Drake Forestry

Visual Impact Assessment
BCTS Williams Lake – Quesnel Lake TA1918

Block(s) – 153, 155, 160, 176
October 22, 2021

Overview
This Visual Impact Assessment (VIA) is for blocks 153, 155, 160 and 176 within BCTS License TA1918. These blocks are within the Cariboo Operating Area, and are planned for harvesting using a conventional harvest method. Proposed clear-cuts with reserves silviculture system are assumed be utilized. The blocks are located approximatley 9km north east of Likely, within the Cariboo-Chilcotin Natural Resource District.

Stakeholder Perspective
The proposed block is located within the vicinity of Wolverine Lake. This lake contains an established recreational site (Wolverine Lake Rec Site) just off of Kangaroo Creek FSR. This site is known for activities such as fishing, boating and camping.

No visual specific stakeholder input was obtained.

1. VLI Information

Polygon No.	VAC	EVQO	VSC	EVC	Date VLI Completed
258	N/A	M	3	N/A	July 6, 2011

2. Viewpoint and Photography Information

Viewpoint	Description	Viewpoint Importance[1]	Coordinates	Elevation	Viewing Direction	Viewing Distance
1	Access road from Rec Site	1	52° 40’ 19.0” N 121° 28’ 51.6” W	936m	085° to 124°	Mid-ground (2.5 to 5.2km)
2	Access road from Rec Site	1	52° 40’ 56.1” N 121° 29’ 55.5” W	1022m	104° to 126°	Mid-ground (3.8 to 6.9 km)
2A	Access road from Rec Site	1	52° 40’ 37.58” N 121° 29’ 27.37” W	981m	096° to 125°	Mid-ground (3.1 to 6.1 km)

[1] Viewpoint importance and duration is defined as:
(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.

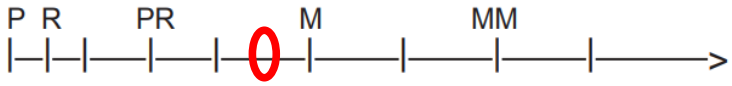
3. Basic VQO Assessment

Blocks 153, 155 and 160 were assessed in the field as visible from viewpoint 2 and not visible from viewpoints 1 and 2A. Block 176 was deemed non-vis from all viewpoints due to the aspect of the block facing away from the chosen viewpoints.

The existing forested road corridor provide it with adequate visual screening from the impacts of road and block development. The visibility from viewpoint 2 is subordinate given the already established visual screen of road corridor.

No viewpoints were established along the Keithley Creek Rd as there was no visibility outside of the existing forested road corridor. See attached photos.

The proposed alteration would meet the following VQO if taking in account visual design strategies and tactics from all of the selected viewpoints.



4. Visual Design Observations

	Viewpoint 1	Viewpoint 2	Viewpoint 2A
Response to visual force lines *(Strong – Good, Not Apparent – Moderate, Weak – Poor)*	Moderate	Moderate	Moderate
Borrows from natural character *(Fully – Good, Partially – Moderate, Not at all – Poor)*	Moderate	Moderate	Moderate
Incorporating edge treatment *(Feathering and Irregular Boundaries – Good, Feathering or Irregular Boundaries – Moderate, Neither Aspect Present – Poor)*	Moderate	Moderate	Moderate
Distance between alteration and viewpoint *(>8km – Good, >1 and <8km – Moderate, <1km – Poor)*	Moderate	Moderate	Moderate
Position of opening on the landform *(Lower Down & To One Side – Good, Small Opening Near Centre – Moderate, High on the Landscape or Large near Centre – Poor)*	Moderate	Moderate	Moderate

Proposed blocks 153, 155, 160 and 176 and it's associated road development are well within the VQO definition of 'Modification'.

The design of the cutblocks have utilized the principles from the Province of British Columbia's *Golden Rules of Design* to achieve a natural appearance as follows:

- The general shape, scale and position of the proposed harvest units fit the natural character of the landscape.
- The proposed block and roads are located on relatively gentle slopes which will reduce their visual effects.

5. Assessing Numerical Data

Viewpoint	Block(s) and Landform	EVQO	Total Landform Area (unitless)	Visible Ground Area (unitless)	Total Percent Alteration[1] %	VQO Achieved
1	153, 155, 160 (Landform 2) 176 (Landform 1)	M	11.03	0.00	0.0%	Preservation

2	153, 155, 160 (Landform 2) 176 (Landform 1)	M	1.5	0.11	7.3%	Modification
2A	153, 155, 160 (Landform 2) 176 (Landform 1)	M	8.64	0.00	0.0%	Preservation

[1] Percent calculated from the visible ground of the proposed alterations in perspective view as seen from each viewpoint divided by the total landform area in perspective view as seen from each viewpoint.

The proposed alteration, in combination with any existing non-VEG alterations, would meet the following VQO from all selected viewpoints based on percentage only.

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%

6. Summary

Visual design concepts and principles have been incorporated into block and road design of the development of proposed blocks 153, 155, 160 and 176 in Cariboo Lake. The proposed blocks were deemed non-vis from viewpoints 1 and 2A. Blocks 153, 155, 160 were visually subordinate from viewpoint 2. Although block 176 is located outside of an established VQO and scenic area, it was included in this report. Overall, the impact of the proposed block and road development was assessed and determined to exceed both the definition and percent alteration of 'Modification'. No re-design of the current block shapes are required.

Attached to this assessment are the following:

- Photos and simulations from all viewpoints
- VIA Overview Map
- Lines of Force Overview Map



Joshua Klok, RFT
Drake Forestry Services
October 22, 2021



Photo (left) Location: Along Keithley Creek Rd

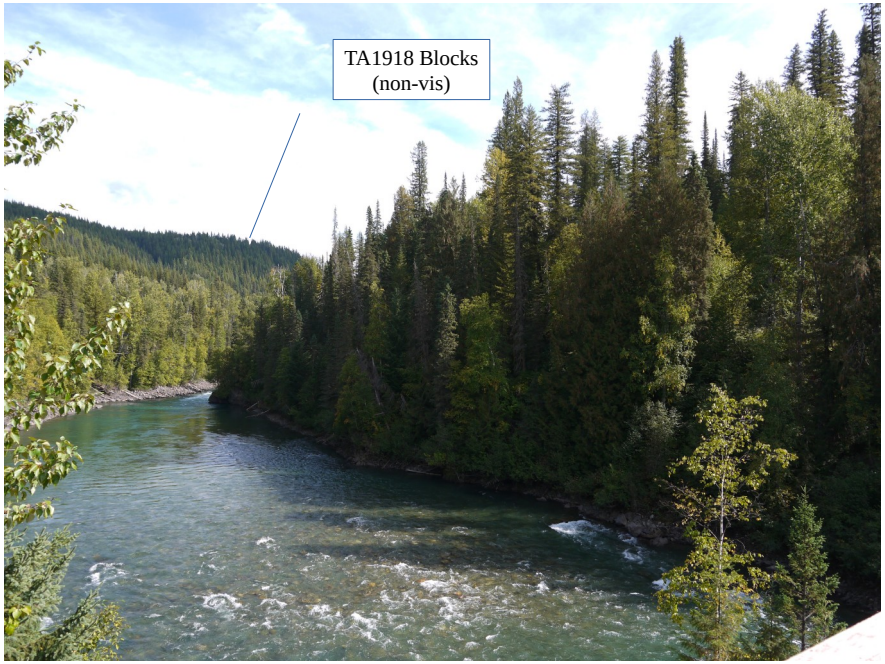
Description:

Keithley Creek Rd road corridor contains tall mature trees which screens any potential visibility of the TA1918 blocks. No viewpoints were selected along this road for that reason.

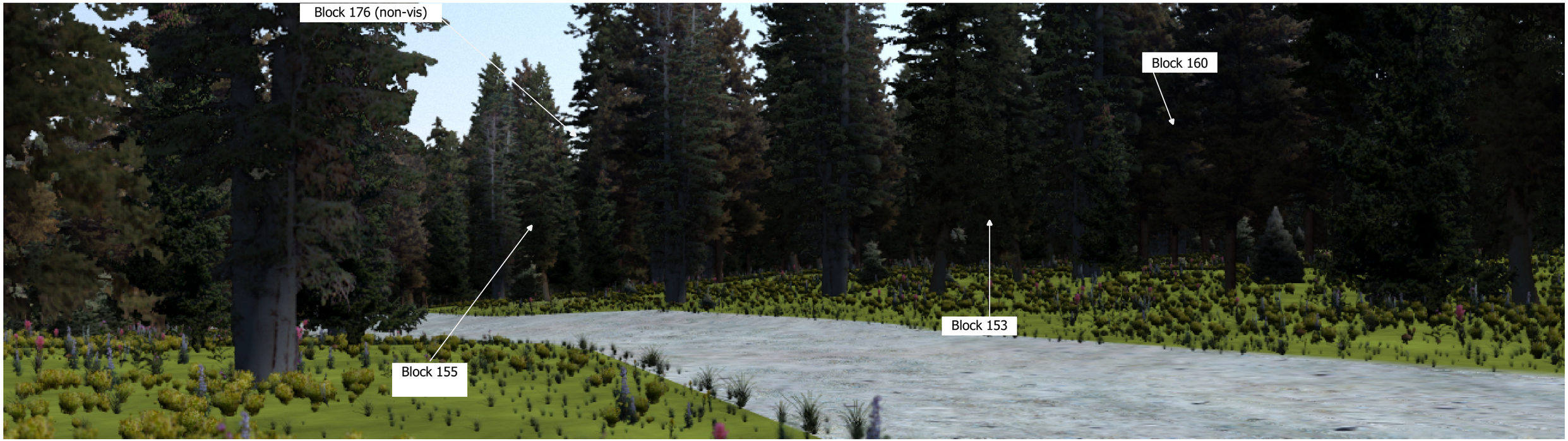
Photo (right) Location: Keithley Creek Rd bridge crossing the Cariboo River

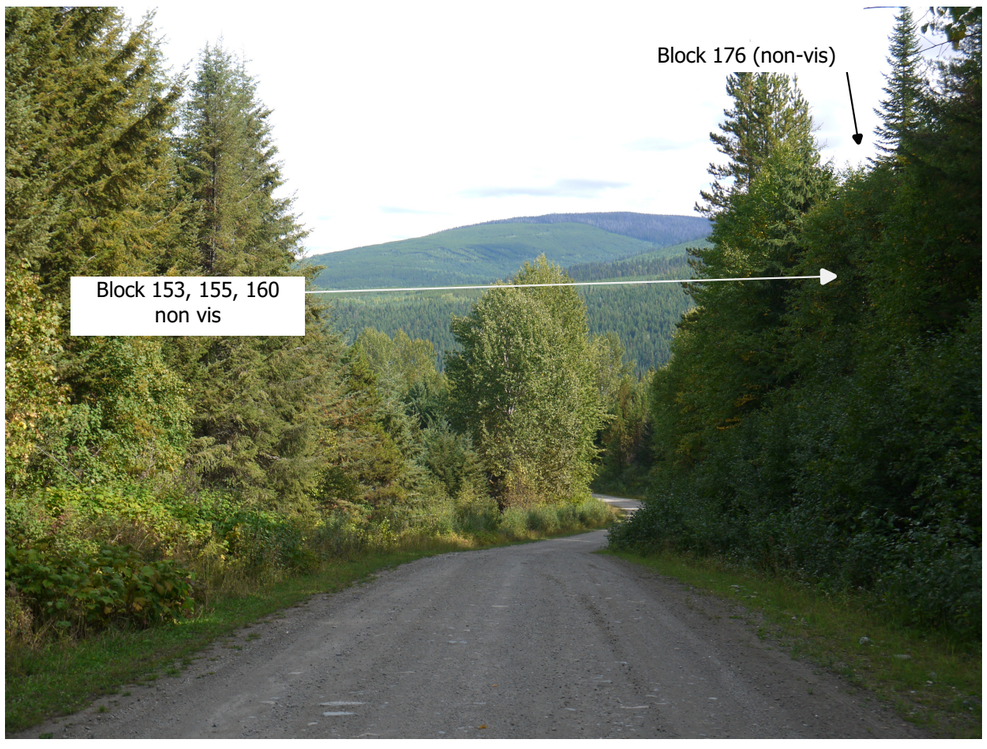
Description:

This photo is taken in the direction of the TA1918 blocks from the bridge site. There is no visibility of the proposed development from this site.



Viewpoint Simulation VP1 / TA1918 (Blocks 153, 155, 160, 176) All 4 blocks not visible





Area of Interest	Landform	VQO	VQO Description
Cariboo Lake	Landform 1	M	M-Modification = 7.1-18% of landform in perspective view (clearcut)

Landform	License	Proposed Block	Landform Area	Block Area	Percent Alteration	Visibility
Landform 1	TA1918	BLOCK 153, 155, 160	11.03	0	0	No

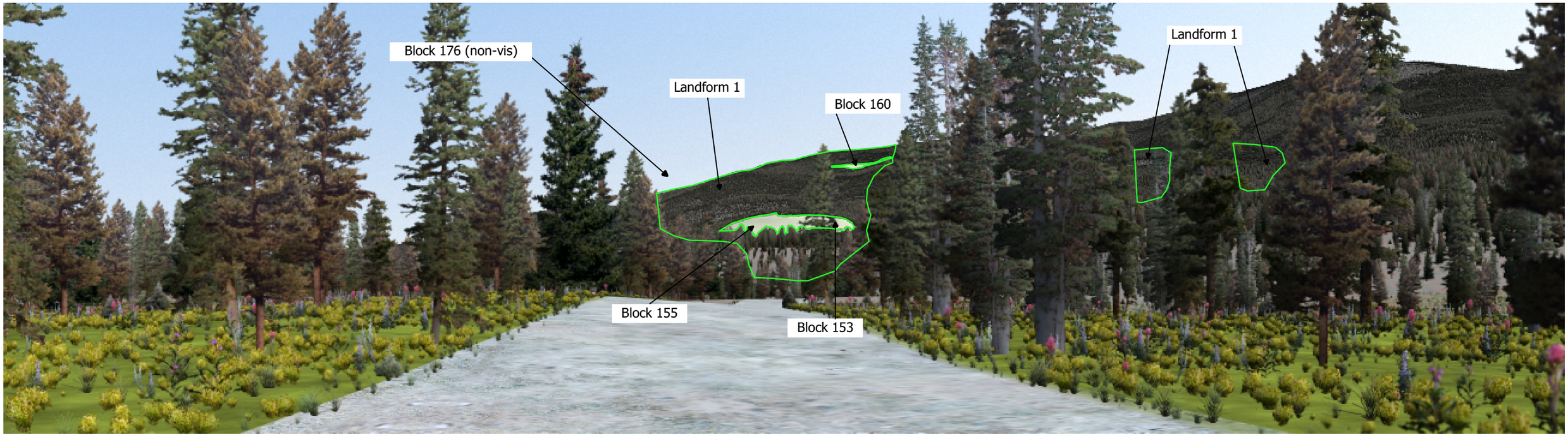
VP Name	Description	Lat & Long	Altitude (m)	Observer Height (m)	Azimuth	Viewpoint Distance (km)	Block
VP1	Access road to rec site	52° 40 19.0 N, 121° 28 51.6 W	936	1.6	85	2583	Block 155
VP1	Access road to rec site	52° 40 19.0 N, 121° 28 51.6 W	936	1.6	124	5253	Block 160
VP1	Access road to rec site	52° 40 19.0 N, 121° 28 51.6 W	936	1.6	106	2298	Block 153

Compiled by: Phil Cadorette / Drake Forestry Services

VIA Simulation rendered with "Visual Nature Studio"

21/10/2021

Viewpoint Simulation / TA1918 (Blocks 153, 155, 160, 176)





Area of Interest	Landform	VQO	VQO Description
Cariboo Lake	Landform 1	M	M-Modification = 7.1-18% of landform in perspective view (clearcut)

Landform	License	Proposed Block	Landform Area	Block Area	Percent Alteration	Visibility
Landform 1	TA1918	BLOCK 153, 155, 160	1.5	0.11	7.3	Yes

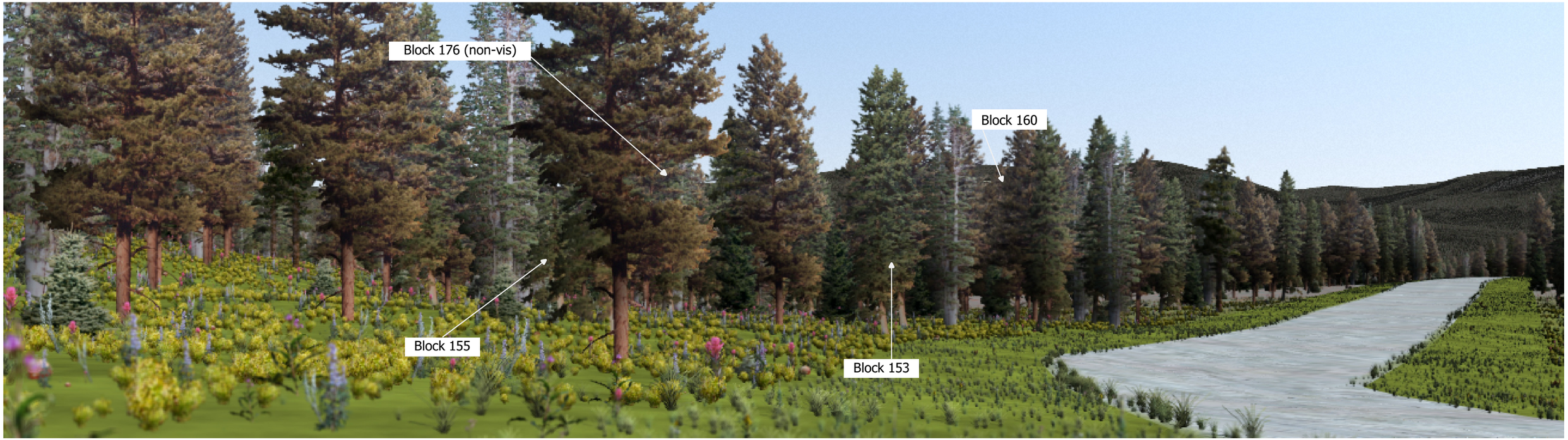
VP Name	Description	Lat & Long	Altitude (m)	Observer Height (m)	Azimuth	Viewpoint Distance (km)	Block
VP2	Access road to rec site	52° 40 56.1 N, 121° 29 55.5 W	1022	1.6	117	3.89	Block 155
VP2	Access road to rec site	52° 40 56.1 N, 121° 29 55.5 W	1022	1.6	104	3.87	Block 153
VP2	Access road to rec site	52° 40 56.1 N, 121° 29 55.5 W	1022	1.6	126	6.9	Block 160

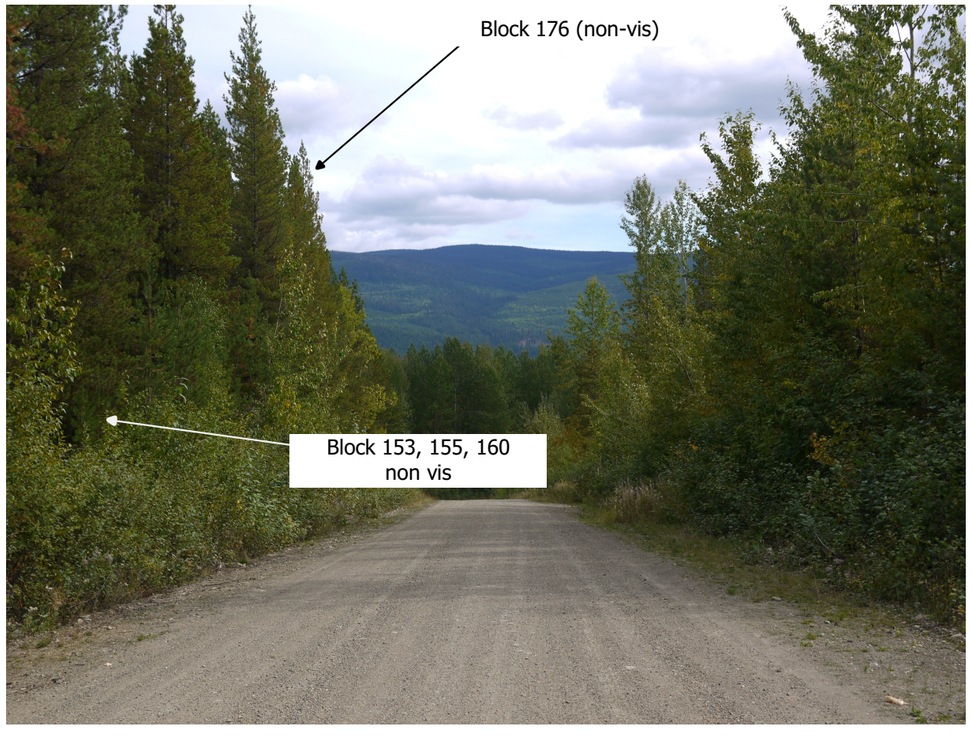
Compiled by: Phil Cadorette / Drake Forestry Services

VIA Simulation rendered with "Visual Nature Studio"

21/10/2021

Viewpoint Simulation 2A / TA1918 (Blocks 153, 155, 160, 176)
All 4 blocks not visible





Area of Interest	Landform	VQO	VQO Description
Cariboo Lake	Landform 1	M	M-Modification = 7.1-18% of landform in perspective view (clearcut)

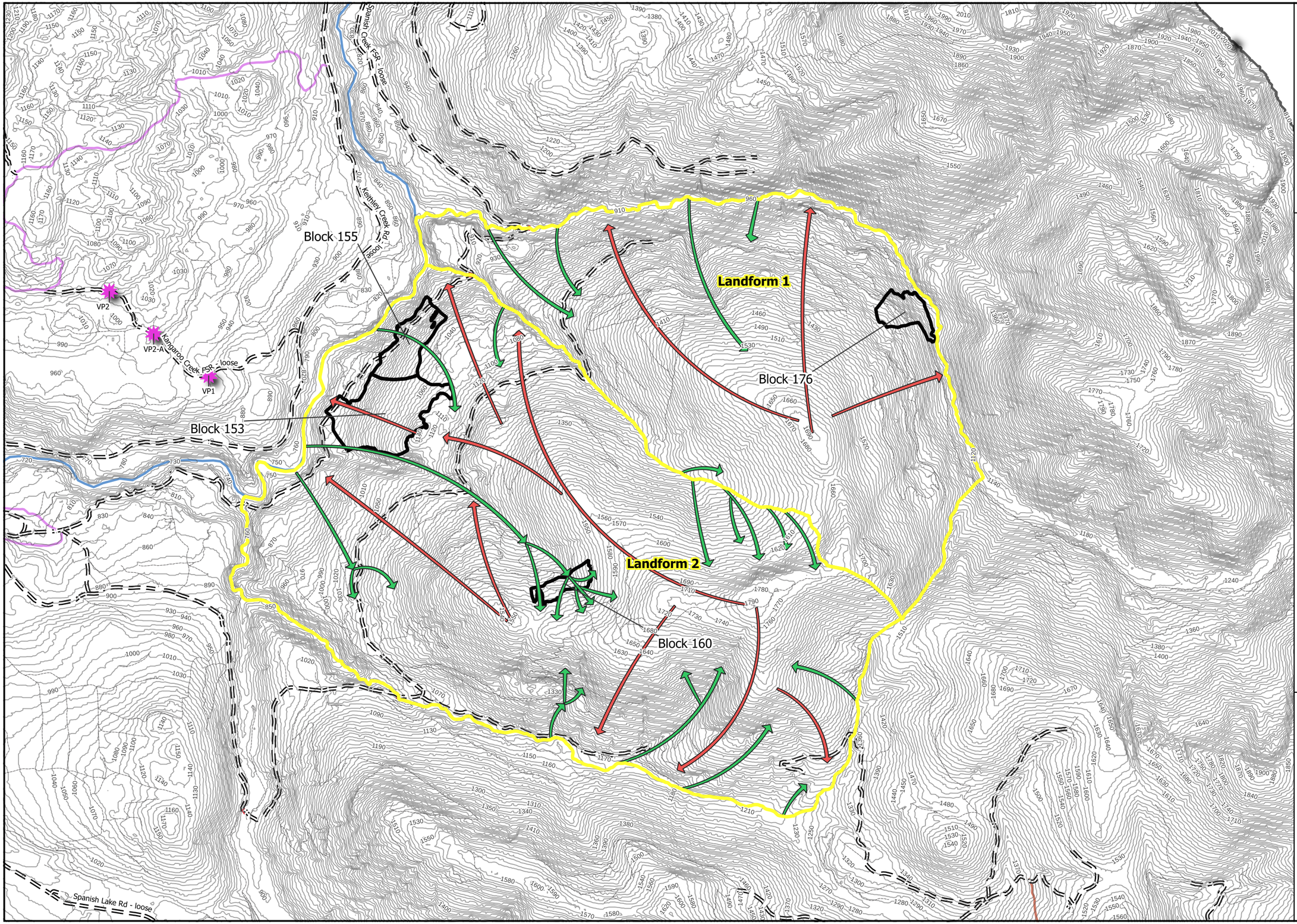
Landform	License	Proposed Block	Landform Area	Block Area	Percent Alteration	Visibility
Landform 1	TA1918	BLOCK 153, 155, 160	8.64	0	0	No

VP Name	Description	Lat & Long	Altitude (m)	Observer Height (m)	Azimuth	Viewpoint Distance (km)	Block
VP2-A	Access road to rec site	52°40'37.58"N, 121° 29'27.37"W	981	1.6	96	3.25	Block 155
VP2-A	Access road to rec site	52°40'37.58"N, 121° 29'27.37"W	981	1.6	113	3.13	Block 153
VP2-A	Access road to rec site	52°40'37.58"N, 121° 29'27.37"W	981	1.6	125	6.12	Block 160

Compiled by: Phil Cadorette / Drake Forestry Services

VIA Simulation rendered with "Visual Nature Studio"

21/10/2021



Landform Analysis

AOI: TA1918
Blocks 153, 155, 160, 176
Cariboo Lake

Author: P: Cadorette
Drake Forestry Services

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NAD83 / BC Albers
EPSG:3005

Cariboo Lake Data

- View Points
- Cariboo River
- Blocks of Interest
- Landforms
- Contours

Visual Lines of Force

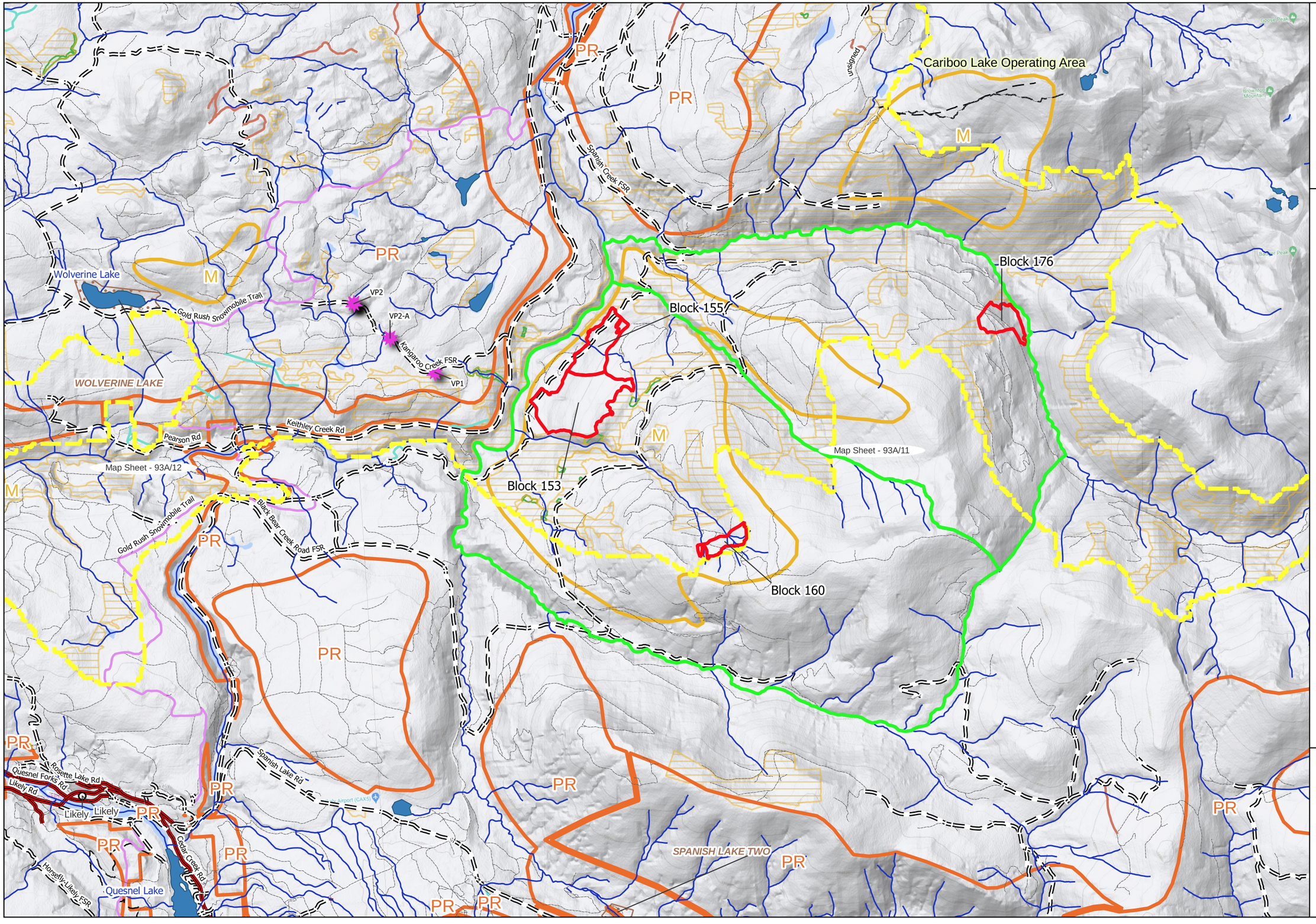
- Concavities
- Convexities

DRA Road Atlas

- loose
- overgrown
- paved
- rough
- seasonal

1:45,000

2,000 m



VIA
Planimetric Map

AOI: Cariboo Lake
TA1918

Author: P: Cadorette

Drake Forestry Services

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VIA AOI
View Points
Landforms
Blocks of Interest

Williams Lake Data
Towns & Cities
Mapsheet
BCTS Operating Area
Streams
TCC WTP
FTEN Recreation Area

Water Type
Water
TCC Adjacent Blocks

DRA Road Atlas
loose
overgrown
paved
rough
seasonal
unknown
Recreation Lines

VQO
M
PR

1:55,000
2 km