



**Slocan Integral Forestry Cooperative**

**Forest Stewardship Plan 2022 to 2027  
Community Forest Agreement K2R  
for Review and Comment**

Signature of the Person Required to Prepare this FSP:

---

Stephan Martineau  
Manager, SIFCo

Date:

Signature of the Preparing Registered Professional Forester

---

Erik Leslie, RPF 4724

"I certify that the work herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals."

Date:

## Table of Contents

1	Interpretation .....	1
1.1	Definitions under Acts and Regulations .....	1
1.2	Definitions Specific to this FSP .....	1
1.3	Objectives, Results, Strategies and Measures .....	2
2	Application of this FSP .....	3
2.1	Description of the Forest Stewardship Plan Area .....	3
2.2	Term of the Forest Stewardship Plan.....	3
2.3	Forest Development Units .....	4
2.4	Collaboration within Shared Management Units .....	6
	Agreement Holder Developed Strategy: Collaboration .....	6
2.5	Public Review and Comment Period .....	6
2.6	Public and Stakeholder Comments .....	7
2.7	Sharing Operating Plans .....	7
	Agreement holder developed Measures: Information Sharing of Operating Plans .....	7
3	Kootenay Boundary Higher Level Plan Order .....	8
4	Values, Objectives, and Practice Requirements .....	9
4.1	Soils .....	9
	Objective Set by FRPA/FPPR for Soils.....	9
4.2	Timber .....	9
4.2.1	Objectives Set by HLPO for Timber .....	9
4.2.2	Objectives Set by FRPA/FPPR for Timber .....	10
4.3	Wildlife .....	11
4.3.1	Objectives Set by HLPO for Wildlife .....	11
	Result for RMZO 5: .....	11
4.3.2	Objectives Set by FRPA/FPPR and GAR for Wildlife .....	11
	Agreement Holder Developed Result for FPPR Section 7(2) and GAR Sections 9 to 13: .....	13
	Agreement Holder Developed Strategy for FPPR 7(2) Species at Risk: .....	13
	Agreement Holder Developed Strategy for FPPR 70(2) / GAR M 213 Wildlife Habitat Features:.....	14
4.4	Riparian Areas .....	15
	Objectives Set by FRPA/FPPR for Water, Fish, Wildlife and Biodiversity Within Riparian Areas.....	15
	Agreement Holder Developed Strategies for Water, Fish, Wildlife and Biodiversity Within Riparian Areas .....	16
	Agreement Holder Developed Strategy - Alternative to FPPR Section 47(4) .....	16
	Agreement Holder Developed Strategy per FPPR 12(3) Riparian Management Zones: .....	17

	Agreement Holder Developed Strategies - Supplement to FPPR 51(1) Riparian Reserve Zones: .....	17
	Agreement Holder Developed Strategies - Sediment Management .....	18
4.5	Fisheries Sensitive Watersheds .....	19
	Objective Set By FRPA/FPPR for Fish Habitat in Fisheries Sensitive Watersheds: .....	19
4.6	Community Watersheds .....	19
4.6.1	Objectives Set by FRPA/FPPR for Community Watersheds .....	19
	Agreement Holder Developed Strategy for Community Watersheds: .....	20
4.6.2	Objective Set by GAR for Community Watersheds .....	20
4.7	Consumptive Use Streams .....	21
4.7.1	Objectives Set by HLPO for Consumptive Use Streams .....	21
	Result and Measures for RMZO 6 .....	21
4.7.2	Objective Set by FRPA/FPPR for Water within Riparian Areas .....	21
	Agreement Holder Developed Strategy: Planning in Domestic Use Watershed .....	22
	Agreement Holder Developed Strategy: Timber Harvesting near Licensed Waterworks in Domestic Use Watersheds .....	22
	Agreement Holder Developed Strategy: Roads Near Licensed Waterworks in Domestic Use Watersheds .....	22
4.8	Biodiversity.....	23
4.8.1	Objectives Set by HLPO for Biodiversity.....	23
	Result for RMZO 1: .....	23
	Result for RMZO 2 Old Forest: .....	23
	Agreement Holder Developed Strategies: RMZO 2 Old Forest.....	23
	Result for RMZO 2 Mature Forest: .....	24
	Agreement Holder Developed Strategies: RMZO 2 Mature Forest .....	24
	Agreement Holder Developed Strategies for Entering OGMAs .....	24
	Agreement Holder Developed Strategies for Information Sharing and Reporting re: Changes to OGMAs .....	25
4.8.2	Objectives Set by HLPO for Green-up Height.....	25
	Result for RMZO 4: Green-up.....	26
4.8.3	Objectives Set by HLPO for Fire-Maintained Ecosystems .....	26
4.8.4	Objective Set by FRPA/FPPR for Wildlife and Biodiversity at the Landscape Level .....	26
4.8.5	Objective Set by FRPA/FPPR for Biodiversity at the Stand Level .....	26
	Agreement Holder Developed Result for Wildlife Tree Retention: .....	27
	Agreement Holder Developed Strategy for Quantifying Dispersed Wildlife Tree Retention:.....	27
	Agreement Holder Developed Strategy re: Harvesting in Wildlife Tree Retention Areas .....	28
4.9	Visual Quality .....	29
4.9.1	Objectives Set by HLPO for Visuals .....	29
4.9.2	Objectives Set per GAR 7(1) and 7(2) for Visual Quality .....	29

	Result for Visual Quality:.....	29
	Proposed Alternate Visual Quality Objective:.....	29
4.10	Cultural Heritage Resources.....	31
	Objectives Set by per FRPA 10 for Cultural Heritage Resources.....	31
	Agreement Holder Developed Strategy for Requesting Information On Cultural Heritage Resources: .....	31
	Agreement Holder Developed Strategy for Response to Information Received on Cultural Heritage Resources:.....	31
	Agreement Holder Developed Strategy for Response to Cultural Heritage Resources Identified During Operations: .....	32
4.11	Archeological Resources .....	32
4.12	Resource Features.....	33
	Objectives Set by GAR / FPPR for Resource Features .....	33
	Result for Resource Features: .....	33
4.13	Special Trees Protection.....	34
	Objectives Set by Special Tree Protection Regulation .....	34
4.14	Recreation .....	34
	Objectives Set per FRPA for Recreation Features .....	34
	Agreement Holder Developed Results for Recreation Features:.....	35
	Agreement Holder Developed Strategy for Recreation Features:.....	35
4.15	Invasive Plants.....	36
	Objectives Set per FRPA / FPPR for Invasive Plants .....	36
	Agreement Holder Developed Measures for Invasive Plants: .....	37
4.16	Natural Range Barriers .....	37
5	Stocking Standards .....	38

### **List of Appendixes**

- Appendix A: FSP Map
- Appendix B: Factors to Consider when Assessing Suitability of Old Forests per HLPO Footnote k
- Appendix C: Alternate Visual Quality Objective Result and Strategy Regarding Trozzo Fire Salvage on Elliot Anderson FSR

# 1 Interpretation

## 1.1 Definitions under Acts and Regulations

Unless specifically indicated otherwise, terms used in this Forest Stewardship Plan (FSP) have the same meaning as defined in relevant British Columbia acts and regulations.

## 1.2 Definitions Specific to this FSP

**FRPA Value** means one or more of the following:

- (a) Soils
- (b) Visual quality
- (c) Timber
- (d) Forage and associated plant communities
- (e) Water
- (f) Fish
- (g) Wildlife
- (h) Biodiversity
- (i) Recreation resources
- (j) Resource features
- (k) Cultural heritage resources

**Fuel Hazard** means the potential fire behaviour, without regard to the state of weather or topography, based on the physical fuel characteristics, including fuel arrangement, fuel load, condition of herbaceous vegetation and the presence of ladder fuel.

**Primary Forest Activities** means any or all of timber harvesting, permanent road deactivation and/or road construction.

**Operational Plan** means the site specific plans prepared to establish performance standards for primary forest activities and the supporting documents for these plans.

**Qualified Professional** means a person deemed by the agreement holder to be qualified, in terms of appropriate levels of education, training, and experience, to conduct the activities described. Where the activities fall within the scope of practice of members of a professional regulatory body this person will be a Qualified Registered Professional.

**Qualified Registered Professional** means a person who:

- (a) In the opinion of the agreement holder has the appropriate education, training and experience to carry out the activity; and
- (b) Is a member of, or is licensed by, a regulatory body in British Columbia that has the legislated authority to regulate its members' performance of the activity.

**Reasonable opportunity for review and comment** is a two part process composed of (1) a written communication (either mailed or sent electronically) from the agreement holder to another party or a newspaper advertisement which informs the reader of a planned primary forest activities and (2) a specified time frame (generally 30 days) within which the reader can request additional information, request a meeting for discussion, and/or provide written comments on the planned activity which will be considered.

### 1.3 Objectives, Results, Strategies and Measures

The Forest and Range Practices Act (FRPA) requires that a FSP specify results or strategies in relation to objectives set by government and specify measures related to invasive plants and natural range barriers. With regard to these requirements, the following interpretations have been used in the preparation of this FSP:

**Objective** means an objective that is set by government, in legally established land use plans, in regulation, or enabled through regulation, for managing and protecting forest and range values.

**Result** means a description of measurable or verifiable outcomes for a particular established objective and the situations or circumstances that determine where the outcomes will be applied.

**Strategy** means a description of measurable or verifiable steps or practices that will be carried out to meet a particular established objective, and the situations or circumstances that determine where the steps or practices will be applied.

**Measure** means a course of action taken or planned to achieve a particular purpose. With regards to FSP's, measures must be specified to (1) prevent the introduction or spread of invasive plants and (2) mitigate the effect of removing or rendering ineffective natural range barriers. Measures are intended to be reasonable and appropriate when considering what is likely to be effective and what is practicable.

**Measurable** means with respect to Results and Strategies to be able to be measured, quantified or calculated.

**Verifiable** means with respect to Results and Strategies to be able to be verified, proven, authenticated or demonstrated.

## Acronym Definitions

CFA	Community Forest Agreement
ECA	equivalent clearcut area
FDU	Forest Development Unit
FPPR	Forest Planning and Practices Regulation
FRPA	Forest and Range Practices Act
FSP	Forest Stewardship Plan
GAR	Government Actions Regulation
HLPO	Kootenay Boundary Higher Level Plan Order, October 26 2002
LU	Landscape Unit
MOF	Ministry of Forests
OGMA	Old Growth Management Area
POD	Point of Diversion
QP	Qualified Professional
QRP	Qualified Register Professional
RMA	Riparian Management Area
RMZ	Riparian Management Zone
RMZO	Resource Management Zone Objective
RRZ	riparian reserve zone
SIFCo	Slocan Integral Forestry Cooperative
VQO	Visual Quality Objective
WHA	Wildlife Habitat Area
WTRA	Wildlife Tree Retention Area
WUI	Wildfire Urban Interface

## 2 Application of this FSP

### 2.1 Description of the Forest Stewardship Plan Area

This Forest Stewardship Plan applies to the 15,969 hectare area of Community Forest Agreement K2Rm which is held by the Slocan Integral Forestry Cooperative's, and to each Cutting Permit and Road Permit issued to the agreement holder within K2R after the term of this Forest Stewardship Plan commences.

### 2.2 Term of the Forest Stewardship Plan

The term of this Forest Stewardship Plan:

- a. shall be, per FRPA 6(1)(a), 5 years,
- b. may end earlier than 5 years if the FSP holder chooses to replace it with another approved FSP,
- c. per FRPA 6(2), may be extended by the minister pursuant to applicable Acts and Regulations, and
- d. will commence on the day the Delegated Decision Maker grants approval to this FSP.

### 2.3 Forest Development Units

Forest Development Units identify areas in which the agreement holder will conduct primary forest activities. Individual FDUs have common values, objectives and practice requirements.

There are three FDUs and they contain the entire CFA K2R agreement area. There are no FDUs outside of the agreement area.

The boundaries of the FDUs and the features required to be identified under FPPR Section 14 are shown on the maps in Appendix A.

Table 1 lists the FDU areas and Figure 1 provides an overview of the FDUs.

FDU No.	FDU Name	Landscape Unit FDU is Within	Gross Area of FDU (ha)
1	Pedro	N513 - Pedro and N515 - Lemon	10,528
2	Ringrose	N515 - Lemon	1,437
3	Red Mountain	N524 - Idaho	4,004
Total			15,969

Table 1: Forest Development Units within CFA K2R.



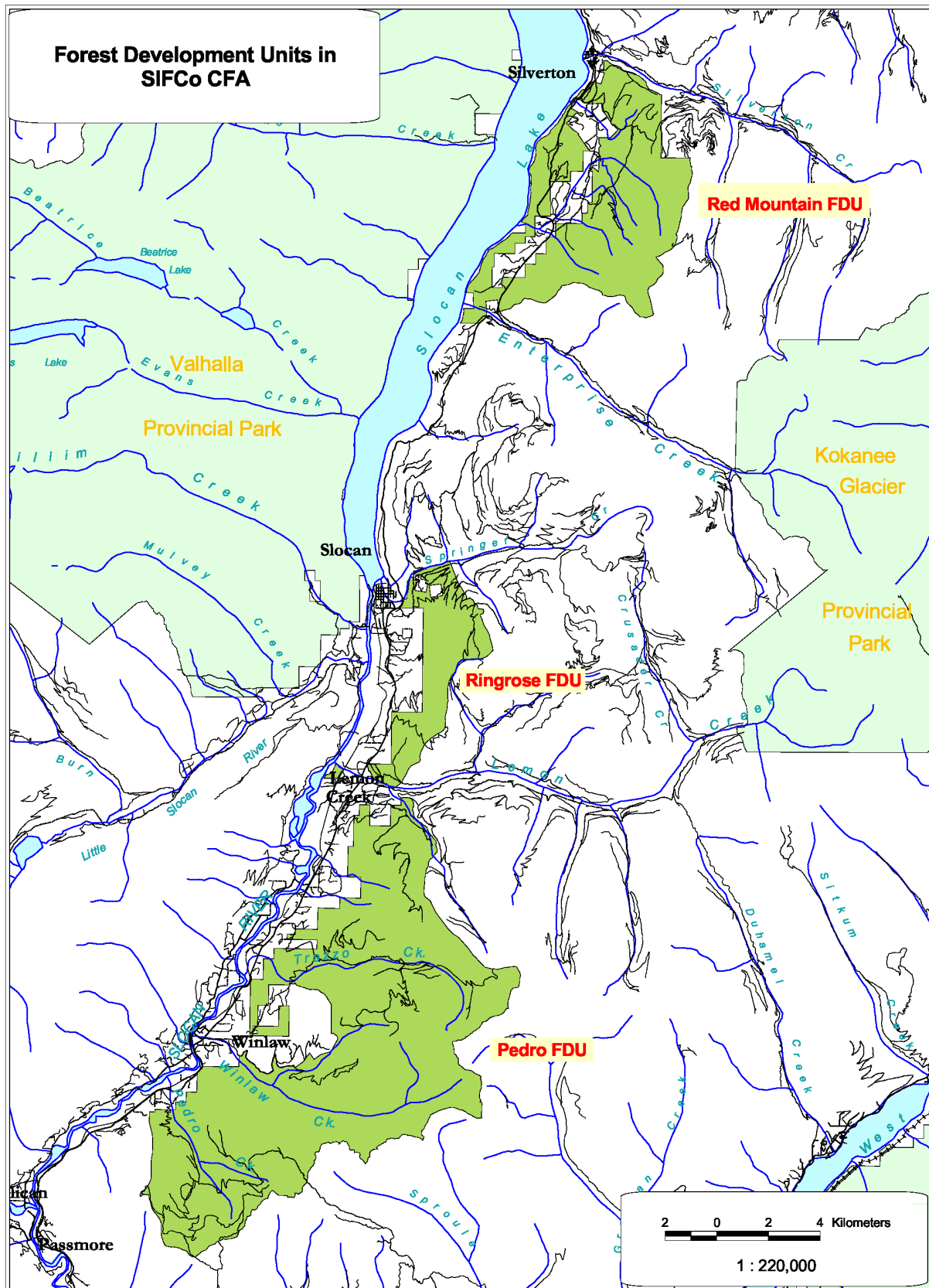


Figure 1: Forest Development Units within CFA K2R.

## 2.4 Collaboration within Shared Management Units

When CFA K2R is operating within a landscape unit or community watershed within which other Forest License or Agreement Holders have timber harvesting rights, the following strategy will apply:

Agreement Holder Developed Strategy: Collaboration	
Collaboration within Shared Management Units	<p>When timber harvesting is planned within shared landscape units and/or community watersheds, the agreement holder will</p> <p>(a) offer to exchange information on planned activities with all other affected licence or agreement holders, and where this offer is accepted,</p> <p>(b) will endeavor to collaborate with the other affected licence or agreement holder in relation to the following values, where applicable, to ensure that the objectives set by government for managing and protecting the values in legally established land use plans or regulations, or enabled through regulation, will be achieved:</p> <ul style="list-style-type: none"><li>i. Old and Mature Forest</li><li>ii. Connectivity Corridors</li><li>iii. Water in Community Watersheds</li></ul> <p>If the holders of the multiple Forest Stewardship plans that overlap the landscape unit or community watershed in question are unable to reach an agreement for sharing the responsibility to obtain results consistent with objectives set by government, a request will be made to the Minister to act under section 9 of the Forest and Range Practices Act.</p>

## 2.5 Public Review and Comment Period

Practice Requirements	The agreement holder complied with:
Providing Notice re: FSP	FPPR Section 20
Review and Comment re: FSP	FPPR Section 21
<p>The Slocan Valley community was made aware that the Forest Stewardship Plan was available for review and comment through notices placed in the Valley Voice newspaper.</p> <p>First Nations with interests in the FSP area were identified from the First Nation Consultation Areas Public Map Service, and were either sent an information sharing letter by email or the FSP information sharing material was uploaded to the appropriate First Nations portal.</p> <p>Potentially affected agreement holders were sent an information sharing letter by email.</p> <p>A copy of the public notice, the standard information sharing letter, and the list of parties who were contacted via email or portal are included in Appendix ____</p> <p>The Forest Stewardship Plan was made available for public review and comment on the SIFCo website, at the SIFCo office, and through meetings arranged with any stakeholders if requested for a two month period from _____ to _____.</p>	

## 2.6 Public and Stakeholder Comments

Practice Requirements	The agreement holder complied with:
Responding to Review and Comment re: FSP	FPPR Section 22
Copies of written comments received, descriptions of any changes made to the plan as a result of the comments received, and a description of the efforts made to meet with First Nation groups affected by the plan to discuss the plan are contained in Appendix ____.	

## 2.7 Sharing Operating Plans

This FSP is a landscape level plan that indicates how the agreement holder will be consistent with government objectives for managing and protecting forest and range values.

This FSP does not show operational plans for road construction, harvesting, fuel management or ecosystem restoration activities. Information sharing on and discussion of operational level plans will be carried out by the agreement holder as such plans are developed.

Agreement holder developed Measures: Information Sharing of Operating Plans	
Sharing Operating Plans	<p>At least thirty days before conducting primary forest activities, the agreement holder will provide a reasonable opportunity for review and comment on all operational level plans to First Nations, water licence holders, and the public.</p> <p>All written comments received by the agreement holder regarding operating plans will be responded to. Where practical, operating plans will be modified to reflect comments and concerns received.</p>

### **3 Kootenay Boundary Higher Level Plan Order**

This FSP area is subject to the Kootenay Boundary Higher Level Plan Order (HLPO) which came into effect on October 26, 2002.

The HLPO has been amended several times since 2002, but none of the amendments affect the area covered by this FSP.

The HLPO Resource Management Zone Objectives (RMZO) have been developed specifically for this region and take precedence over objectives set by government under the Forest and Range Practices Act and the Forest Planning and Practices Regulation where they conflict.

Results and strategies to comply with the HLPO RMZO are contained within this FSP.

## 4 Values, Objectives, and Practice Requirements

The Government of BC has established objectives for various forest resource values in legislation, regulations or approved higher level plans under FRPA or other acts that affect land management. To facilitate implementation of these objectives government has established practice requirements and/or provisions for Results and/or Strategies, or combinations thereof, to be defined with the FSP.

**All of the Objectives, Practice Requirements, Results, Strategies, and Measures following apply to all FDUs in this FSP.**

### 4.1 Soils

Objective Set by FRPA/FPPR for Soils	
<b>Regulation</b>	FPPR Section 5
<b>Objective</b>	Soils The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils.
<b>Regulation</b>	FPPR Section 12.1(1) An agreement holder is exempt from the requirement in Section 5 of FRPA to specify results or strategies for soils if the approved FSP includes an undertaking that the person will comply with sections 35 and 36 of FPPR.
<b>Practice Requirements</b>	The agreement holder will comply with:
a) Soil disturbance limits	FPPR Section 35
b) Permanent access structure limits	FPPR Section 36

### 4.2 Timber

4.2.1 Objectives Set by HLPO for Timber	
<b>RMZO</b>	<b>RMZO 7: Enhanced Resource Development Zones</b>
<b>Objective:</b>	To support intensive forest management for the purpose of increasing volumes of merchantable timber and to reduce industry costs while maintaining adequate environmental stewardship Enhanced Resource Development Zones – Timber emphasis is assigned as outlined on map 7.1.
<b>Not Applicable:</b>	No mapped Enhanced Resource Development Zones – Timber overlap the FDUs in this FSP so HLPO RMZO 7 is not applicable to the FDUs in this FDP.
<b>RMZO</b>	<b>RMZO 10: Social and Economic Stability</b>
<b>Objective:</b>	To ensure that there are no unintended outcomes of the bringing into force objectives 1 to 9 on the social and economic stability of communities located within the area of the higher level plan, the Ministry of Sustainable

	Resource Management in consultation with communities, forest licensees and other interests will create thresholds for timber supply, costs and timber profiles that will initiate a review of these objectives.
<b>Not Applicable:</b>	HLPO RMZO 10 is not applicable to the intent and purpose of this plan.
<b>4.2.2 Objectives Set by FRPA/FPPR for Timber</b>	
<b>Regulation</b>	FPPR Section 6
<b>Objective</b>	<p>Timber</p> <p>The objectives set by government for timber are to:</p> <p>(a) maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests,</p> <p>(b) ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provisions of this regulation and of the Act, are competitive in relation to equivalent costs in relation to regulated primary forest activities in other jurisdictions, and</p> <p>(c) ensure that the provisions of this regulation and of the Act that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the Forest Act to exercise the holder's rights under the agreement.</p>
<b>Practice Requirements</b>	The agreement holder is exempt.
a) Timber	Under FPPR Sec 12 (8) the agreement holder is exempt from the requirement to prepare a result or strategy for timber.

### 4.3 Wildlife

4.3.1 Objectives Set by HLPO for Wildlife	
RMZO	RMZO 3: Caribou
<b>Objective:</b>	To retain seasonal habitats for mountain caribou in order to contribute to maintaining viability of the existing subpopulations according to the forest cover requirements shown in Table 3.1, within the caribou habitat areas shown on Map 3.1.
<b>Not Applicable:</b>	HLPO RMZO 3 was cancelled and replaced with GAR orders UWR U-4-010 to UWR U-4-14 for caribou winter range in 2009.  The FDU's covered by this FSP are outside of caribou UWR areas identified in the noted GAR orders.
RMZO	RMZO 5: Grizzly Bear Habitat and Connectivity Corridors
<b>Objective:</b>	To maintain mature and/or old forests adjacent to important grizzly bear habitat as shown on Map 5.1.  To maintain mature and/or old forests within connectivity corridors shown on Map 5.2 for purposes of regional forest ecosystem connectivity.
<b>Result for RMZO 5:</b>	
<b>Result:</b>	The agreement holder will comply with HLPO RMZO 5.  Objectives 1 and 2 in HLPO RMZO 5 do not apply at this time as they rely on the mapping of important grizzly bear areas, and these have not been mapped.
4.3.2 Objectives Set by FRPA/FPPR and GAR for Wildlife	
<b>Legislation and Regulations:</b>	FPPR Section 7 and Section 70, GAR Sections 9 to 13
<b>Objectives:</b>	<p><b>Wildlife: Species at Risk, Regionally Important Wildlife, Ungulate Winter Range, General Wildlife Measures:</b></p> <p>The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for</p> <ul style="list-style-type: none"> <li>(a) the survival of species at risk,</li> <li>(b) the survival of regionally important wildlife, and</li> <li>(c) the winter survival of specified ungulate species.</li> </ul> <p><b>Wildlife Habitat Areas</b></p> <p>The minister responsible for the Wildlife Act by order may establish an area as a wildlife habitat area (WHA) if satisfied that special management has not otherwise been provided for under Government Actions Regulations or another enactment, and the area is necessary to meet the habitat</p>

	<p>requirements of a category of species at risk or regionally important wildlife.</p> <p>Note: No established or currently proposed WHAs are overlapped by the FDUs of this FSP.</p> <p><b>Wildlife Habitat Feature</b></p> <p>An authorized person who carries out a primary activity must ensure that the primary forest activity does not damage or render ineffective a wildlife habitat feature.</p>
<b>Preamble:</b>	<p>Notices given under FPPR Section 7(2) specify the amount, distribution and attributes of wildlife habitat required for identified species at risk (SAR), regionally important wildlife and ungulate species.</p> <p>Orders under the GAR Sections 9 to 13 establish Wildlife Habitat Areas (WHAs), Ungulate Winter Range (UWR) and Wildlife Habitat Features (WHFs) and specify General Wildlife Measures (GWMs) for specific species.</p> <p>In many cases newer GAR orders establishing WHAs and GWMs have addressed and replaced the requirements of earlier FPPR Section 7(2) notices.</p> <p>The only FPPR Section 7(2) Notice in effect and applicable to the FDUs of this FSP at time of approval is:</p> <p><b>Indicators Of The Amount, Distribution And Attributes Of Wildlife Habitat Required For The Survival Of Species At Risk In The Arrow Boundary Forest District, December 30, 2004</b></p> <p>The Notice applies to the Arrow Boundary Forest District, which is now part of the Selkirk Resource District. The species at risk listed in the notice are Coeur d'Alene Salamander, Flammulated Owl and Interior Western Screech Owl.</p> <p>There are currently no inventoried habitat sites of the noted species within the area of the CFA.</p> <p>The GAR Orders in effect and applicable to the FDUs of this FSP at time of approval are:</p> <p><b>GAR U-4-001 - UWR - November 28, 2019</b></p> <p>The location of UWRs established per GAR U-4-001 are shown on the FDU map of this FSP.</p> <p>This Order establishes an exemption per FPPR S 7(3) from the obligation to prepare a result or strategy in relation to the objectives set out in FPPR 7(1) for Ungulate Winter Range in the West Kootenay area.</p> <p><b>GAR 4-113 - WHA - Western Screech Owl - May 12, 2011</b></p> <p>This Order establishes an exemption per FPPR S 7(3)</p>



	<p>from the obligation to prepare a result or strategy in relation to the objectives set out in the 2004 Notice per FPPR 7(2) for the Western Screech Owl in the Arrow Boundary Forest District.</p> <p>As of the commencement date of this FSP, no WHAs for any species have been established within the FDUs of this FSP.</p> <p><b>GAR M 213 - Wildlife Habitat Features - May 29, 2018</b></p> <p>GAR M 213 applies throughout all FDUs of this FSP.</p>
--	--

#### Agreement Holder Developed Result for FPPR Section 7(2) and GAR Sections 9 to 13:

<b>Result for Wildlife:</b>	<p>The agreement holder will carry out primary forest activities only where consistent with the requirements of current or future applicable (i) Notices under FPPR Section 7(2) and (ii) Orders under the GAR Sections 9 to 13.</p>
-----------------------------	--

#### Agreement Holder Developed Strategy for FPPR 7(2) Species at Risk:

<b>Strategy for Species at Risk:</b>	<p>There are currently no inventoried occurrences or habitat sites of the species identified in the December 20, 2004 Notice within the FDUs of this FSP.</p> <p>The following strategy will be followed to ensure consistency with the Notice:</p> <ol style="list-style-type: none"> <li>1. Personnel responsible for layout of primary forest activities will be knowledgeable of the attributes of SAR habitat per the FPPR 7(2) Notices relevant to the FDUs of this FSP.</li> <li>2. During operational planning of a primary forest activity, a QRP will: <ul style="list-style-type: none"> <li>• identify the FPPR 7(2) Notices relevant to the planning area,</li> <li>• review existing data of species occurrences, including the BC Species &amp; Ecosystems Explorer, and Conservation Data Center and Wildlife Species Occurrence data sets downloaded from the BC GeoData Warehouse,</li> <li>• use available vegetation and terrain information to assess the ecological characteristics of the planning area,</li> <li>• create an initial list of species listed in Notices, species at risk and/or ecosystems at risk that may occur in the planning area, and</li> <li>• carry out a field reconnaissance of the planning area to assess if species or ecosystems at risk are present or likely present.</li> </ul> </li> <li>3. If a species or ecosystem at risk is present or likely present in the planning area: <ul style="list-style-type: none"> <li>• The QRP will provide a professional</li> </ul> </li> </ol>
--------------------------------------	--

	<p>recommendation on whether (i) the primary forest activity can proceed as planned without compromising the persistence of the species or ecosystems at risk, (ii) can proceed with modifications to mitigate impacts on the species or ecosystems at risk, or (iii) should not proceed.</p> <ul style="list-style-type: none"> <li>• If, in the opinion of the QRP, the primary forest activity can proceed with modifications, the QRP will provide professional recommendations on measures to ensure the persistence of the species or ecosystems at risk. The recommendations will be incorporated in the Operational Plan, will be communicated to forestry workers and contractors, and will be followed during primary forest activities.</li> <li>• The QRP will report any observed occurrences to the B.C. Conservation Data Centre (CDC).</li> </ul>
--	---

**Agreement Holder Developed Strategy for FPPR 70(2) / GAR M 213 Wildlife Habitat Features:**

<b>Strategy for Wildlife Habitat Features:</b>	<p>The following strategy will be followed to ensure consistency with the FPPR 70(2) and GAR Order M 213:</p> <ol style="list-style-type: none"> <li>1. Personnel responsible for layout of primary forest activities <ul style="list-style-type: none"> <li>• will be knowledgeable of the attributes of wildlife habitat features (WHF) per the Order and per the <i>Field Identification of Wildlife Habitat Features for SIFCo Operational Workers</i> guide, and</li> <li>• will bring any potential WHF they note during reconnaissance and layout work to the attention of the QRP referred to below.</li> </ul> </li> <li>2. During the operational planning of a primary forest activity, a QRP will carry out a field reconnaissance of the planning area to assess if WHF per M 213 are present or likely present.</li> <li>3. If WHF per M 213 are present or likely present in the planning area: <ul style="list-style-type: none"> <li>• The QRP will provide a professional recommendation on whether (i) the primary forest activity can proceed as planned without risk of damaging or rendering ineffective the WHF, (ii) can proceed with modifications to ensure that WHF are not damaged or rendered ineffective, or (iii) should not proceed.</li> <li>• If, in the opinion of the QRP, the primary forest activity can proceed with modifications, the</li> </ul> </li> </ol>
--	---

	<p>QRP will provide professional recommendations on measures to prevent damage to and to maintain the effectiveness of the WHF. The recommendations will be incorporated in the Operational Plan, and will be followed during primary forest activities.</p> <p>4. Personnel carrying out primary forest activities:</p> <ul style="list-style-type: none"> <li>• will be receive training in the attributes of WHF per the Order,</li> <li>• will be provided with copies of the <i>Field Identification of Wildlife Habitat Features for SIFCo Operational Workers</i> guide, and</li> <li>• in case a previously unnoted WHF is found during operations, will follow the SIFCo <i>Standard Operating Procedures Bird Nest and Wildlife Habitat Features Encounters</i>.</li> </ul> <p>5. Any WHF identified under this strategy will be reported to government per FPPR 86(3)(b).</p>
--	--

#### 4.4 Riparian Areas

Objectives Set by FRPA/FPPR for Water, Fish, Wildlife and Biodiversity Within Riparian Areas	
<b>Regulation:</b>	FPPR Section 8
<b>Objective:</b>	<p>Riparian Areas</p> <p>The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.</p>
<b>Regulation:</b>	<p>FPPR Section 12.1(2)</p> <p>An agreement holder is exempt from the requirement in Section 5 of FRPA to specify results or strategies for water, fish, wildlife and biodiversity if the approved FSP includes an undertaking that the person will comply with sections 47 to 51, 52 (2) and 53 of FPPR.</p>
<b>Practice Requirements</b>	The agreement holder will comply with:
a) Stream riparian classes	FPPR Section 47 (1-3) (5-7)
b) Wetland riparian classes	FPPR Section 48
c) Lake riparian classes	FPPR Section 49
d) Restrictions in a riparian management area	FPPR Section 50
e) Restrictions in a riparian reserve zone	FPPR Section 51

f) Restrictions in a riparian management zone	<p>FPPR Section 52(2)</p> <p>Note: FPPR 52(2) applies to circumstances where an authorized person fells, modifies or removes trees adjacent to a stream. As all classified streams in the FDUs of this FSP will have a minimum 10 meter riparian reserve zone, the circumstances to which FPPR 52(2) is applicable will not occur.</p>
h) Temperature sensitive streams	<p>FPPR Section 53</p> <p>Note 1: No temperature sensitive streams have been designated within the FDUs of this FSP. The agreement holder will comply with FPPR 53 if a temperature sensitive stream is designated within a FDU.</p> <p>Note 2: FPPR 53 requires protection of overstory trees and understory vegetation adjacent to temperature sensitive streams and direct tributaries. As all classified streams in the FDUs of this FSP will have a minimum 10 meter riparian reserve zone, the circumstances to which FPPR 53 is applicable will not occur.</p>

#### Agreement Holder Developed Strategies for Water, Fish, Wildlife and Biodiversity Within Riparian Areas

<b>Regulation:</b>	FPPR Section 12 (3) and 12.3(1)
<b>Objectives:</b>	<p>FPPR Section 12 (3):</p> <p>A person who prepares a forest stewardship plan must specify in it, for the objective set out in section 8, a result or strategy that addresses retention of trees in a riparian management zone.</p> <p>FPPR 12.3(1)</p> <p>An agreement holder who is required to prepare a forest stewardship plan is exempt from FPPR Section 47 (4) if the approved plan includes an intended result or strategy for the objective for water, fish, wildlife and biodiversity set out in section 8 in relation to the areas of primary forest activity under the plan.</p>

#### Agreement Holder Developed Strategy - Alternative to FPPR Section 47(4)

<b>Riparian Reserve Zone Strategy for Stream Classification S4, S5 and S6:</b>	The agreement holder will provide enhanced stream protection while carrying out primary forest activities by establishing a Riparian Reserve Zone of 10 meters, both sides, on stream classes S4, S5 and S6.		
Riparian Class	Riparian Management Area Width (meters)	Riparian Reserve Zone Width (meters)	Riparian Management Zone Width (meters)
S1-A	100	0	100
S1-B	70	50	20
S2	50	30	20

S3	40	20	20
S4	30	10	20
S5	30	10	20
S6	20	10	10

All distances in table above are slope distances.

#### Agreement Holder Developed Strategy per FPPR 12(3) Riparian Management Zones:

<b>Riparian Management Zone Strategies for all classes of streams, wetlands and lakes:</b>	<p><b>Retention Level</b></p> <p>20 to 100% of the pre-harvest basal area &gt;12.5cm dbh within the RMZ will be retained.</p> <p>The spatial pattern of prescribed retention may vary throughout the RMZ and may include single trees, clumps of trees, and/or reserves or WTRA's.</p> <p>Non-merchantable conifers, deciduous and understory vegetation within the RMZ will also be retained to the extent practicable.</p> <p><b>Riparian Assessment</b></p> <p>Prior to a primary forest activity in a RMZ, a riparian assessment will be completed by a QRP to inform the RMZ retention levels to be specified in the Operational Plan. The riparian assessment will consider such factors as:</p> <ul style="list-style-type: none"> <li>• tree species composition,</li> <li>• soils,</li> <li>• windthrow potential*,</li> <li>• risk of erosion and/or mass wasting,</li> <li>• stream channel stability,</li> <li>• wildlife habitat,</li> <li>• visual quality,</li> <li>• operational constraints,</li> <li>• damage or imminent threats to the stand,</li> <li>• forest health factors, and/or</li> <li>• other site specific factors the QRP deems important.</li> </ul> <p>* Windthrow potential will be assessed using an approach consistent with the Windthrow Field Cards (FS 712)</p>
--	--

#### Agreement Holder Developed Strategies - Supplement to FPPR 51(1) Riparian Reserve Zones:

<b>Primary Forest Activities In or Adjacent To Riparian Reserve Zones</b>	<p>The agreement holder will comply with FPPR 51, with the addition of the following strategies.</p> <p><b>Designated Operational Stream Crossings</b></p> <p>Per FPPR 51(1)(c), a stream crossing may be constructed in a riparian reserve zone. When constructing a temporary stream crossing to allow equipment engaged in a primary forest activity</p>
---	---

	<p>to cross a classified stream, the following strategies will be followed:</p> <ol style="list-style-type: none"> <li>1. The number of designated stream crossings will be kept to a practical minimum.</li> <li>2. The constructed width of machine trail in the designated stream crossings will be kept to a practical minimum.</li> <li>3. The approaches to designated stream crossings will be constructed as close to perpendicular to the watercourse as possible to reduce area impacted.</li> <li>4. Any overburden or waste soil resulting from construction of designated crossings will be disposed a minimum of 5-meters from the stream edge.</li> </ol> <p><b>Remove Debris</b></p> <p>If slash or vegetation debris is deposited into a classifiable riparian feature or a riparian reserve zone during a primary forest activity, the debris will be removed as soon as practicable within one year of deposition.</p>
--	---

#### Agreement Holder Developed Strategies - Sediment Management

<p><b>Primary Forest Activities In or Adjacent To Riparian Areas</b></p>	<p>Prior to constructing a road or access structure within the area where surface water flow could transport sediment to a stream, a QRP will specify measures to reduce and/or manage water transport of sediment from the exposed soil associated with the new construction to watercourses.</p> <p>The following practices will be applied to reduce the potential transport of sediment into water when constructing new roads or access structure within the area where surface water flow could transport sediment to the stream:</p> <ol style="list-style-type: none"> <li>1. Minimize exposed soil surfaces to minimize potential sediment yield.</li> <li>2. Seed exposed soil surfaces with an appropriate revegetation mix as quickly as possible.</li> <li>3. Reduce potential erosion by: <ul style="list-style-type: none"> <li>• placing culverts and cross drainage consistent with natural drainage patterns.</li> <li>• armouring at culvert outflows.</li> <li>• armouring the ditch line where the ditch line directly connects with a stream.</li> </ul> </li> <li>4. Where practicable, construct bridges higher than the road grade to prevent water on the road surface from transporting sediment onto the bridge deck and into the stream.</li> </ol>
--	--

#### 4.5 Fisheries Sensitive Watersheds

Objective Set By FRPA/FPPR for Fish Habitat in Fisheries Sensitive Watersheds:	
<b>Regulation:</b>	FPPR Section 8.1
<b>Objective:</b>	FPPR Section 8.1 The objective set by government for fish habitat in fisheries sensitive watersheds is to prevent, to the extent to the extent that it does not unduly reduce the supply of timber from British Columbia's forests, the cumulative hydrological effects of primary forest activities in the fisheries sensitive watershed from resulting in a material adverse impact on the habitat of the fish species for which the fisheries sensitive watershed was established.
<b>Not Applicable at This Time:</b>	Currently there are no fisheries sensitive watersheds identified in the FDUs of this FSP.

#### 4.6 Community Watersheds

The Ringrose FDU contains the Springer Creek Community Watershed. No other community watersheds are overlapped by the FDUs of this FSP.

4.6.1 Objectives Set by FRPA/FPPR for Community Watersheds	
<b>Regulation:</b>	FPPR Section 8.2
<b>Objective:</b>	FPPR Section 8.2 The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent, to the extent that it does not unduly reduce the supply of timber from British Columbia's forests, the cumulative hydrological effects of primary forest activities within the community watershed from resulting in: (a) a material adverse impact on the quantity of water or the timing of the flow of the water to the waterworks, or (b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under (i) an enactment, or (ii) the licence pertaining to the waterworks.
<b>Practice Requirements</b>	The agreement holder will comply with:
Protecting water quality	FPPR Section 59
Licensed waterworks	FPPR Section 60
Excavated or bladed trails	FPPR Section 61

Agreement Holder Developed Strategy for Community Watersheds:	
<b>Hydrological Assessment Strategy:</b>	<p>Prior to an primary forest activity in a Community Watershed, a QRP will calculate the approximate equivalent clearcut area (ECA) of the watershed. If the ECA including planned forest development is expected to exceed 20%, then a watershed assessment will be completed by a QRP that considers cumulative hydrological impacts of existing and proposed development and any other factors as deemed necessary by the QRP.</p> <p>The agreement holder will ensure that primary forest activities are consistent with the recommendations of a watershed assessment as determined by a QRP.</p>
4.6.2 Objective Set by GAR for Community Watersheds	
<b>Regulation:</b>	GAR Section 8
<b>Objectives:</b>	<p>8 (1) The minister responsible for the Land Act by order may designate as a community watershed all or part of the drainage area that is upslope of the lowest point from which water is diverted for human consumption by a licensed waterworks, if satisfied that, to protect the water that is diverted for human consumption, the area requires special management, that is not otherwise provided for under this regulation or another enactment,</p> <p>(a) to conserve the quality, quantity and timing of water flow, or</p> <p>(b) to prevent cumulative hydrological effects that would have a material adverse effect on the water.</p> <p>(2) The minister responsible for the Wildlife Act by order may establish for a community watershed water quality objectives respecting a matter referred to in subsection (1).</p>
<b>Practice Requirements</b>	
<b>None at This Time:</b>	No water quality objectives have been established at date of FSP submission so no Practice Requirements have been established under GAR.



#### 4.7 Consumptive Use Streams

The FDUs in this FSP contain numerous licensed water intakes on streams and springs.

4.7.1 Objectives Set by HLPO for Consumptive Use Streams	
RMZO	RMZO 6: Consumptive Use Streams
<b>Objective:</b>	To reduce the impacts of forest development on streams licensed for human consumption, apply specified stream side management provisions to S5 and S6 streams that meet specified conditions.
<b>Definition:</b>	RMZO 6 applies to the streamside management zone on specified reaches of S5 and S6 streams, which extends from the edge of the stream channel bank or the outer edge of the active floodplain, to a minimum distance of 30 meters on each side of the stream, or to the top of the inner gorge, whichever is greater.
Result and Measures for RMZO 6	
<b>Strategy for RMZO 6:</b>	The agreement holder will follow the HLPO RMZO 6 requirements for specified reaches of S5 and S6 streams on which there is a water intake which is licensed for human consumption.
<b>Measures for RMZO 6:</b>	<p>Prior to carrying out primary forest activities in a streamside management zone identified per RMZO 6, a QRP will specify measures to safeguard water licensed for human consumption for activities in the stream side management zone.</p> <p>The measures specified above will be incorporated in the Operational Plan prepared for each primary forest activity and will be followed during primary forest activities.</p>
4.7.2 Objective Set by FRPA/FPPR for Water within Riparian Areas	
<b>Regulation:</b>	FPPR Section 8
<b>Objective:</b>	<p>Riparian Areas</p> <p>The objective set by government for water... within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality... associated with those riparian areas.</p>

**Agreement Holder Developed Strategy: Planning in Domestic Use Watershed****Planning Process:**

Prior to commencement of primary forest activities in a Domestic Use Watershed the agreement holder will:

- Obtain the current information on water Point of Diversion (POD) locations and status from the BC data catalogue.
- Obtain the publicly available information on the water licence holders associated with POD(s) that may be affected by the primary forest activity.
- Contact potentially affected domestic use water agreement holders whose contact information is publicly available to inform them of the planned activities and ask for comments.
- Ensure that comments from domestic use water agreement holders are considered when planning primary forest activities.

**Agreement Holder Developed Strategy: Timber Harvesting near Licensed Waterworks in Domestic Use Watersheds****Timber Harvesting near Licensed Waterworks:**

The agreement holder will not harvest timber within a 100 m radius upslope of a licensed waterworks where the water is diverted for human consumption, unless the timber harvesting will not increase sediment delivery to the water intake.

**Agreement Holder Developed Strategy: Roads Near Licensed Waterworks in Domestic Use Watersheds****Roads Near Licensed Waterworks:**

The agreement holder will not construct a road within a 100 m radius upslope of a licensed waterworks where the water is diverted for human consumption unless there is no practicable alternative location for the road.

## 4.8 Biodiversity

4.8.1 Objectives Set by HLPO for Biodiversity	
RMZO	RMZO 1: Biodiversity Emphasis
<b>Objective:</b>	To contribute to the conservation of biodiversity through the assignment of biodiversity emphasis to each Landscape Unit (LU).
<b>Result for RMZO 1:</b>	
<b>Result:</b>	The agreement holder will comply with HLPO Resource Management Zone Objective 1. The FDU of this FSP overlap LUs N513, N514 and N524.
RMZO	RMZO 2: Old and Mature Forest
<b>Objective:</b>	To maintain mature and old forests at the level set for each Landscape Unit by the HLPO.
<b>Result for RMZO 2 Old Forest:</b>	
<b>Result:</b>	The agreement holder will comply with HLPO Resource Management Zone Objective 2. The requirements of Objective 2 of the KBHLPO for Old Forest are considered to be fulfilled by the mapped non-legal Old Growth Management Areas (OGMAs) within each Landscape Unit (LU) that the FDUs in this FSP overlap. These OGMAs are shown on the FDU map of this FSP.
<b>Agreement Holder Developed Strategies: RMZO 2 Old Forest</b>	
<b>Strategies for RMZO 2 Old Forest:</b>	The agreement holder will use the Higher Level Plan Objectives Reporting Suite application to monitor the area of OGMAs in relation to the Old Forest retention targets set by HLPO RMZO 2 in LUs N513, N515 and N524. In the event that Old Forest retention targets set by HLPO RMZO 2 are no longer met by the OGMAs in any landscape unit, deficits will be addressed aspatially with Old Forest from outside of OGMAs. If a recruitment strategy is required for Old Forest per RMZO 2(5), the agreement holder will share the recruitment strategy with other affected licence or agreement holders in the landscape unit. The information shared will include a written rationale and a map of the forest stands to be recruited. The <u>Old Growth Management Areas - Non Legal - Current</u> data set maintained by MOF will be used to determine the spatial extent of OGMAs.

<b>Result for RMZO 2 Mature Forest:</b>	
<b>Result:</b>	The agreement holder will comply with HLPO Resource Management Zone Objective 2.
<b>Agreement Holder Developed Strategies: RMZO 2 Mature Forest</b>	
<b>Strategies for RMZO 2 Mature Forest:</b>	<p>The agreement holder will use the Higher Level Plan Objectives Reporting Suite application to monitor the area of Mature Forest in relation to the Mature+Old Forest retention targets set by HLPO RMZO 2 in LUs N513 and N515.</p> <p>(No Mature+Old Forest retention target is set in RMZO 2 for LU N524.)</p> <p>Primary forest activities on CFA K2R will be constrained:</p> <ol style="list-style-type: none"> <li>1. To ensure that harvest on CFA K2R do not result in reducing mature forest area to less than the applicable RMZO 2 targets, and</li> <li>2. To allocate mature forest retention targets in LU N515 to areas within the connecting corridor mapped in LU N515, per RMZO 5(5).</li> </ol> <p>Information on planned primary forest activities in Mature Forest in LUs N513 and N515 will be shared with other affected licence or agreement holders per the Collaboration within Shared Management Units strategy in this FSP.</p> <p>If a recruitment strategy is required for Mature Forest per RMZO 2(5), the agreement holder will share the recruitment strategy with other affected licence or agreement holders in the landscape unit. The information shared will include a written rationale and a map of the forest stands to be recruited.</p>
<b>Agreement Holder Developed Strategies for Entering OGMA's</b>	
<b>Strategies for Entering OGMA's:</b>	<p>The QRP referenced in this Strategy for Entering OGMA's will be a biologist or ecologist, or a team of professionals that includes a biologist or ecologist.</p> <p>Primary forest activities will not be carried out in an established OGMA except:</p> <ol style="list-style-type: none"> <li>1. To address safety hazards to adjacent primary forest activities;</li> <li>2. To allow the establishment of tail holds or guy line tiebacks for adjacent harvest operations;</li> <li>3. To construct a road or access trail where no practicable alternative option for the road or access trail location exists; or</li> <li>4. Where the OGMA has been rendered ineffective due to damaging agents (For the purposes of this section, 'rendered ineffective' means, in the opinion of a QRP, damaged to a degree that the OGMA no longer has the</li> </ol>

	<p>ecological values of old forest considering the factors identified in footnote k of KBHLPO Objective 2 (5). The assessment parameters outlined in Appendix B will be used when evaluating the footnote k factors).</p> <p>Where timber is harvested from or a road is constructed in an established OGMA under circumstances 1 through 4 above and the harvested area is &gt; 0.2 ha, a QRP will prepare a written rationale (a) indicating the reasons for harvesting the timber in the OGMA and (b) spatially identifying a replacement area from within the CFA area at least the same size as the harvested areas that provides equal or greater biological value consistent with the requirements of KBHLPO Objective 2 (5).</p> <p>The rationale will consider the following when assessing biological value:</p> <ul style="list-style-type: none"> <li>• the factors identified in footnote k,</li> <li>• maintaining or improving interior old forest habitat conditions,</li> <li>• maintaining or improving landscape level connectivity, and</li> <li>• prioritizing protection of ancient forests and rare ecosystems (per the Old Growth Technical Advisory Panel definitions).</li> </ul>
<b>Agreement Holder Developed Strategies for Information Sharing and Reporting re: Changes to OGMAs</b>	
<b>Strategies for Information Sharing and Reporting</b>	<p>When a change to an OGMA boundary is proposed, the information sharing package sent to First Nations by the agreement holder will include the QRP's written rationale per above strategy and spatial data of the identified OGMA replacement area.</p> <p>If an OGMA boundary is changed, the change will be reported to MOF per the <i>Selkirk Resource District Protocol for Managing OGMA Consolidation Mapping</i>.</p>
<b>4.8.2 Objectives Set by HLPO for Green-up Height</b>	
<b>RMZO</b>	<b>RMZO 4: Green-up</b>
<b>Objective:</b>	<p>To establish the green-up height as 2.5 meters for areas adequately stocked and 3.0 meters for areas not adequately stocked, based on the criteria in the regulations, except in:</p> <ul style="list-style-type: none"> <li>i. community watersheds;</li> <li>ii. visually sensitive areas within known scenic areas.</li> <li>iii. Enhanced Resource Development Zones, and</li> <li>iv. fire-maintained ecosystems as identified in RMZO 8.</li> </ul>

Result for RMZO 4: Green-up	
<b>Result:</b>	The agreement holder will comply with HLPO RMZO 4.
4.8.3 Objectives Set by HLPO for Fire-Maintained Ecosystems	
<b>RMZO</b>	<b>RMZO 8: Fire-Maintained Ecosystems</b>
<b>Objective:</b>	To restore and maintain the ecological integrity of fire-maintained ecosystems identified on HLPO Map 8.1
<b>Not Applicable at This Time:</b>	HLPO Map 8.1 has not been published, and therefore RMZO 8 is not in effect.
4.8.4 Objective Set by FRPA/FPPR for Wildlife and Biodiversity at the Landscape Level	
<b>Objective:</b>	The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.
<b>Legislation and Regulations:</b>	FPPR Section 12.1(3) An agreement holder is exempt from the requirement in Section 5 of FRPA to specify results or strategies for wildlife and biodiversity at the landscape level if the approved FSP includes an undertaking that the person will comply with sections 64 and 65 of FPPR.
<b>Practice Requirements</b>	The agreement holder will comply with:
Maximum cutblock size	FPPR Section 64
Harvesting adjacent to another cutblock	FPPR Section 65, except that the 3 meter minimum height will be changed to 2.5 meters in Sections 65(3)(a) and 65(3)(b)(ii) to comply with HLPO RMZO 4 in areas that RMZO 4 applies to.
4.8.5 Objective Set by FRPA/FPPR for Biodiversity at the Stand Level	
<b>Objective - FPPR 9.1:</b>	The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees.
<b>Regulation:</b>	FPPR Section 12.5 An agreement holder is exempt from FPPR Section 66 - Wildlife Tree Retention and Section 67 - Restriction on Harvesting in Wildlife Tree Retention Areas if the approved FSP includes an intended results or strategy for wildlife and biodiversity at the stand level.

**Agreement Holder Developed Result for Wildlife Tree Retention:****Result for Wildlife Tree Retention:**

1. The total area of wildlife tree retention areas (WTRAs) that relate to the cutblocks in a cutting permit is a minimum of 7% of the harvested area in the cutblocks.
2. The total area of wildlife tree retention areas that relate to a cutblock is a minimum of 3.5% of the harvested area in the cutblock.
3. For the purposes of (1) and (2) above, a WTRA may relate to more than one cutblock if all of the cutblocks that relate to the WTRA collectively meet the applicable requirements of this section.
4. WTRAs will be identified during harvest planning and will be documented and mapped in the Operational Plan prepared for each harvest unit.

**Agreement Holder Developed Strategy for Quantifying Dispersed Wildlife Tree Retention:****Strategy for Quantifying Dispersed Wildlife Tree Retention:**

Dispersed trees outside of mapped WTRA can be used to contribute to the wildlife tree retention area targets. The area equivalency of the retained dispersed trees will be determined as the total basal area of the retained trees, measured by a QP, divided by the basal area of the pre-harvest forest type, measured by a QP.

## Agreement Holder Developed Strategy re: Harvesting in Wildlife Tree Retention Areas

### Strategy re: Harvesting in Wildlife Tree Retention Areas:

Timber harvesting will not be carried out within a WTRA except for one or more of the following reasons:

1. to remove trees that contain insect populations that constitute a threat to forest health,
2. to allow the establishment of tail holds or guy line tiebacks for adjacent harvest operations,
3. to remove a safety hazard,
4. to construct a road or access trail where no alternative practicable option for the road or access trail location exists, or
5. where the trees in the WTRA are damaged as a result of wind, fire or forest health factors and, in the documented opinion of a QRP, the WTRA is rendered ineffective.

For the purposes of this section, 'rendered ineffective' means altered such that the forest in the WTRA no longer has significant ecological attributes that are valuable to wildlife.

For the purposes of this section, ecological attributes that are valuable to wildlife includes:

- large trees, large veteran trees, and large dead trees (compared to average stand height and diameter)
- large trees with internal decay, heart rot or stem cavities,
- trees with crevices, cracks or loose bark that is suitable for wildlife
- trees with large mistletoe brooms
- trees or features with active or recent wildlife use, and/or
- uncommon tree or vegetation species.

If, in the quantified opinion of a QRP, the ecological attributes of the WTRA that are valuable to wildlife are maintained following harvesting carried out for reasons of (1) to (4) above, no further action is required.

If, in the quantified opinion of a QRP, the ecological attributes of the WTRA that are valuable to wildlife are not maintained following harvesting carried out for reasons of (1) to (4) above, or harvesting is carried out for reason (5), an area of replacement WTRA that is:

- (a) equivalent in size, and
- (b) as equivalent as practicable in ecological attributes valuable to wildlife

to the harvested WTRA area will be identified in a location as close as practicable to the harvested WTRA.



	The replacement WTRA area and the QRP assessments to establish equivalency will be documented in the Operational Plan for the harvest unit.
--	---

## 4.9 Visual Quality

4.9.1 Objectives Set by HLPO for Visuals	
RMZO	RMZO 9: Visuals
<b>Objective:</b>	To conserve the quality of views from communities, major waterways and major highways by establishing the areas identified on Map 9.1 as known scenic areas.
<b>Not Applicable:</b>	HLPO RMZO 9 was replaced by a GAR <i>Order for the Establishment of Visual Quality Objectives and Scenic Area for the Arrow Boundary Forest District</i> on December 31, 2005.

4.9.2 Objectives Set per GAR 7(1) and 7(2) for Visual Quality	
<b>Regulations:</b>	FPPR Section 7, GAR Sections 7(1) and 7(2)
<b>Objective:</b>	The <i>Order for the Establishment of Visual Quality Objectives and Scenic Area for the Arrow Boundary Forest District</i> established mapped scenic areas and mapped area with differing Visual Quality Objectives on December 31, 2005.
<b>Result for Visual Quality:</b>	
<b>Result:</b>	The agreement holder will comply with the Visual Quality Objectives established by the <i>Order for the Establishment of Visual Quality Objectives and Scenic Area for the Arrow Boundary Forest District</i> dated December 31, 2005, except for a planned fire salvage harvest within Wildfire N51705. An alternative Result is proposed for the fire salvage harvest below.

Proposed Alternate Visual Quality Objective:	
<b>Alternative Visual Quality Objective</b>	<p>At the time of FSP preparation, the agreement holder is planning to salvage dead and dying timber on approximately 30 ha from within Wildfire N51705, which burned in 2021, that is within an area with Visual Quality Objective of Partial Retention.</p> <p>Due to the circumstances of</p> <ul style="list-style-type: none"> <li>(a) the shape and location of the main harvest unit are determined by terrain and fire extent,</li> <li>(b) dispersed retention or edge feathering can not be relied on to reduce visual impact in the burned timber due to root damage, and</li> <li>(c) the short time period available to salvage the timber resources requires that the area be harvested in one pass,</li> </ul>

	<p>the established Visual Quality Objective is not achievable in this planned harvest area. Therefore, the holder proposes an alternate visual management result of Modification for this salvage harvesting activity.</p> <p>A rationale to support this proposal, and measures that will be used where practicable to reduce visual impact, are contained in Appendix C.</p>
<b>Agreement Holder Developed Strategy to Meet Visual Quality Objectives:</b>	
<b>Strategy: Visual Impact Assessment:</b>	<p>The agreement holder will conduct a Visual Impact Assessment (VIA) for planned primary forest activities located in known scenic areas.</p> <p>The VIA will assess the visual landscape from major public viewpoints and determine potential visual impacts.</p> <p>The results of the VIA will be incorporated into cutblock design.</p>

#### 4.10 Cultural Heritage Resources

Objectives Set by per FRPA 10 for Cultural Heritage Resources	
<b>Regulation:</b>	<b>FPPR Section 10</b>
<b>Objective:</b>	<p>The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are</p> <p>(a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and</p> <p>(b) not regulated under the Heritage Conservation Act.</p>
Agreement Holder Developed Strategy for Requesting Information On Cultural Heritage Resources:	
<b>Strategy: Requesting Information</b>	<p>When planning a primary forest activity, the agreement holder will:</p> <ol style="list-style-type: none"> <li>1. Utilize the BC government First Nation Consultation Areas Public Map Service Consultative Areas Database to identify First Nations with interests in the potentially affected area with whom information on planned primary forest activities should be shared.</li> <li>2. Share information with First Nations by: <ul style="list-style-type: none"> <li>• providing maps (either mailed or sent electronically),</li> <li>• providing spatial data of planned primary forest activities by email or through upload to portal,</li> <li>• requesting in writing any information the recipients may wish to share regarding cultural heritage resources (CHR) in the planned primary forest activity area or anywhere in the CFA landbase, and</li> <li>• offering in writing to meet through video conferencing to discuss planned activities.</li> </ul> </li> <li>3. The above information sharing process will be initiated at least 30 days prior to commencement of primary forest activities.</li> </ol>
Agreement Holder Developed Strategy for Response to Information Received on Cultural Heritage Resources:	
<b>Strategy: Responding to Information on CHR</b>	<p>If cultural heritage resources are brought to the agreement holder's attention when planning a primary forest activity, the agreement holder will:</p> <ol style="list-style-type: none"> <li>1. Share the information on the CHR with MOF and ask for their assessment per FPPR Schedule 1(4).</li> <li>2. Work with the First Nation(s) who identified the CHR to revise the operational plan for the planned primary forest activity to the extent required to conserve, mitigate impacts on, or protect the identified CHR,</li> </ol>

	<p>taking into account FPPR Section 10 and Schedule 1(4).. The measures, if any, that are committed to in the operational plan will be communicated back to the First Nation in writing.</p> <ol style="list-style-type: none"> <li>3. Keep a written record of First Nations comments, agreement holder responses to First Nations comments, information provided by First Nations on CHR, and changes in operational plans to minimize potential impacts on CHR.</li> <li>4. With the exception of the Province of BC, keep any or all shared information on CHR confidential.</li> </ol>
--	---

#### **Agreement Holder Developed Strategy for Response to Cultural Heritage Resources Identified During Operations:**

<b>Strategy :Response to CHR Identified During Operations</b>	<p>If at any time a cultural heritage resource becomes known while implementing a primary forest activity the agreement holder will:</p> <ol style="list-style-type: none"> <li>1. Halt operations to the extent necessary to protect or conserve the CHR.</li> <li>2. Record the location, details of the resource, time and date of the discovery and other relevant information.</li> <li>3. Share information on the CHR with MOF and ask for their assessment per FPPR Schedule 1(4), and share information on the CHR, the planned activity and the expected outcome of the activity with affected First Nation(s)</li> <li>4. Work with the First Nation(s) who identified the CHR to revise the operational plan for the planned primary forest activity to the extent required to conserve, mitigate impacts on, or protect the identified CHR, taking into account FPPR Section 10 and Schedule 1(4).. The measures, if any, that are committed to in the operational plan will be communicated back to the First Nation in writing.</li> <li>5. Keep a record of all steps taken with regard to the cultural heritage resource.</li> </ol>
---	---

#### **4.11 Archeological Resources**

The Heritage Conservation Act governs the protection and conservation of archeological sites and objects in British Columbia. The agreement holder is obligated to comply with the Heritage Conservation Act, and the content of this FSP has no impact on those obligations.

Presented here for information only, the agreement holder uses the following procedures to ensure compliance with the Heritage Conservation Act with regards to archeological sites and objects:

1. An Archeological Overview Assessment has been completed for all currently accessible portion of the CFA landbase.

2. If primary forest activities are being considered in an area that has been identified in the Archaeological Overview Assessment as having a moderate or high archaeological potential, a QRP Archaeologist will be retained to carry out a professional review and provide recommendations. The Archaeologist's recommendations will be followed in any operational activities.
3. Workers carrying out primary forest activities will receive a briefing on, and will be provided with a copy of an Archeological Chance Finds standard operating procedure. The key component of the SOP is to stop work in area immediately if a potential archeological feature is found, and obtain a QRP review.

#### 4.12 Resource Features

Objectives Set by GAR / FPPR for Resource Features	
<b>Regulations:</b>	GAR Section 5, FPPR Section 70
<b>Objective:</b>	<p>A "resource feature" means a resource feature identified under GAR Section 5, and may include:</p> <ul style="list-style-type: none"> <li>(a) a surface or subsurface element of a karst system;</li> <li>(b) a range development;</li> <li>(c) Crown land used for research or experimental purposes;</li> <li>(d) a permanent sample site used as a snow course by or on behalf of the federal or Provincial government for the purpose of measuring the water content of the snow pack on a given area;</li> <li>(e) a cultural heritage resource that is the focus of a traditional use by an aboriginal people and that is not regulated by the Heritage Conservation Act;</li> <li>(f) an interpretive forest site, recreation site or recreation trail;</li> <li>(g) a trail or other recreation facility referred to in section 57 of the Act that is authorized by the minister or under another enactment;</li> <li>(h) a recreation feature that the minister considers to be of significant recreational value.</li> </ul> <p>FPPR 70 (1) requires that an authorized person who carries out a primary forest activity must ensure that the primary forest activity does not damage or render ineffective a resource feature.</p>
Result for Resource Features:	
<b>Result:</b>	<p>The agreement holder will not damage or render ineffective a resource feature during primary forest activities.</p> <p>At time of submission, there are no Resource Features identified within the FDUs of this FSP.</p>

#### 4.13 Special Trees Protection

Objectives Set by Special Tree Protection Regulation	
<b>Regulation:</b>	Special Tree Protection Regulation
<b>Objective:</b>	A responsible person for a primary forest activity must ensure that, in the course of carrying out that activity, specified trees are not cut, damaged or destroyed, and supporting trees are not felled, topped or destroyed.
<b>Practice Requirements</b>	The agreement holder will comply with the Special Tree Protection Regulation.

#### 4.14 Recreation

Objectives Set per FRPA for Recreation Features	
<b>Legislation and Regulations:</b>	FRPA Sections 56, 180 and 181; FPPR 70(1); Forest Recreation Regulation Section 16
<b>Objectives:</b>	<p>Under FRPA, the minister may establish Crown land as an interpretive forest site, a recreation site or a recreation trail and establish objectives for the established feature.</p> <p>All objectives in respect to an interpretive forest site, a recreation site and/or a recreation trail that were in effect immediately before the effective date of FRPA are continued as objectives under FRPA.</p>
<b>Practice Requirements</b>	The agreement holder will comply with the following recreation feature objectives:
Rockslide Lake Trail – REC5075	The objective is to manage the Rockslide Lake recreation trail for a forested, semi-primitive recreation experience. The trail will be maintained and adjacent vegetation conserved. Opportunities for hiking and mountain biking are available. No mechanical use permitted.
Crusader Creek Trails - REC6888	The management objectives for this feature have been requested multiple times by have not been received as of March 2, 2022.
Bannock Point Recreation Site – REC5077 Bannock Point Recreation Trail – REC106888	<p><b>Recreation Site:</b> The objective is to manage the Bannock Point recreation site for a lakeside recreation experience. The campsite and trail will be maintained; the lake shoreline and natural vegetation will be conserved. Opportunities for camping, picnicking, and swimming will be available at the site. Access is by non-motorized trail and boat.</p> <p><b>Recreation Trail:</b> The management objectives for this feature have been requested multiple times by have not been received as of March 2, 2022.</p>

**Agreement Holder Developed Results for Recreation Features:****Results:**

The agreement holder will comply with the following:

1. Primary forest activities within or adjacent to an established recreation feature will be carried out consistent with the established objectives of the recreation site or trail.
2. Primary forest activities within or adjacent to an established recreation feature will proceed only if authorized by a Recreation Officer.
3. If additional recreation features with associated tenure holders are established within the FDU's of this FSP, the agreement holder will provide the recreation tenure holder with a reasonable opportunity for review and comment.
4. If a primary forest activity is carried out in or adjacent to an established recreation feature which is designated as non-motorized access, and new road or access trail construction could provide motorized access to the recreation feature, the new access structures will be deactivated to a condition which re-establishes the degree of access which existed prior to the primary forest activities within one year following completion of primary forest activities.

**Agreement Holder Developed Strategy for Recreation Features:****Strategy:**

Where the agreement holder carries out primary forest activities within or adjacent to a established recreation feature the following measures will be followed, unless otherwise approved or directed by a Recreation Officer:

1. where practicable, activities will take place during periods of low recreational use, as determined through consultation with a Recreation Officer;
2. established recreation feature(s) within two tree lengths of active work sites will be closed for as short a period as practicable to manage public safety;
3. safety hazards within the primary forest activity area which could impact the established recreation feature(s) will be removed as soon as practicable and prior to reopening the recreation feature;
4. the running surface of trails within or adjacent to the primary forest activity will be cleared of any debris and re-established as soon as practicable, and no later than 12-months following the completion of primary forest activities;
5. new access structures will not be constructed across a recreation trail unless there is no other practicable

	<p>location; and</p> <p>6. primary forest activities adjacent to established recreation feature(s) will minimize damage to natural understory vegetation, to the extent practicable, within 30 meters of the recreation feature.</p>
--	--

#### 4.15 Invasive Plants

Objectives Set per FRPA / FPPR for Invasive Plants	
<b>Legislation and Regulations:</b>	FRPA Section 47 and FPPR Section 17
<b>Objectives:</b>	<p>A person carrying out a forest practice must carry out measures that are specified in the applicable operational plan to prevent the introduction or spread of prescribed species of invasive plants.</p> <p>A person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.</p>



**Agreement Holder Developed Measures for Invasive Plants:****Measures:**

The agreement holder will comply with the following measures to prevent the introduction or spread of invasive alien plants:

1. Field layout and supervisory staff will be trained in invasive plant identification and reporting.
2. The agreement holder will review the InvasivesBC data set during operational planning to be informed of known locations of invasive plants near planned operations and access routes to those operations.
3. Invasive plants present in or adjacent to proposed operating areas will be identified during the field layout. Where practicable, specific measures to prevent introduction or spread will be incorporated in operational plans.
4. Equipment and clothing that the licence holder is responsible for will be inspected and cleaned of invasive plant propagules and seed before entering and leaving sites.
5. The agreement holder will seed exposed soils along roads, landings and access trails constructed during a primary forest activity with appropriate plant species within one year of completion of the primary forest activity
6. Seeding will use Canada Common #1 or #2 seed with a seed analysis that indicates that provincially listed noxious or invasive weed species are not present in the seed.
7. The agreement holder will participate in the Central Kootenay Invasive Species Society (CKISS).
8. Should invasive plants with a status of Contain, Eradicate or Prevent on the CKISS Invasive Plant Priority List be observed outside of known infestation areas, the agreement holder will file a report using the Report-A-Weed app or the CKISS website Report an Invasive Species page within 30-days.

**4.16 Natural Range Barriers**

<b>Regulation:</b>	FPPR Section 18
<b>Practice Requirements</b>	Currently there are no range use agreements or grazing activity in the FDUs within this FSP.

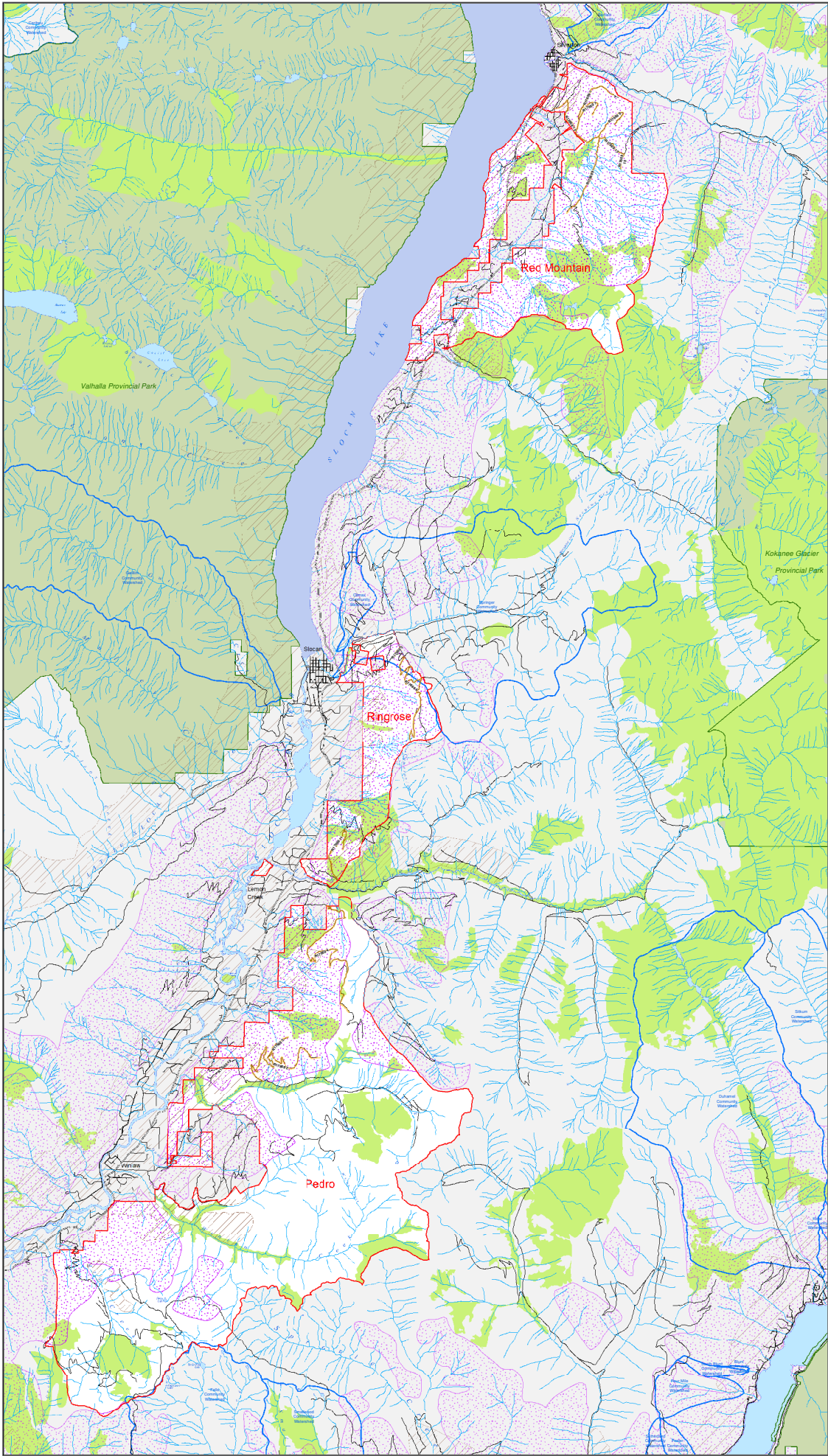
## 5 Stocking Standards

Stocking Standards	
Regulations	FRPA 107 and FPPR Sections 16, 44 and 97
	<p><b>Stocking Standards</b></p> <p>The agreement licence holder will comply with the Selkirk Resource District South Columbia default stocking standards and Fire Management / Wildland Urban Interface stocking standards, as amended from time to time, that are in effect on the date of commencement of harvesting operations in any standards unit.</p> <p><b>Early Free Growing Date</b></p> <p>When free growing standards have been achieved the agreement holder may declare achievement of free growing per FPPR 97(5), with due consideration of FPPR 97(6), using the approved variation process in RESULTS.</p>
Applies to FDU	All

K2R FSP 2022-2027

**Appendix A**

**FSP Map**



Slocan Integral Forestry Cooperative



Community Forest Agreement K2R  
Forest Stewardship Plan Map  
Pedro, Ringrose and Red Mountain  
Forest Development Units

Forest and Range Planning and Practices Regulation  
Section 14 Information

- Forest Development Unit
- Pedro Forest Development Unit Name
- Old Growth Management Areas
- Ungulate Winter Range
- Community Watershed
- Class 1 Scenic Areas
- Class 1.1A Lake
- Road Permit held by the Agreement Holder

Other Features

- Provincial Parks

Water Features

- Other Lake or River
- Streams
- Indefinite Streams

Transportation

- Highway
- Other Road

There were no declared Fisheries Sensitive Watersheds, Lakeshore Management Zones or Wildlife Habitat Areas in effect within the area covered by this FSP as of February 1, 2022.

5  
Kilometers  
1:50,000  
on 32 x 40" Sheet



K2R FSP 2022-2027

**Appendix B**

**Factors to Consider when Assessing Suitability of Old Forests per HLPO Footnote k**

### Factors to Consider when Assessing Suitability of Old Forests per HLPO Footnote k

Footnote k Factor	Definition and Interpretation	Sources for Additional Information
Stand age	Minimum ages of old and mature forests are listed in the HLPO. Stands are assessed based on the age of the dominant cohort in a stand. Field-based measurements using tree cores take precedence over forest inventory estimated ages. Ancient forests have particularly high conservation value.	HLPO, Biodiversity Guidebook (1995); LMH 25 describes Very Old Forests (structural stage 7b) as >400 in NDT 1,2,4 and >250 in NDT 3. These age classes will be considered ancient forests.
Successional status	Describes the stand development status of a forest, including factors such as tree species composition and canopy complexity.  Older successional stands with greater structural diversity, more large structures and greater canopy complexity have greater conservation value.	LMH 25 (2010) describes both Successional status and Structural stages
Presence of old growth attributes	Old forest attributes differ between ecosystems. Typical old forest attributes include: <ul style="list-style-type: none"> <li>• large live trees (for the BEC unit),</li> <li>• large snags and CWD in a range of decay classes; wildlife trees;</li> <li>• multiple canopy layers (from regen to dominants);</li> <li>• canopy gaps; and</li> <li>• well-developed plant communities.</li> </ul>	The size of “large” and density of expected large attributes is described in a series of research projects that were completed in the Kootenay Boundary Region (1999-2006). These “index of old growthness” reports will be used to inform a professional rationale.

Size of stand	<p>Larger stands of old forests are preferred because they provide more habitat, more interior habitat conditions, and less edge habitat.</p> <p>The minimum legal size of an OGMA is 2 ha, but larger patches are encouraged, and the intention is to maintain or increase patch size where possible.</p> <p>Large OGMAs are intended to maximize the inclusion of old forest and should only include mature or younger forest where (1) recruitment is required or (2) conservation benefits have been assessed and old forest biodiversity values are captured equally or better than would be achieved through inclusion of different patches of old forest.</p> <p>In many landscapes, large old forest patches with interior habitat are uncommon, and the overall quantity of old forests is low.</p>	Guidance on expected patch size, by BEC and NDT (Holt 2000) <sup>1</sup>		
		<b>Natural Disturbance Type</b>	<b>Percentage of OGMAs on Landscape</b>	<b>Patch Size</b>
		NDT1	40 - 100% 40% 15% 5%	> 1000 ha 250 - 1000 ha 50 - 250 ha < 50 ha
		NDT2	35% 35% 25%	> 500 ha 250 - 500 ha 50 - 250 ha
		NDT3 (ICH / ESSF) NDT4	20% 40% 30% 10%	> 500 ha 250 - 500 ha 50 - 250 ha < 50 ha
Amount of human impact	<p>Human impacts such as historic (or recent) selective harvesting, roads, trails, linear corridors, etc. reduce the value of old forest stands.</p> <p>These impacts will be considered when identifying replacement old forest areas.</p>			
Dispersion/connectivity of the stand	<p>Landscape level connectivity allows for the flow of species, genes, and populations. Old forest retention planning should avoid fragmentation and creation of isolated patches.</p> <p>However, smaller stands may have high old forest conservation value where old forest is uncommon or where forests are very old.</p> <p>Riparian areas, low passes between mountains, and areas that support movement from low to high elevation provide increased connectivity value.</p>	The Biodiversity Guidebook provides information on landscape connectivity.		

<sup>1</sup> Holt. 2000. An index of Old-Growthness for the ESSFwm BEC unit in the Nelson Forest Region. Prepared for the Inter-Agency Management Committee, Min. Env., Lands and Parks.

Rarity of the stand	<p>The range of ecosystems in a geographic area should be included in a network of OGMA's.</p> <p>Old forests in ecosystems with few remaining old forests and/or stands with uncommon structures (e.g., very old/ancient forests or very large remnant/veteran trees) are often prioritized in OGMA selection.</p>	<p>The Conservation Data Centre's Ecosystem Explorer provides lists of Ecosystems at Risk based on plant communities (e.g., site series level); these are currently being reviewed and updated with incorporation of new BEC.</p>
<b>Other Factors</b>	<b>Interpretation</b>	<b>Sources for Additional Information</b>
Old Growth Technical Advisory Panel	<p>The April 2020 Gorley and Merkel report and subsequent mapping and analysis work by the Old Growth Technical Advisory Panel (OGTAP) led to a proposed voluntary deferral of harvesting in a set of old forests in November 2021.</p> <p>The OGTAP identified a minimum stand age, height and quadratic mean diameter which, when used to filter the current VRI inventory data in each landscape unit and BEC subzone combination, identified a set of VRI polygons that appear to meet the target set for old growth protection in that analysis unit.</p> <p>The parameters were used to create initial maps showing areas proposed to be deferral from harvesting. However, FLNRORD stresses that the maps themselves are not the end product; the parameters are the product. The VRI data used to make the maps is known to have errors. If a stand is captured by the parameters, based on actual stand attributes not inventory data, it should be deferred, regardless of the map.</p> <p>Guidance on field based assessment processes is being prepared by the OGTAP.</p> <p>The provincial old growth forest initiative is a work in progress. Parameters to be considered and deferral status of any particular area may change.</p> <p>The holder will consider the current OGTAP stand age, height and quadratic mean diameter parameters when assessing any replacement old forest area.</p>	<p>A NEW FUTURE FOR OLD FORESTS A Strategic Review of How British Columbia Manages for Old Forests Within its Ancient Ecosystems, Gorley and Merkel, April 2020</p> <p>Priority Deferrals An Ecological Approach, Old Growth Technical Advisory Panel – October 2021</p> <p>OG TAP Old Growth Deferral: Background and Technical Appendices</p>



K2R FSP 2022-2027

**Appendix C**

**Alternate Visual Quality Objective Result and Strategy Regarding Trozzo Fire Salvage  
on Elliot Anderson FSR**

## INITIAL VISUAL IMPACT ASSESSMENT

### SIFCo Trozzo Creek Fire Salvage

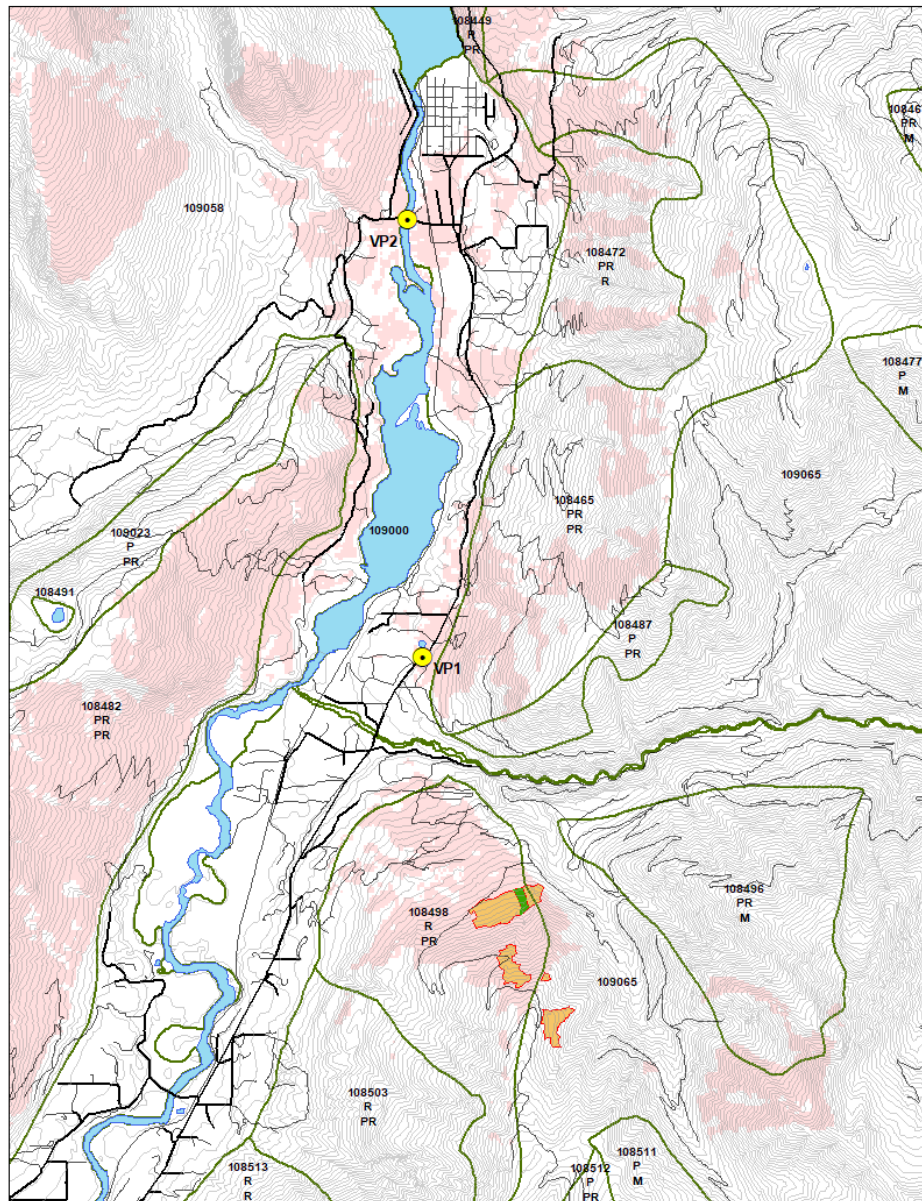


Figure 1 - Map of SIFCo Fire Salvage proposed block shapes where pink is visible from selected viewpoint.

## Objective

Cabin Resource Management Services was contracted by Slocan Integral Forestry Cooperative (SIFCo) for the completion of a Visual Impact Assessment for a fire salvage harvest within the Community Forest.

## Methods

The proposed alterations contain four proposed blocks which are located within two different Visual Landscape Inventory (VLI) polygons. Block 1 and block 3 are within VLI polygon #108498 with an Established Visual Quality Objective (EVQO) of Partial Retention (PR) and an Existing Visual Condition (EVC) of Retention (R). Blocks 4 and 5 are within VLI polygon #109065 with no EVQO.

In the summer of 2021, the Trozzo creek fire burnt over 5900 ha of forest land in the Solcan Valley. The proposed alterations are within the delimitation of the fire as shown on [Figure 2](#) and [Figure 3](#). The proposed alterations consist of a post fire salvage harvest.

Visual Nature studio v3.05 (VNS3) was employed along with ESRI ArcGIS 10.6 to perform a Visual Impact Assessment of the VQO identified and the proposed harvest area. A Digital Elevation Model (DEM) was derived from 20m TRIM contour data for the use in VNS3 models.

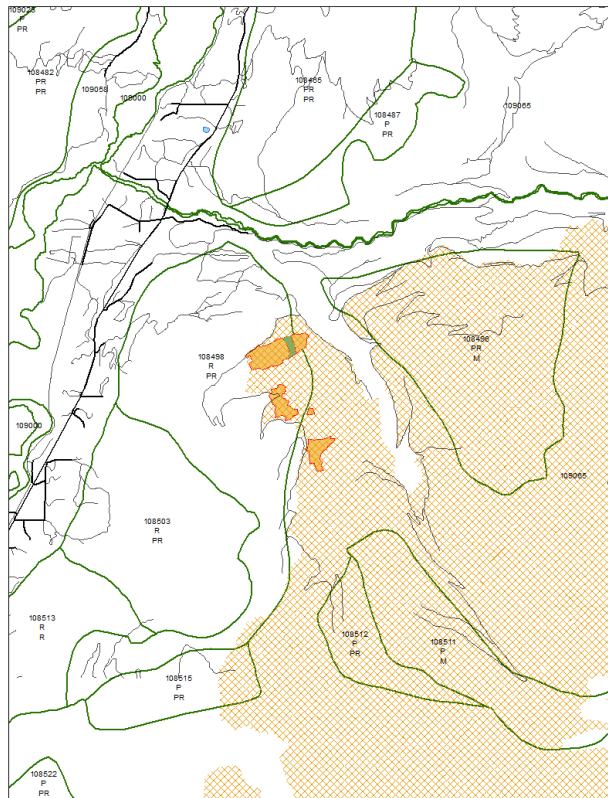


Figure 2 - Proposed block shapes with Trozzo Creek fire in orange crosshatch.

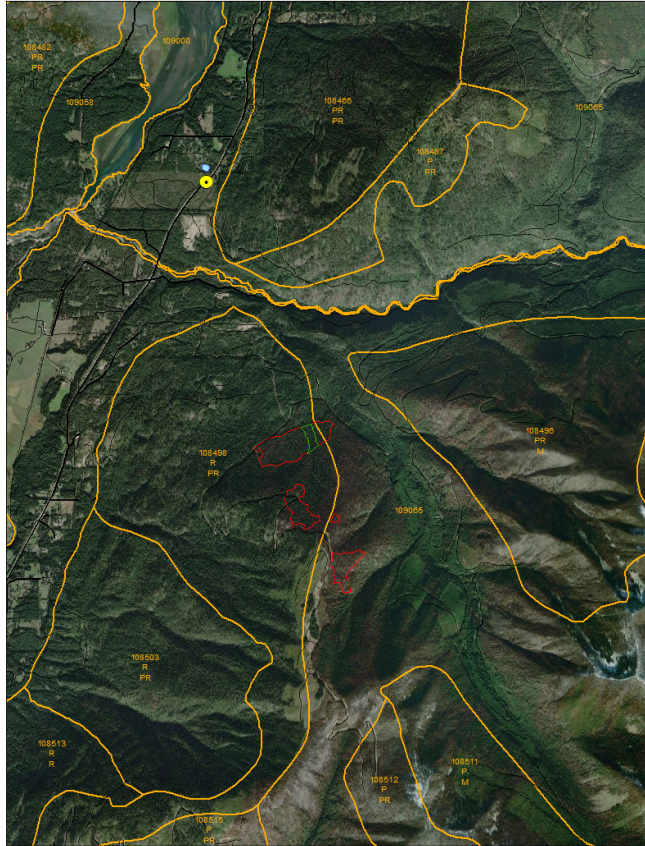


Figure 3 – Bing Aerial Imagery of the Trozzo Creek Fire with proposed block shapes in red and VLI polygons in orange.

## Viewpoints

- VP1 – Highway 6
- VP2 – Slocan Bridge

No Government Identified viewpoints were considered for the purpose of this project. The viewpoints were selected during a field visit.



## Viewpoint 1 – Highway 6

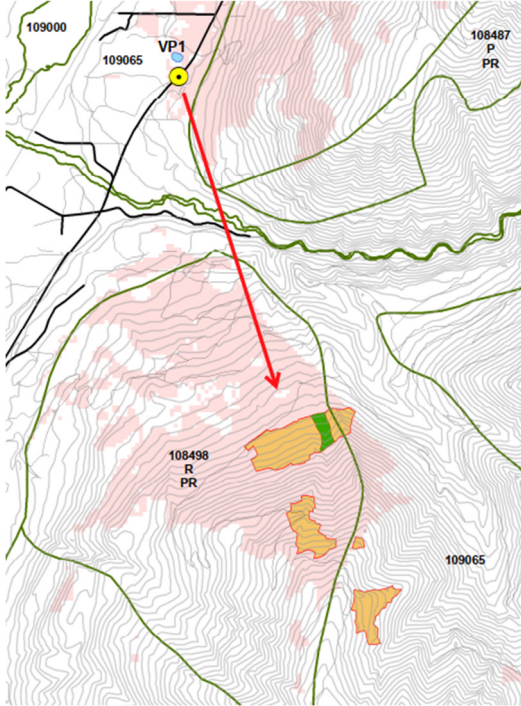


Figure 4 - VP1 viewing direction

Viewpoint #1

Min. Distance to Landform: ~1.7 km

VLI #: 108498

EVQ0: PR

EVC: R

---

Total Existing Alteration: 0%

Total Proposed Alteration: 5.7%

---

Total Initial % Alteration: 5.7%

---



20A 100 KALAMALKA LAKE RD  
VERNON, BC, V1T9G1  
778-475-3655  
JANUARY, 2022

## Viewpoint 1 – Highway 6

Viewing Direction:	SE	VLI #:	108498
Latitude:	49.7090116°	EVQO:	PR
Longitude:	117.4737187°	EVC:	R

---

Area of Landform:	31 873px	Proposed % Alteration:	5.7%
Area of Proposed Alteration:	1831 px	Existing % Alteration:	0%
Area of Existing Alteration:	0 px		

---

Total % Alteration (not adjusted):	5.7%
Total % Alteration (adjusted):	9.7%
Initial Visual Quality Objective Achieved:	M



Figure 5 - Photo captured by a Cabin staff member from the Highway 6 viewpoint in January 2022.



Figure 6 – Composite renders of Trozzo Fire Salvage using VNS with the landform highlighted in red and lines of force drawn. This photograph is intended to represent post-harvest conditions of landform from this viewpoint.

## Viewpoint 1 Rationale

The Highway 6 and Mon Amie Rd Junction viewpoint (VP1) is located on a well traveled highway between the Slocan and Lemon Creek communities in the Slocan Valley. It is well-travelled by locals and visitors year-round. This viewpoint is assigned an importance rating of 2 as public traveling towards Winlaw would have a 20 seconds side view of the alterations while driving south.

The proposed blocks are partially located within PR polygon #108498. VLI polygon #108498 has a Visual Sensitivity Class (VSC) of 1 and a Low Visual Absorption Capability (VAC), meaning that there is a high probability that the public would be concerned if the landform is visibly altered. Considering that the proposed alterations are within the area affected by the 2021 Trozzo Creek fire, the VAC would increase (not represented in the VLI layer data). Nonetheless, these alterations are within a sensitive VLI polygon.

The initial calculations are as follows:

1. There is no existing alteration on the landform.
2. The proposed alterations are 5.7%; which is the predicted range of Partial Retention.



20A 100 KALAMALKA LAKE RD  
VERNON, BC, V1T9G1  
778-475-3655  
JANUARY, 2022

The Basic VQC for the landform was assessed to be **Modification**, as the alterations are moderate in scale with linear/angular characteristic. A Visual Quality Effectiveness Evaluation was completed and concluded that the response to the major force line was poor. The alterations do not borrow from natural character. The viewpoint distance between alteration and viewpoint is 1 km-8 km (~1.7 km) resulting in a moderate rating. The position of the opening is rated as poor, as it is large and located higher and near the center of the landform. Edge treatments were rated poor as there is no feathering and one linear boundary. Roads had a subordinate impact on the visual quality from this viewpoint. The adjusted percent alteration from this viewpoint is **9.7%** resulting in an adjusted VQC of **Modification**.

The Visual Quality Objective from this viewpoint is **not met**, as neither methods indicate VQO achievement but both are close to class boundary. The blocks design do not meet PR by legal definition (*FPPR Section 1.1*).



<b>2.1.2 Site Information (Office)</b>																																		
Forest District _____		Sample Code _____																																
Licensee <b>SIFCo</b>		Date of Field Evaluation <b>01</b> / <b>26</b> / <b>2022</b> Y																																
Licence No. _____ CP No. _____		Block <b>1, 3, 4 and 5</b>																																
General Location <b>Lemon Creek (Trozzo Ck fire)</b>		Results Opening ID _____																																
<b>2.1.3 VLI Information (Office)</b>																																		
Date of Update <b>MM</b> / <b>DD</b> / <b>YY</b> / <b>YY</b> VAC <b>L</b>	Established VQO <b>PR</b>																																	
Polygon No. <b>108498</b> VSC <b>1</b>	Date of Establishment <b>12</b> / <b>31</b> / <b>2005</b> Y																																	
EVC <b>R</b> Recommended VQC _____	Source Document <b>GAR 7.1/7.2</b>																																	
<b>2.2.1 Viewpoint (Field)</b>																																		
Viewpoint No. <b>VP1</b>	GPS Latitude <b>49.708857</b>	Viewing Direction <b>SE</b>																																
GPS Longitude <b>-117.473671</b>	Elevation (m) <b>600</b>	Viewing Distance <b>1.7 km</b>																																
<b>2.2.2 Photography (Field)</b>																																		
Roll No. _____ ID Nos. _____	Viewpoint Importance (low) <b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>5</b> (high)	Field of View Width(degrees) <b>80</b>																																
Digital Photo ID Nos _____	Viewpoint Description <b>Highway 6</b>	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: <b>Moderate in scale with linear/angular character</b> Basic VQC <table style="display: inline-table; border: none;"> <tr> <td>P</td><td>R</td><td>PR</td><td>M</td><td>MM</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> <tr> <td colspan="3"></td> <td style="text-align: center;"><b>X</b></td> <td colspan="7"></td> </tr> </table>				P	R	PR	M	MM																			<b>X</b>							
P	R	PR	M	MM																														
			<b>X</b>																															
<b>2.2.4 Design Observations (Field)</b>		<b>2.3.4 Partial Cut Alterations</b>																																
Design Elements	G (-1)	M (0)	P (+1)																															
Response to visual force lines	_____	_____	<b>+1</b>																															
Borrows from natural character	_____	_____	<b>+1</b>																															
Edge treatments incorporated	_____	_____	<b>+1</b>																															
Distance from the viewpoint	_____	<b>0</b>	_____																															
Position on the landform	_____	_____	<b>+1</b>																															
<b>Total Design</b>	_____	_____	<b>+4</b>																															
<b>2.3.2 Assess Initial VQC (Office)</b>		<b>2.3.6 Determining EE Rating for the Landform by Comparing Basic VQC with Adjusted VQC (Office)</b>																																
a) % of landform altered by recent openings	<b>5.7%</b>																																	
b) % of landform with site disturbance outside openings	<b>NA</b>																																	
c) % non veg contribution of old openings	<b>NA</b>																																	
X = (a+b+c) = <b>5.7</b> % alteration Initial VQC <b>M</b>																																		
<b>2.3.3 Assess Adjusted VQC (Office)</b>		<b>2.3.7 Allowance for Over-ride</b>																																
d) Impact of roads, side cast, etc. (within openings)	<b>+1</b>																																	
<input type="checkbox"/> None <input checked="" 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 <b>0</b>																																		
f) Design (enter total from 2.2.4 above)	Adj. Factor <b>+4</b>																																	
<b>Total adjustment</b> Y = (d+e+f)	Adj. Total <b>+5</b>																																	
Calculate adjusted % alteration $X * (1 + 0.14 * Y) =$ <b>9.7%</b>																																		
<b>Adjusted VQC</b>	<table style="display: inline-table; border: none;"> <tr> <td>P</td><td>R</td><td>PR</td><td>M</td><td>MM</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> <tr> <td colspan="3"></td> <td style="text-align: center;"><b>X</b></td> <td colspan="7"></td> </tr> </table>			P	R	PR	M	MM																			<b>X</b>							
P	R	PR	M	MM																														
			<b>X</b>																															
Adjusted % alt <table style="display: inline-table; border: none;"> <tr> <td>0</td><td>1.5</td><td>4</td><td>7</td><td>12</td><td>18</td><td>24</td><td>30</td><td>++</td> </tr> </table>				0	1.5	4	7	12	18	24	30	++																						
0	1.5	4	7	12	18	24	30	++																										
Evaluated by <b>C. Levesque</b> Signature _____																																		
Over-ride EE _____ Rationale for over-ride _____ _____ _____ _____																																		

## Viewpoint 2 – Slocan Bridge

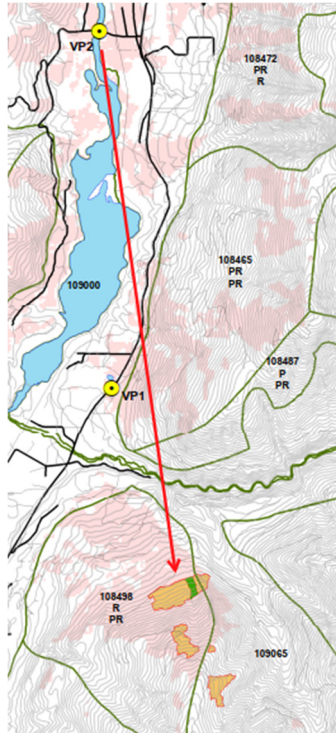


Figure 7 - VP2 viewing direction

### Viewpoint #2

Min. Distance to Landform:  
VLI #: 108498  
EVQO: PR  
EVC: R

---

Total Existing Alteration: 0%

Total Proposed Alteration: 6.7%

---

Total Initial % Alteration: 6.7%

---



20A 100 KALAMALKA LAKE RD  
VERNON, BC, V1T9G1  
778-475-3655  
JANUARY, 2022

## Viewpoint 2 – Slocan Bridge

Viewing Direction:	S/SE	VLI #:	108498
Latitude:	49.754541°	EVQO:	PR
Longitude:	-117.475487°	EVC:	R

---

Area of Landform:	2310 px	Proposed % Alteration:	6.7%
Area of Proposed Alteration:	155 px	Existing % Alteration:	0%
Area of Existing Alteration:	px		

---

Total % Alteration (not adjusted):	6.7%
Total % Alteration (adjusted):	10.5%
Initial Visual Quality Objective Achieved:	M



Figure 8 -Photo captured from the Slocan Bridge viewpoint in January 2022.

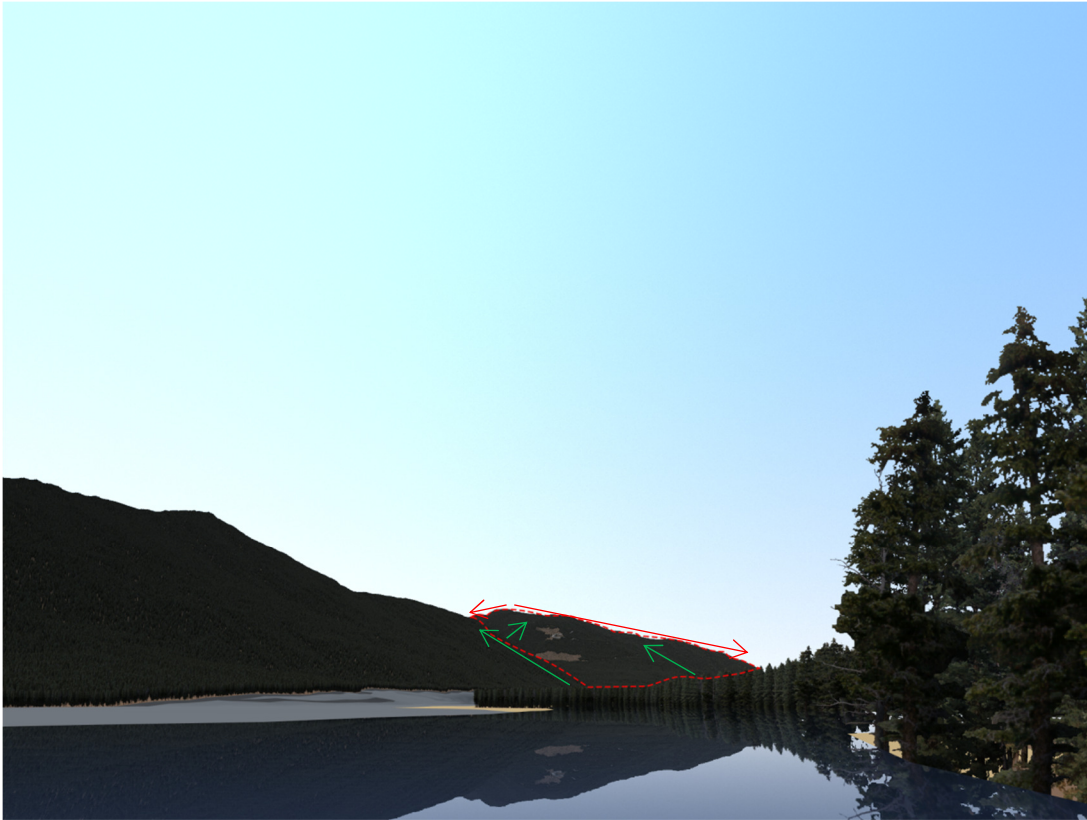


Figure 9 – VNS render from VP2 with the landform highlighted and the lines of force drawn. This render is intended to represent post-harvest conditions of landform from VP2.

## Viewpoint 2 Rationale

The Slocan Bridge viewpoint (VP2) is not considered a significant viewpoint as it only allows a glimpse view of less than 10 seconds on the landform. The proposed blocks are partially located within PR polygon #108498. VLI polygon #108498 has a Visual Sensitivity Class (VSC) of 1 and a Low Visual Absorption Capability (VAC), meaning that there is a high probability that the public would be concerned if the landform is visibly altered. Considering that the proposed alterations are within the area affected by the 2021 Trozzo Creek fire, the VAC would increase (not represented in the VLI layer data). Nonetheless, these alterations are within a sensitive VLI polygon.

The initial calculations are as follows:

1. There is no existing alteration on the landform.
2. The proposed alterations are 6.7%; which is the predicted range of Partial Retention.

The Basic VQC for the landform was assessed to be **Modification**, as the alterations are small to moderate in scale but with a design that has some angular characteristics. A Visual Quality Effectiveness Evaluation was completed and concluded that the response to the major force line was poor. The alterations do not borrow from natural character. The viewpoint distance between alteration and viewpoint is 1 km-8 km (~6.5 km)



20A 100 KALAMALKA LAKE RD  
VERNON, BC, V1T9G1  
778-475-3655  
JANUARY, 2022

resulting in a moderate rating. The position of the opening is rated as moderate, as it the alterations are on one side of the landform with the bigger shape lower and the smaller higher up. Edge treatments were rated poor as there is no feathering and one linear boundary. Roads had a subordinate impact on the visual quality from this viewpoint. The adjusted percent alteration from this viewpoint is **10.5%** resulting in an adjusted VQC of **Modification**.

The Visual Quality Objective from this viewpoint is **not met**, as neither methods indicate VQO achievement but both are close to class boundary. The blocks design do not meet PR by legal definition (*FPPR Section 1.1*).



<b>2.1.2 Site Information (Office)</b>			
Forest District _____		Sample Code _____	
Licensee <u>SIFCo</u>		Date of Field Evaluation <u>01</u> / <u>26</u> / <u>2022</u>	
Licence No. _____ CP No. _____		Block <u>1, 3, 4 and 5</u>	
General Location <u>Lemon Creek (Trozzo Ck fire)</u>		Results Opening ID _____	
<b>2.1.3 VLI Information (Office)</b>			
Date of Update <u>MM/DD/YYYY</u>	VAC <u>L</u>	Established VQO <u>PR</u>	
Polygon No. <u>108498</u>	VSC <u>1</u>	Date of Establishment <u>12</u> / <u>31</u> / <u>2005</u>	
EVC <u>R</u>	Recommended VQC _____	Source Document <u>GAR 7.1/7.2</u>	
<b>2.2.1 Viewpoint (Field)</b>			
Viewpoint No. <u>VP2</u>	GPS Latitude <u>49.754541</u>	Viewing Direction <u>S/SE</u>	
GPS Longitude <u>-117.475487</u>	Elevation (m) <u>545</u>	Viewing Distance <u>6.5 km</u>	
<b>2.2.2 Photography (Field)</b>			
Roll No. _____	ID Nos. _____	Viewpoint Importance (low) <u>1</u> 2 3 4 5 (high)	Field of View Width(degrees) <u>80</u>
Digital Photo ID Nos _____		Viewpoint Description <u>Slocan Bridge</u>	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: <u>Small to Moderate in scale with linear/angular characteristics</u> Basic VQC <u>P</u> <u>R</u> <u>PR</u> <u>M</u> <u>MM</u> <u>→</u>			
<b>2.2.4 Design Observations (Field)</b>		<b>2.3.4 Partial Cut Alterations</b>	
Design Elements	G (-1)	M (0)	P (+1)
Response to visual force lines	_____	_____	<u>+1</u>
Borrows from natural character	_____	_____	<u>+1</u>
Edge treatments incorporated	_____	_____	<u>+1</u>
Distance from the viewpoint	_____	<u>0</u>	_____
Position on the landform	_____	<u>0</u>	_____
<b>Total Design</b>	_____	_____	<u>+3</u>
<b>2.3.2 Assess Initial VQC (Office)</b>		<b>2.3.6 Determining EE Rating for the Landform by Comparing Basic VQC with Adjusted VQC (Office)</b>	
a) % of landform altered by recent openings <u>6.7%</u> b) % of landform with site disturbance outside openings <u>NA</u> c) % non veg contribution of old openings <u>NA</u> X = (a+b+c) = <u>6.7</u> % alteration <b>Initial VQC</b> <u>PR</u>		1 <input type="checkbox"/> <b>Clearly not met</b> (Neither method indicates VQO achievement, both are far from class boundary) 2 <input checked="" 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>2.3.3 Assess Adjusted VQC (Office)</b>		<b>2.3.7 Allowance for Over-ride</b>	
d) Impact of roads, side cast, etc. (within openings) <u>+1</u> <input type="checkbox"/> None <input checked="" 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>+3</u> <b>Total adjustment</b> Y = (d+e+f) Adj. Total <u>+4</u> Calculate adjusted % alteration $X \cdot (1 + 0.14 \cdot Y) =$ <u>10.5%</u> <b>Adjusted VQC</b> <u>P</u> <u>R</u> <u>PR</u> <u>M</u> <u>MM</u> <u>→</u> Adjusted % alt _____		Over-ride EE _____ Rationale for over-ride _____ _____ _____ _____	
Evaluated by <u>C. Levesque</u> Signature _____			