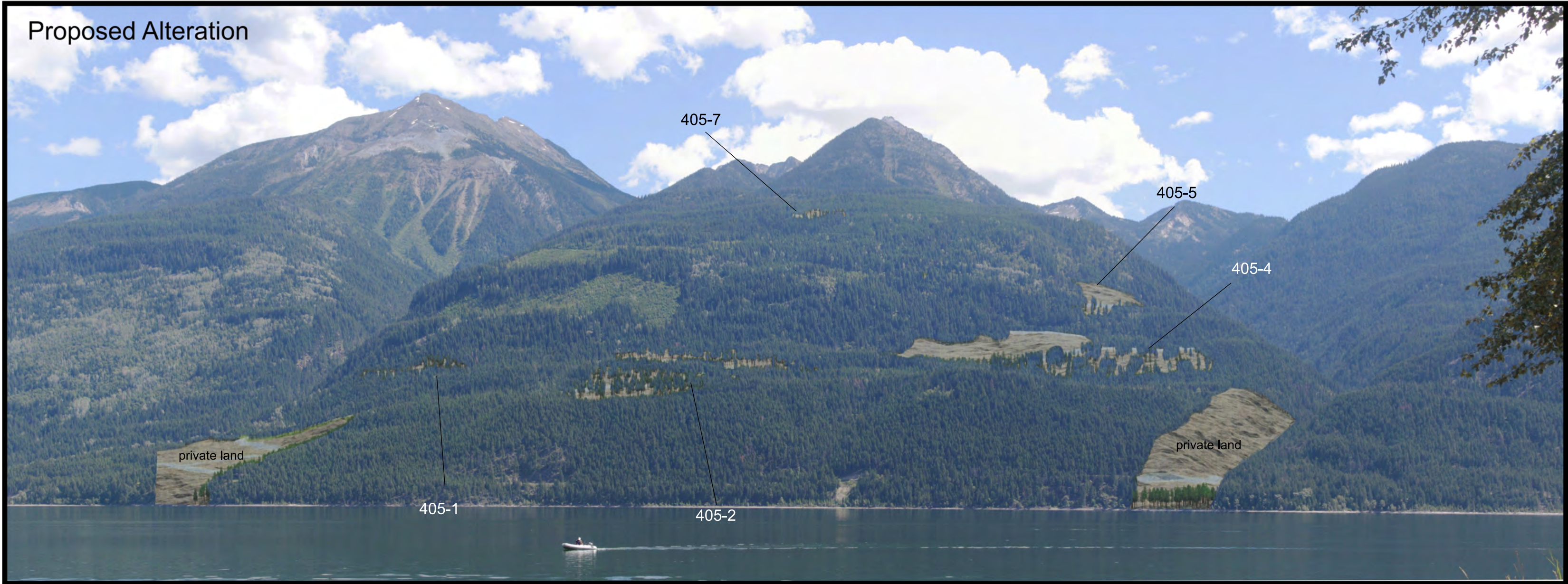


Viewpoint 2  
Lost Ledge Campground

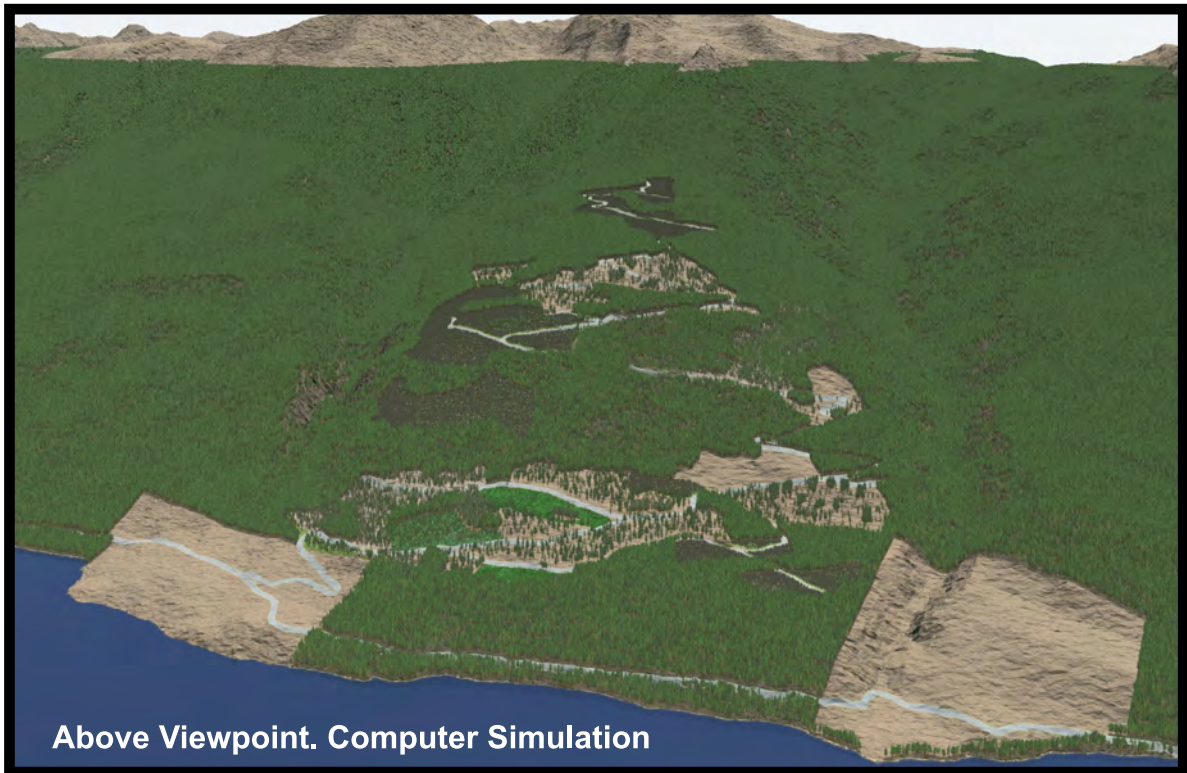


Existing Condition

Photography provided by Timberland Consultants(August 2019)  
Camera: Canon EOS Rebel 2Ti, Fixed 50mm Lens

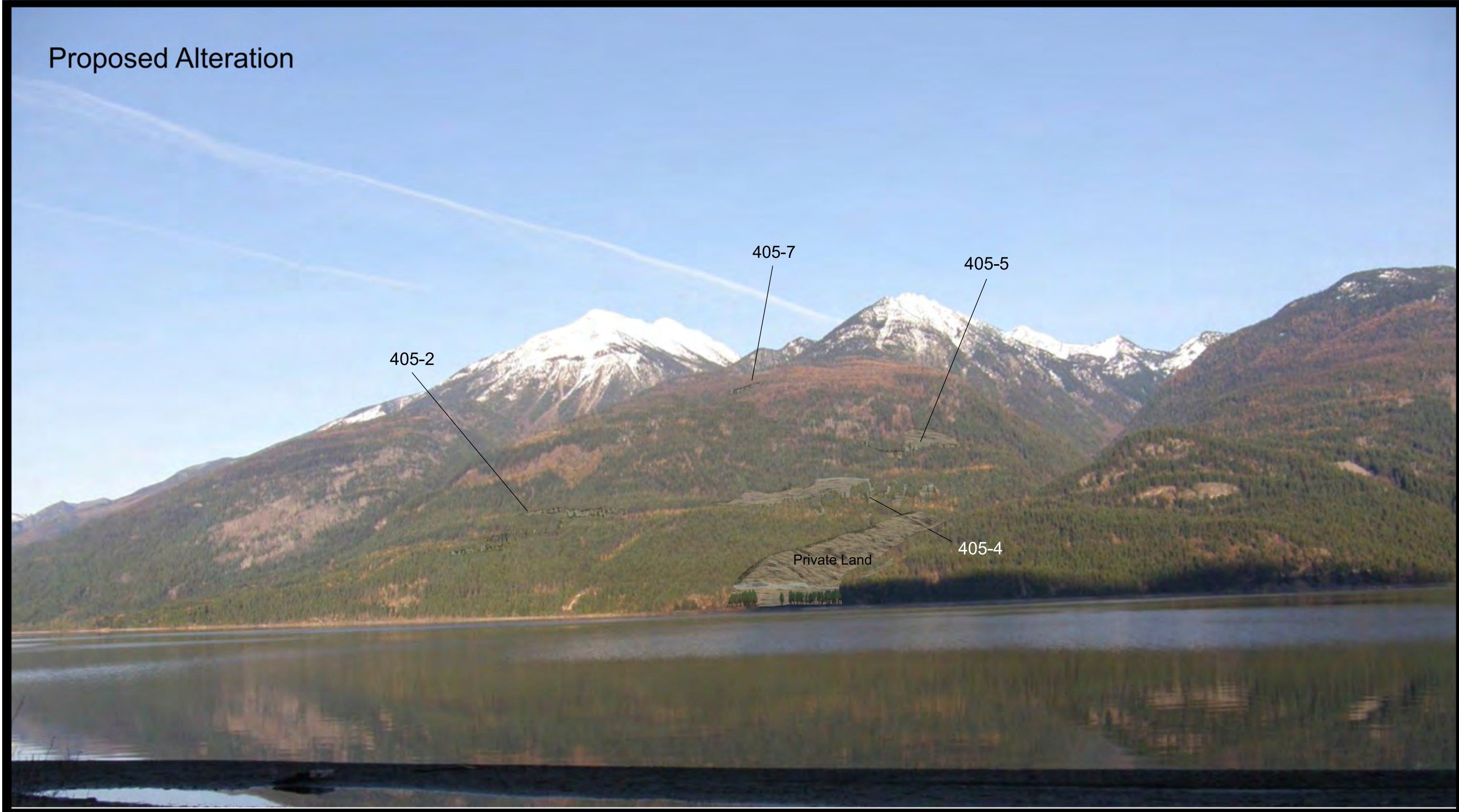
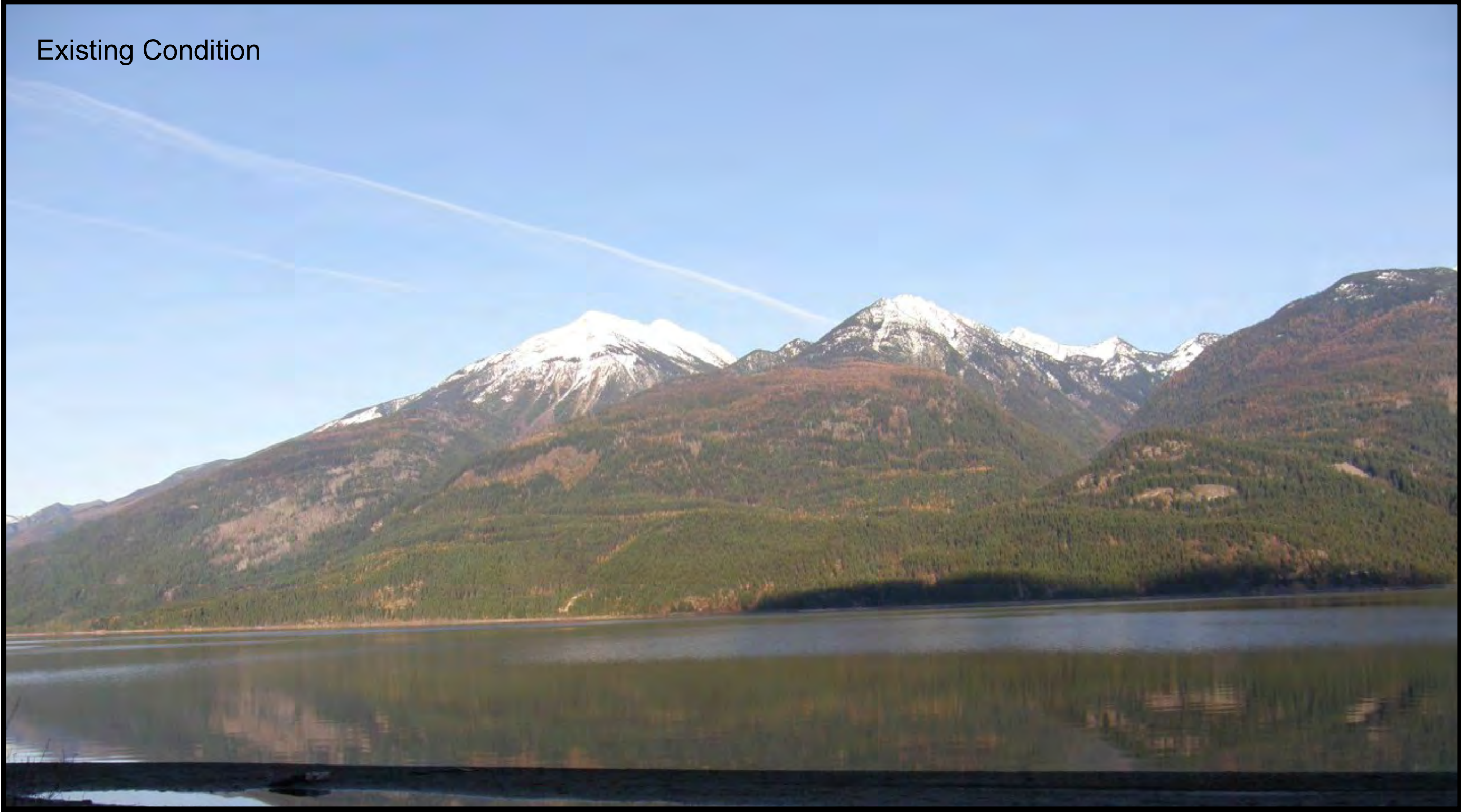


Proposed Alteration



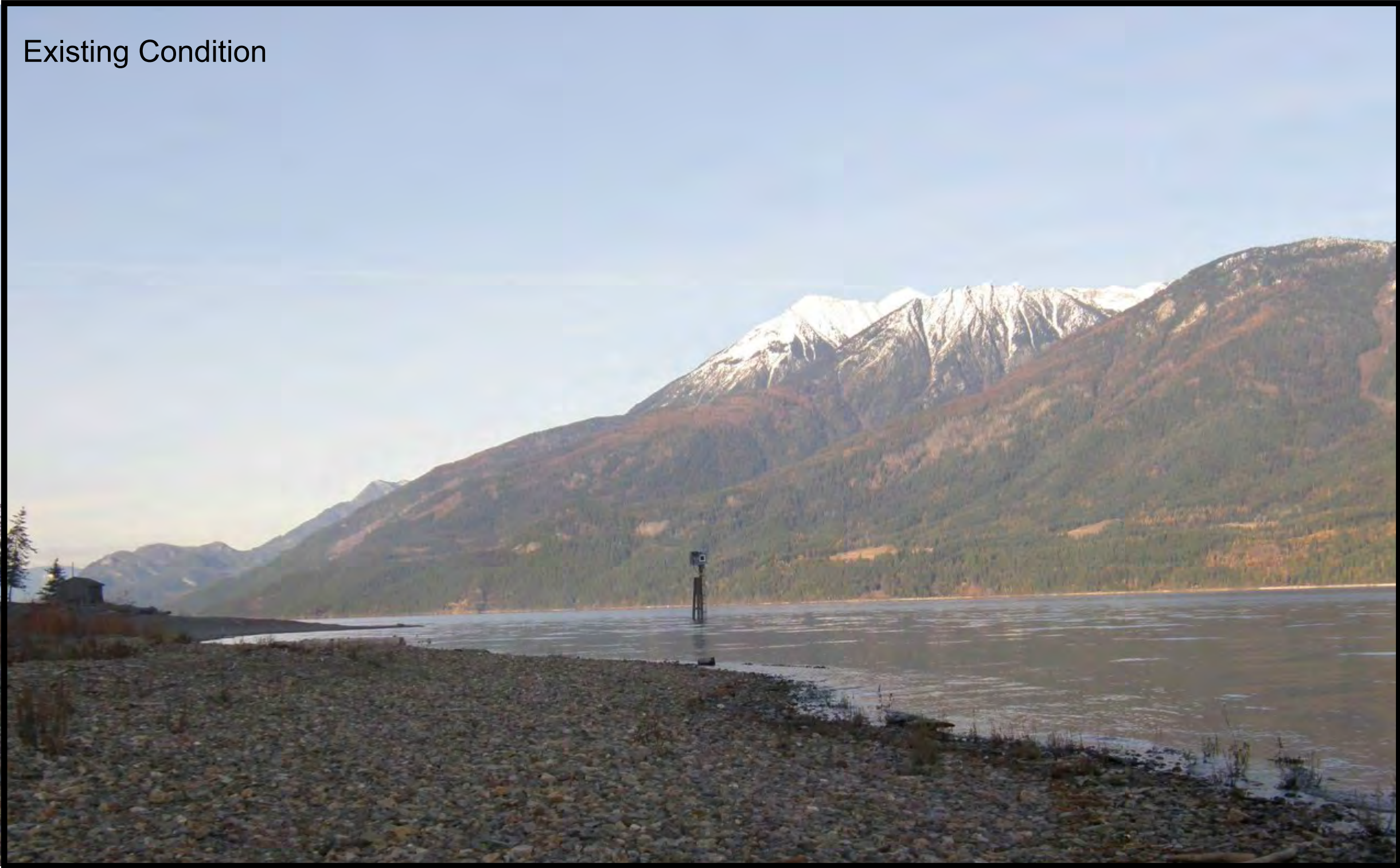
Above Viewpoint. Computer Simulation

Viewpoint 3  
Marine Beach

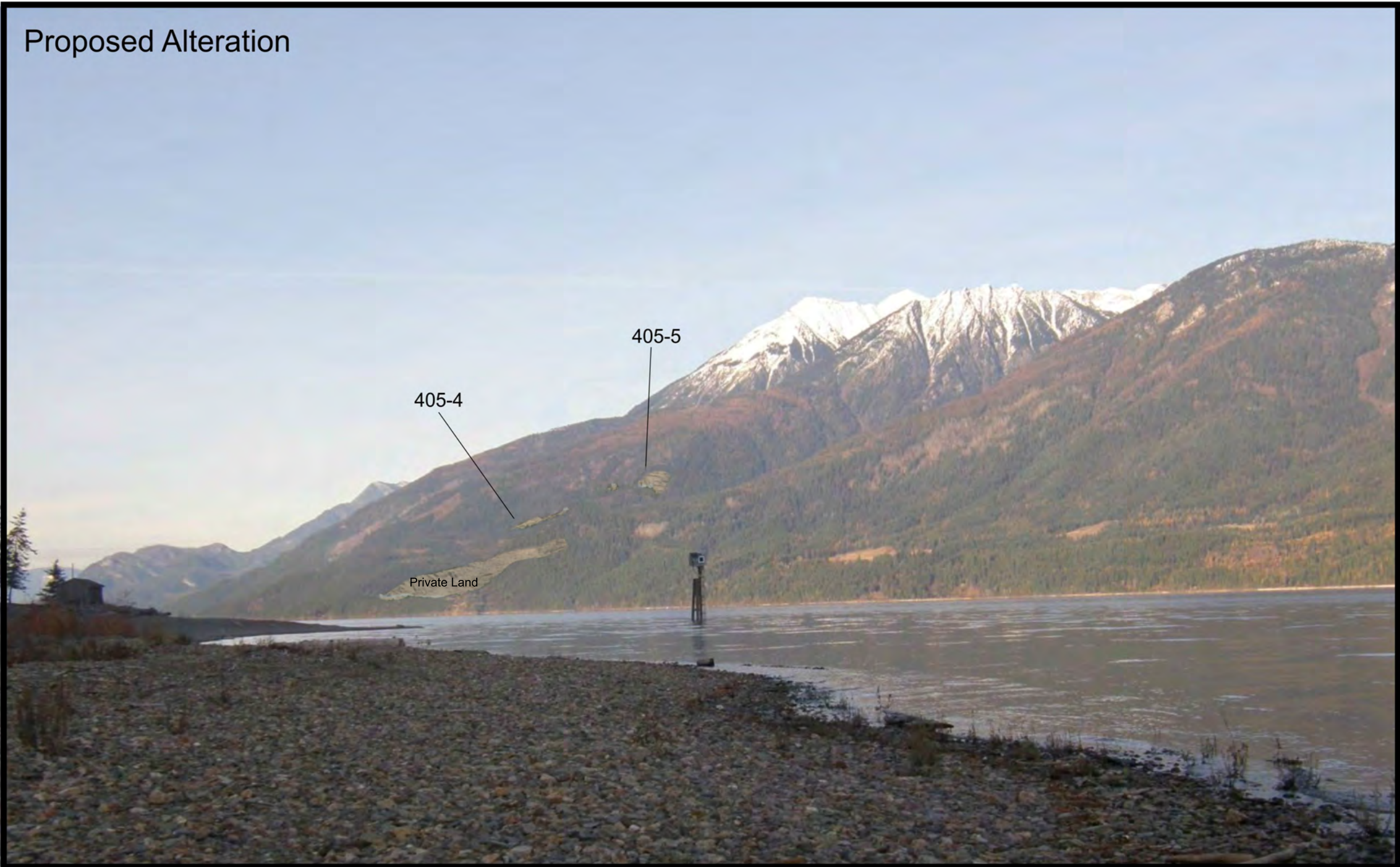


Viewpoint 4  
Schroeder Creek

Existing Condition

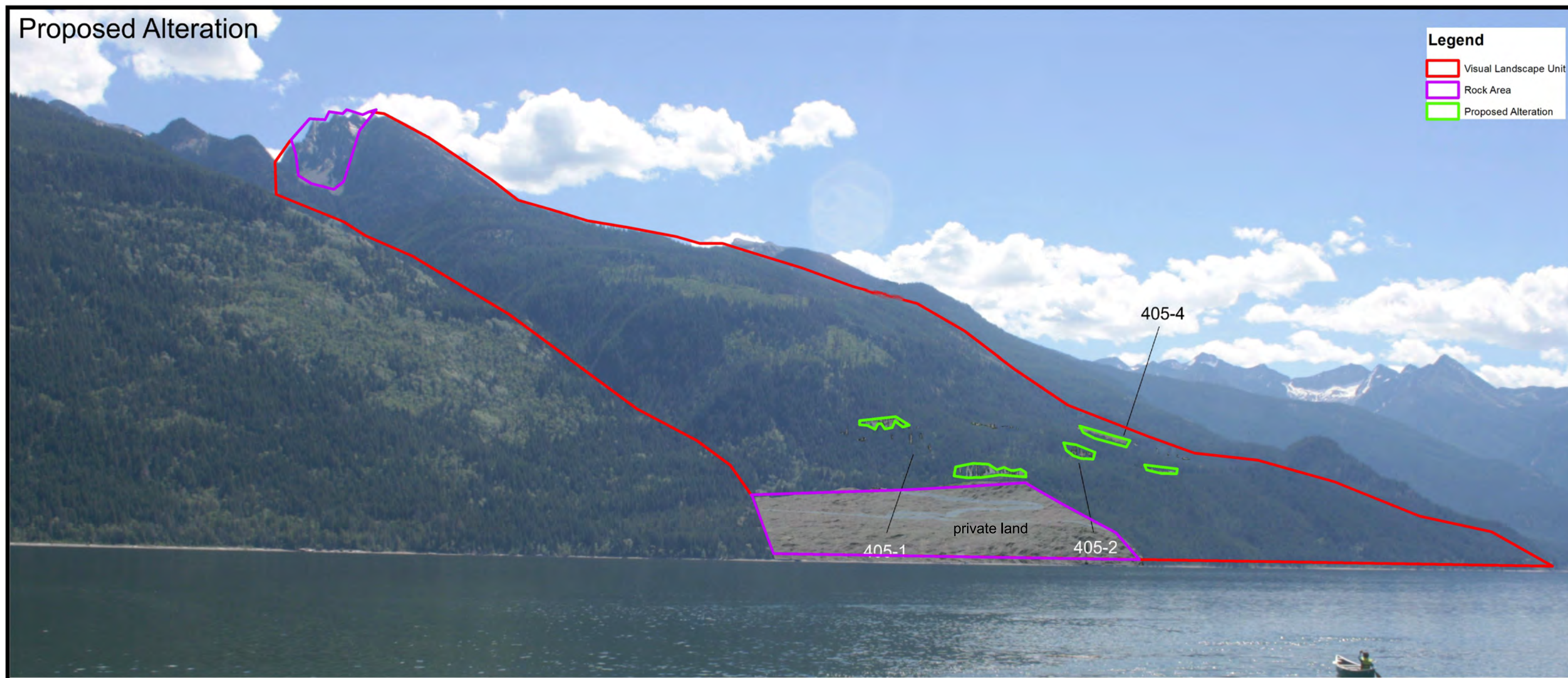


Proposed Alteration



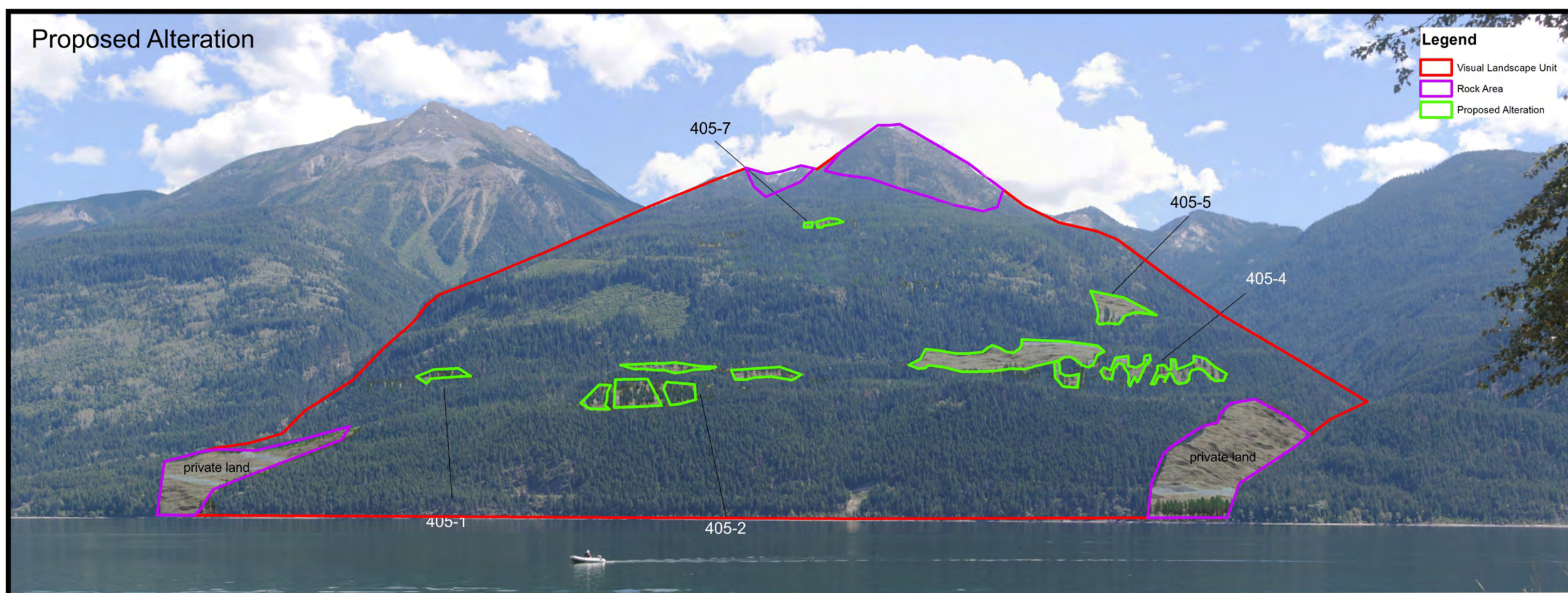
# Calculations

## Viewpoint 1 Davis Creek Campground



Visual Landscape Unit (VLU): 168 cm<sup>2</sup>  
 Rock/Private Land: 24 cm<sup>2</sup>  
 Net VLU: 144.0 cm<sup>2</sup>  
 Proposed Development: 1.9 cm<sup>2</sup>  
 %Alteration: 1.3% (Retention)

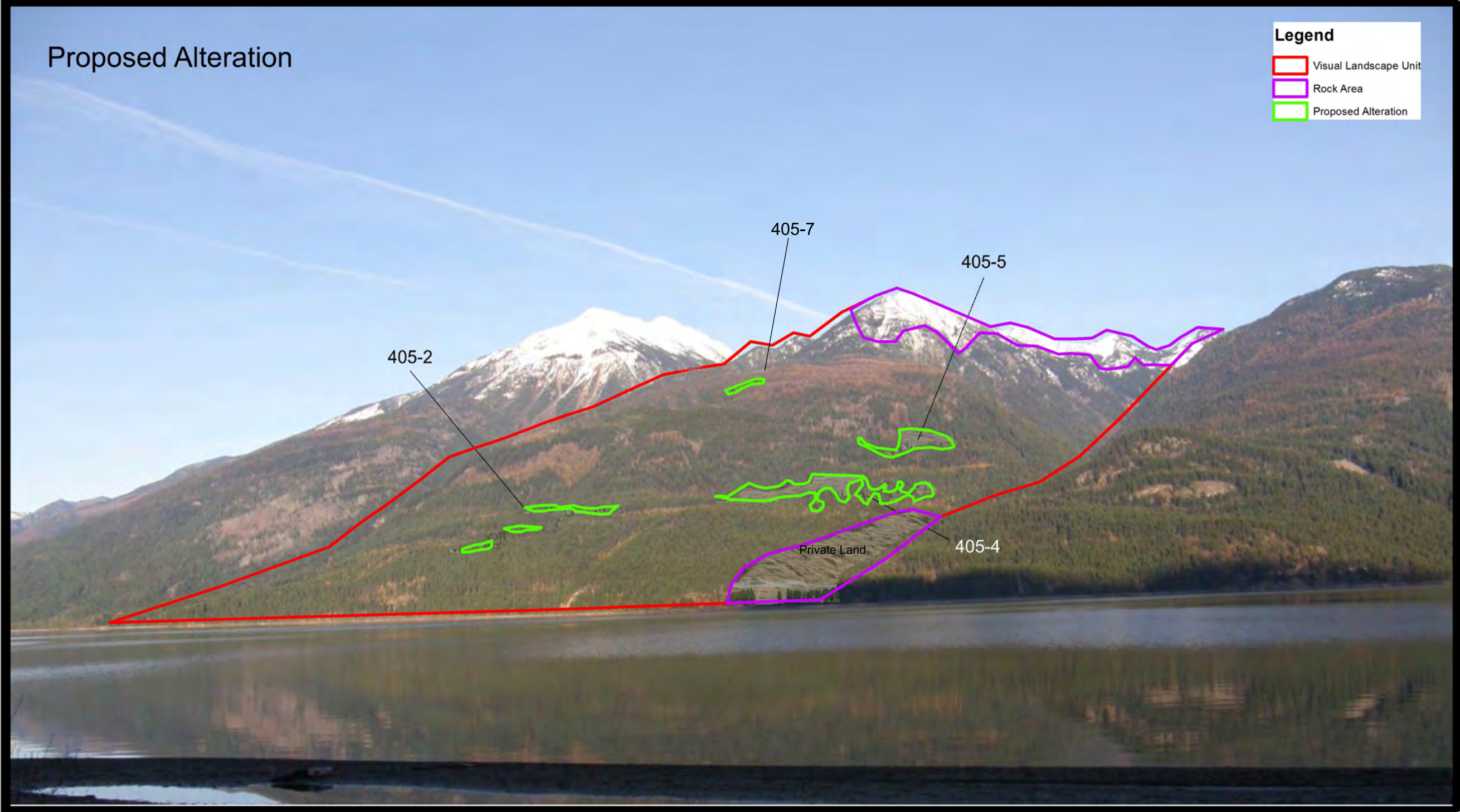
## Viewpoint 2 Lost Ledge Campground



Visual Landscape Unit (VLU): 303cm<sup>2</sup>  
 Rock/Private Land: 27 cm<sup>2</sup>  
 Net VLU: 276 cm<sup>2</sup>  
 Proposed Development: 10.7 cm<sup>2</sup>  
 %Alteration: 3.9% (Partial Retention)

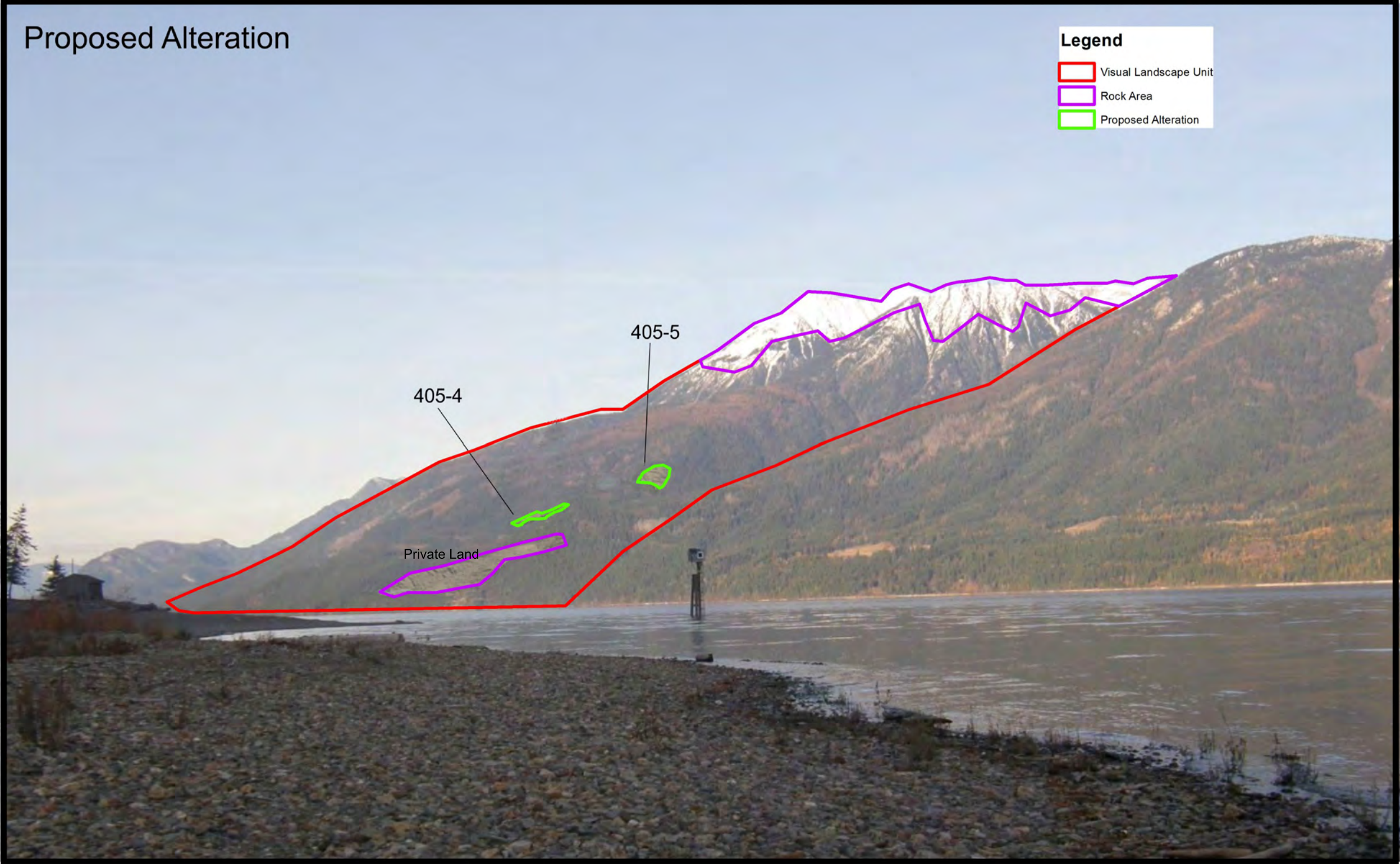


**Viewpoint 3  
Marine Beach**



Visual Landscape Unit (VLU): 143cm<sup>2</sup>  
 Rock/Private Land: 15.0 cm<sup>2</sup>  
 Net VLU: 128 cm<sup>2</sup>  
 Proposed Development: 4.4 cm<sup>2</sup>  
 %Alteration: 3.4% (Partial Retention)

**Viewpoint 4  
Schroeder Creek**



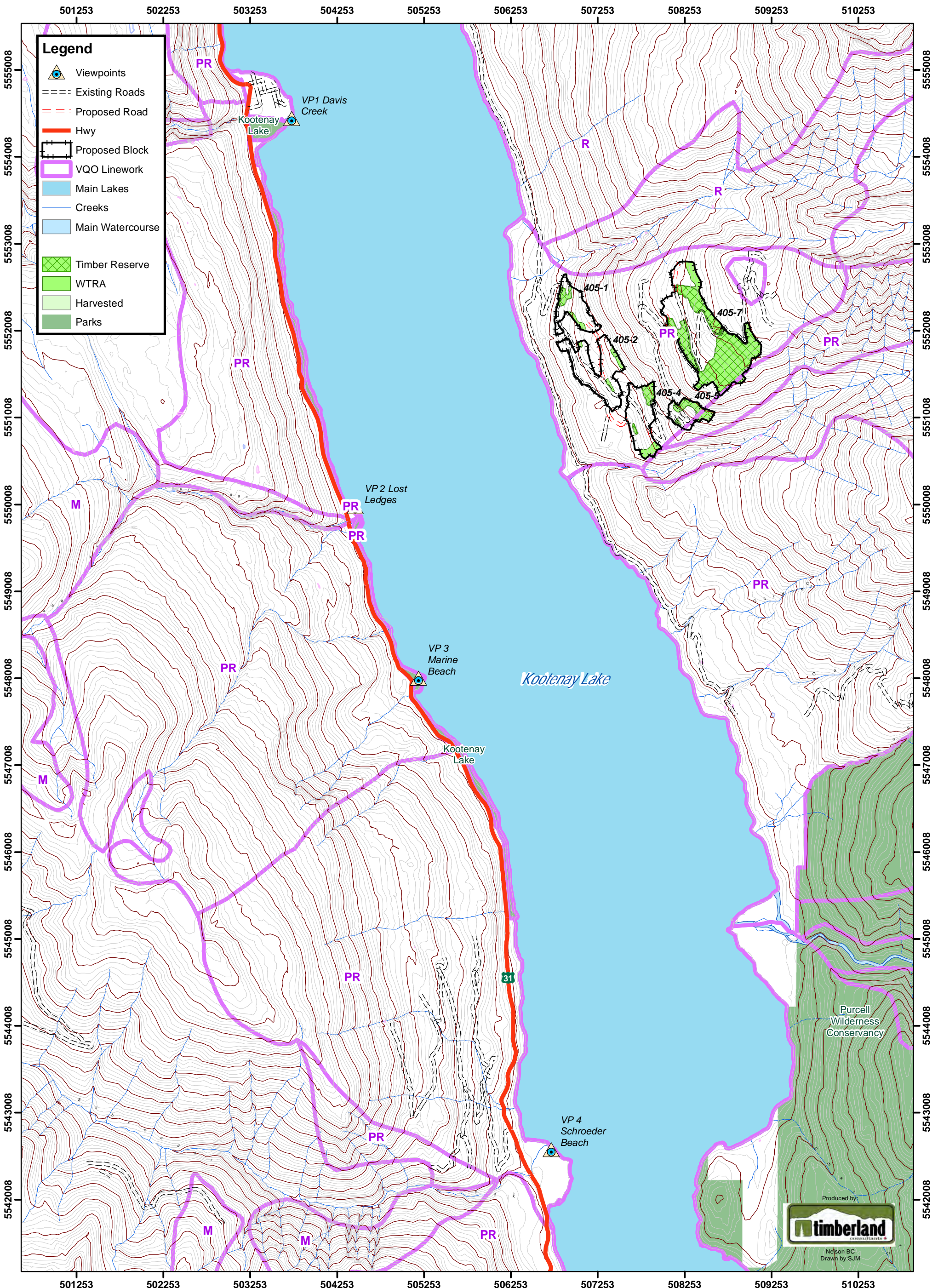
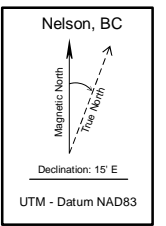
Visual Landscape Unit (VLU): 81.4cm<sup>2</sup>  
 Rock/Private Land: 13.0 cm<sup>2</sup>  
 Net VLU: 68.3 cm<sup>2</sup>  
 Proposed Development: 0.5 cm<sup>2</sup>  
 %Alteration: 0.7% (Retention)






# Cooper Creek Cedar

## VIA Overview Map

CP 405

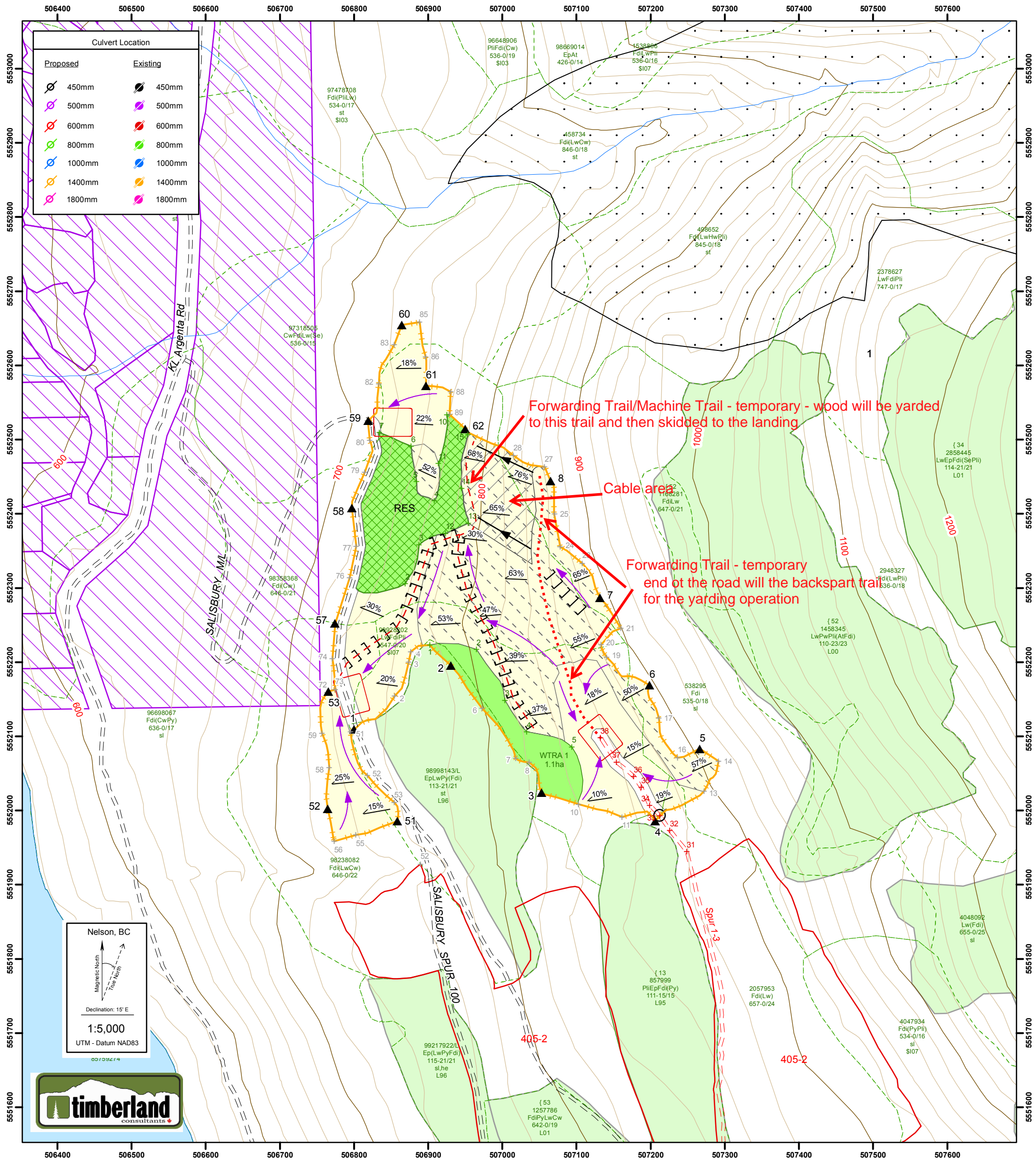
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







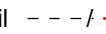



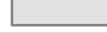





















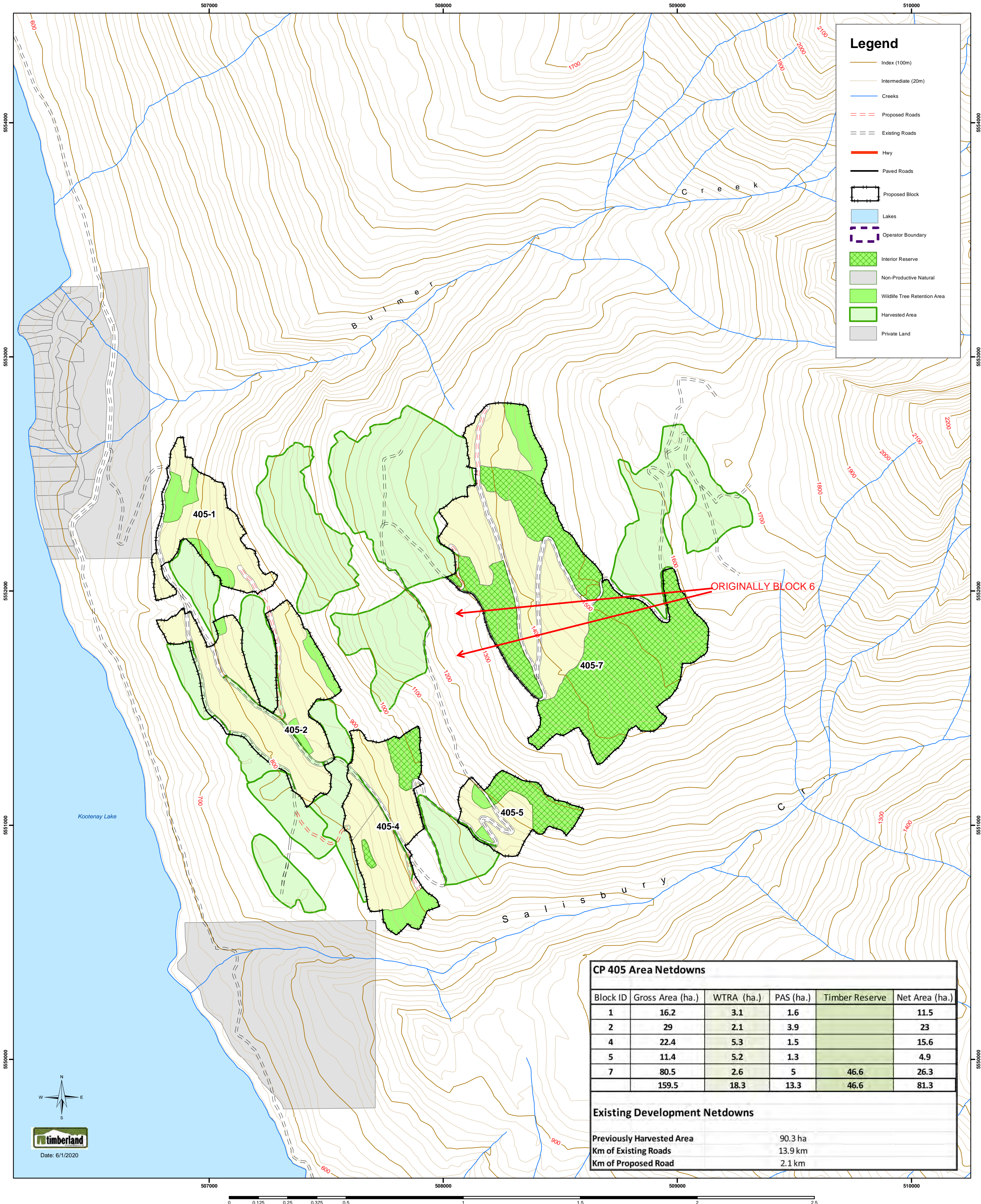
-  Gross Area: 16.2 ha
-  HU 1: Ground-Based Harvest - 12.2 ha NET
-  WTRA - 1.1 ha NET
-  Timber Reserve - 2.0 ha NET
-  PAS - 0.9 ha

# HP Map 405-1 Salisbury Creek

# Cooper Creek Cedar Ltd.



Date: 5/11/2020	Drawn By: AD	Elevation (min / max): 730-910mm	Mapsheet: 82K016	Reach Break  Wet  Wallow 
Cutblock Boundary 	Proposed Perm./Temp Access Rd 	Steep Slopes >35% 	Cable 	
Existing Cutblock 	Exist./Prop. Road  = = - / - = = Rock # Bear Den 	Exist./Perm/Temp Landing  /  / 	Stream  NCD  Seeps 	
Wildlife Tree Retention Area 	Exist./Prop. SkidTrail  Prop. Backspar Trail 	Slope Arrow  25%	Prop. Skid Crossing 	
OGMA  Non-Merch 	Yarding Direction  Skid Direction 	<b>Terrain Hazard Stability</b> (Level B/C - Level D)		
Park  Private Land 	Existing RMA  MFZ (5m)  RMZ 	Class IV / P 	Class V / U 	
Bench  Draw 	Tower Setting  Intermediate Support  POD 	Path: G:\PROJ\cooper_crkiCP405\MAPSI\HPICP405_HP_Map_BLK1.mxd		
Station  +12 Falling Corner  FC2	Ridge  Cliff  Slope Break 			



ORIGINALLY BLOCK 6

Block ID	Gross Area (ha.)	WTRA (ha.)	PAS (ha.)	Timber Reserve	Net Area (ha.)
1	16.2	3.1	1.6		11.5
2	29	2.1	3.9		23
4	22.4	5.3	1.5		15.6
5	11.4	5.2	1.3		4.9
7	80.5	2.6	5	46.6	26.3
	159.5	18.3	13.3	46.6	81.3

Previously Harvested Area	90.3 ha
Km of Existing Roads	13.9 km
Km of Proposed Road	2.1 km



Date: 6/1/2020