Fuel Management Prescription

BRITISH COLUMBIA | Ministry of Forests, Lands and Natural Resource Operations

A. PROJECT IDENTIFICATION

PROJECT ID AND UNIT ID: **Quesnel Fire Fuel Reduction – CWPP Site #33 Dragon Bluffs**	LAND OR TENURE HOLDER: Agriculture Grazing Tenure: document number 66312 Quarrying Sand and Gravel Tenure: document number 49703 Quarrying Sand and Gravel Tenure: document number 67092 Right-of-way Tenure – Electric Power Line: document number: 1094
LATITUDE/LONGITUDE: Lat: ~ 52°57'49.62"N Long: ~ 122°24'4.45"W	GEOGRAPHIC DESCRIPTION: Dragon Lake Bluffs
HIGHER-LEVEL PLAN(s): Quesnel and Area Community Wildfire Protection Plan (CWPP), Cariboo-Chilcotin Land Use Plan, Quesnel Sustainable Resource Management Plan	MAP REFERENCE NUMBER: 93B.098 / 93B.099

B. PROJECT DESCRIPTION

OBJECTIVE:

PUBLIC SAFETY☒ RANGE IMPROVEMENT☐ ECOSYSTEM RESTORATION☐ RECREATION☒ WILDLIFE HABITAT ☐

OTHER: Utilities

DESCRIPTION:

This prescription was undertaken as part of the City of Quesnel and Surrounding Area Community Wildfire Prevention Plan (CWPP). Several areas, including Dragon Bluffs (FTU 33) were selected during the development of the CWPP on criteria which included fuel loading and continuity, proximity to values and infrastructure and fire history.

The primary objective of this prescription is to provide a framework for the completion of treatments aiming at reducing the availability of wildfire fuels within FTU 33 through the reduction of crown and ground fuel availability and continuity which will result in the reduction of wildfire behavior and improve firefighting opportunities. The result of the treatments will be a modification of the wildland-urban interface near the South Hills and Dragon Lake neighbourhood which will protect private properties and Provincial Resources from potential wildfires. This prescription is designed to modify site conditions in order to reduce the crown fire initiation and ground fire intensity and provide a "Defensible Space" adjacent to the neighbourhood and community. Important structures/features in the immediate vicinity include:

- South Hills neighbourhood private properties
- South Hills water tower
- Hydraulic road and access to rural properties
- Hiking and mountain biking trails
- High Voltage power lines
- Powerlines along Hydraulic road

STRATEGIES:

The purpose of this prescription is to reduce the wildfire intensity and propagation potential by reducing the fuel loading and continuity. Surface fuel loadings will be abated through the removal of dead material. Ladder fuel loadings will be abated through pruning of live trees and removal of elevated dead material. Canopy fuel loadings will be abated through the removal of standing green trees, dead standing and supressed/diseased/pest infested conifers. Pruning conifers will achieve an increase in the fuel strata gap and reduce the potential for canopy fires. Breaking the canopy continuity will reduce the potential for spread of a canopy fire.

METHODS: The treatment method will be hand crews and motor manual methods.

C. TREATMENT UNIT (TU) SUMMARY

TU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	TREATMENT REGIME (i.e. PRU, THIN, PIL, BURN)	GENERAL DESCRIPTION
1	13.3	14.3	1.0	0. 0	0.0	Mech / Hand PRUN, THIN, DEAD REMOVAL, PIL/BURN	Gentle to uneven and steep uneven layered Fdi with minor deciduous.
TOTALS	13.3	14.3	1.0	0.0	0.0		

D. SITE CHARACTERISTICS

TU	CFFBPS FUEL TYPE	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT
1	Surface Canopy	Fd_8Ep_1 (AtSx)	SBSmh $04_601_4(05)$	615-714	Lower to Upper	20/0-40	W
FUEL TYPE DETERMINATION	C7 dominated by mature Douglas-fir with a high Crown Base Height. Birch and aspen are mixed throughout and infrequent hybrid white spruce.						

E. SOIL CHARACTERISTICS

TU	SOIL TEXTURE	DUFF DEPTH (cm)	COARSE FRAGMENTS (%)	SOIL DISTURBANCE LIMIT (%)	SOIL HARZARD RATING		
					Compaction	Erosion	Displacement
1	SL-SCL	4-7	25	10	Moderate	Moderate	Low

Comments: No soil concerns observed.

F. VALUES – *FOREST AND RANGE PRACTICES ACT*

RIPARIAN & LAKESHORE AREAS - Forest Planning and Practices Regulation (FPPR) division 3, Government Action Regulation (GAR) section 6, Forest and Range Practices Act (FRPA) sections 180 and 181

	Yes	No	
Is the proposed cutting, modification or removal of trees, or site preparation, in an area that contains streams, lakes or wetlands?	X		Quesnel Sustainable Resource Management Plan – Appendix E: Lake Management: Regional Lake# 1371, Dragon Lake. 0m Lakeshore Management Zone, Forest Management Class N/A. Riparian Reserve Zone 10m. All treatments are outside of the 10m riparian reserve zone.

RIPARIAN MANAGEMENT AREAS (RMAs) - FPPR sections 51 and 52

STREAM, LAKE, WETLAND ID	CLASS	RRZ (m)	RMZ (m)	SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE MANAGEMENT AREAS
Dragon Lake (541.0 Ha)	L1-B	10	0	FPPR Section 52 specifies under column 2, that basal area to be Retained Within Riparian Management Zone (%) is greater or equal to 10%. Quesnel Sustainable Resource Management Plan – Appendix E: Lake Management: Regional Lake# 1371, Dragon Lake. 0m Lakeshore Management Zone, Forest Management Class N/A. Riparian Reserve Zone 10m. All treatments areas are outside of the reserve zone. Areas close to the reserve zone, along Hydraulic Road are hand treatment only with high basal areas area retention. There will be no impact on Dragon Lake by carrying out the proposed treatments.

TEMPERATURE SENSITIVE STREAMS - FPPR section 53, GAR section 15, FRPA sections 180 and 181			
Are there temperature sensitive streams or direct tributaries to temperature sensitive streams within or adjacent to the proposed treatment area?	Yes	No X	n/a
ROAD CONSTRUCTION IN RIPARIAN MANAGEMENT AREAS - FPPR section 50			
Is road construction proposed in riparian management areas within the treatment area or an associated road permit (RP)?	Yes	No X	n/a
STREAM CROSSINGS - FPPR section 55			
Will stream crossings be constructed within the proposed treatment area or a road permit road providing access to the treatment area?	Yes	No X	n/a
MAINTAINING STREAM BANK AND CHANNEL STABILITY ON S4, S5, and S6 STREAMS - FPPR section 52 (2)			
Is the proposed treatment in the RMZ of an S4, S5 or S6 stream that is directly tributary to an S1, S2 or S3 stream and the activity is likely to contribute significantly to the destabilization of the stream bank or the stream channel?	Yes	No X	n/a
DOMESTIC WATER LICENCES (inside or outside of community watershed) - FPPR section 59			
Does the proposed treatment area contain water sources that are diverted for human consumption by a licensed waterworks?	Yes	No X	n/a
LICENCED WATER WORKS (inside or outside of a community watershed) - FPPR section 60			
Does the proposed treatment include areas that are within 100 m of a licensed waterworks?	Yes	No X	n/a
FISHERIES SENSITIVE WATERSHED - GAR section 14, FPPR section 8.1			
Are any activities proposed within a fisheries sensitive watershed?	Yes	No X	n/a
COMMUNITY WATERSHED - GAR section 8, FPPR section 8.2, 61, 62 and 84			
Does the proposed treatment area include areas that are within a community watershed?	Yes	No X	n/a
Will this project require road construction or deactivation within a community watershed?	Yes	No X	n/a
WATERSHED ASSESSMENT CONSIDERATIONS - FRPA section 180 areas with "significant watershed sensitivity"			
Does the proposed treatment area include areas that have watershed assessment considerations?	Yes	No X	n/a

SOIL DISTURBANCE AND PERMANENT ACCESS STRUCTURES - FPPR sections 35 and 36

Treatment Unit	Proposed Max. Allowable Soil Disturbance (%) (5% or 10%)	Proposed Max. Soil Disturbance for Roadside Work Areas (%)	Proposed Max. Permanent Access Structures (%)	Comments
1	10	25	7	Access structures and roads previously established.

Do the proposed Permanent Access Structures exceed 7% of the total area?	Yes	No X	n/a

LANDSLIDES AND TERRAIN STABILITY - FPPR section 37			
Does the proposed treatment area include areas where terrain stability is a concern?	Yes	No X	n/a
SUITABLE SECONDARY STRUCTURE - FPPR section 43.1			
Does the proposed treatment area include a "targeted pine leading stand"?	Yes	No X	n/a
UNGULATE WINTER RANGE - GAR section 12, FRPA sections 180 and 181, FPPR section 69			
Does the proposed treatment area include areas within an Ungulate Winter Range?	Yes	No X	n/a
WILDLIFE HABITAT AREA - GAR section 10, FRPA sections 180 and 181, FPPR section 69			
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes	No X	n/a
OBJECTIVES SET BY GOVERNMENT FOR WILDLIFE - FPPR section 7			
Does the proposed treatment area include areas to which objectives for wildlife under FPPR section 7 apply?	Yes	No X	n/a
OBJECTIVES SET BY GOVERNMENT FOR BIODIVERSITY OBJECTIVES (Landscape Level) - FPPR section 9			
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes	No X	n/a
OBJECTIVES SET BY GOVERNMENT FOR BIODIVERSITY OBJECTIVES (Stand Level) - FPPR section 9.1			
Are considerations for maintaining stand structure (wildlife trees, wildlife tree reserves, etc.), coarse woody debris, and maintaining tree and vegetation species composition incorporated into this prescription?	Yes X	No	Quesnel Sustainable Resource Management Plan 6.5.6 emphasizes retaining as much CWD of all size and decay classes. Chief Forester's Guidance on Coarse Woody Debris Management document supports this, however also speaks to reducing levels of recommended CWD to reduce fire risk where fire rating is high and adjacent to Wildland Urban Interfaces. This document recommends 5-6 CWD pieces per hectare for the SBS BEC zone. Specific coarse woody debris management specifications are outlined in section H.
RECREATION FEATURES - FRPA section 56 and 149, FPPR section 70			
Does the proposed treatment area contain interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature?	Yes X	No	Walking and biking trails extend into Site#33 upslope from the Hydraulic road into Dragon Bluffs. One trail runs through and continues beyond the active quarry and two others 'Oz' and 'Flying Monkey' are located to the south of the quarry and climb up the slope in a south easterly direction towards the power line. A 5m buffer will be established on both sides of these trails within which no piling and burning will take place. These buffers will be treated as per the adjacent TU. Treatments will not damage or render ineffective the resource features (trails) within the treatment units. This includes any coarse woody debris features, trail support/containment, or wooden features that are evidently part of the recreation features. Any damage to recreation features will be repaired.
VISUAL QUALITY OBJECTIVES - GAR section 7, FRPA sections 180 and 181, FPPR section 9.2			
Is the proposed treatment within a scenic area?	Yes X	No	The area is visually sensitive. Though there are no set VQO's and the treatments will not significantly alter the visual landscape.
ARCHAEOLOGICAL RESOURCES/CULTURAL HERITAGE RESOURCES - FPPR section 10			
Are there any known archaeological sites or cultural heritage resources that are important to First Nations within the proposed area?	Yes X	No	Where archaeological potential exists, hand treatment only is proposed. There are two archeological sites within the treatment unit (AOP-01 and FfRo-30) A third site, TSN-TU33-LTH1, is outside of the treatment unit. The sides have been marked in the field with yellow "Special Management Zone" ribbon. These sites will be avoided during treatments.
INVASIVE PLANTS - FRPA section 47 and FPPR section 17			
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes	No X	n/a

NATURAL RANGE BARRIERS - FRPA section 48, FPPR section 18			
Are there natural range barriers within the proposed treatment area that are likely to be removed or rendered ineffective?	Yes	No X	n/a
LAND USE OBJECTIVES (Higher Level Plans and objectives set by Government under the *Land Act*)			
Are there land use objectives (higher level plans or objectives under the *Land Act*) that apply to the proposed treatment area or a Road Permit necessary to provide access to the treatment area?	Yes	No X	n/a
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the *Land Act*)?	Yes	No X	n/a

G. OTHER CONSIDERATIONS AND REQUIREMENTS

CONSULTATION – FIRST NATIONS

FIRST NATION	CONCERNS IDENTIFIED AND MEASURES TO ADDRESS
Lhtako Dene First Nation	
Tl'etinqoxt'in First Nation	
?Esdilagh First Nation	

First Nations consultation complete?	Yes X	No	

CONSULTATION – GENERAL

EXISTING TENURE HOLDERS (Forest, Range, Guide Outfitters, Trappers)

Tenure Holder	Concerns		Measures proposed to address licensee's concerns
Range (66312)	Yes	No X	
Quarry (49703)	Yes	No X	The Local Highways service provider has been informed of the proposed activities and expressed no concerns.
Quarry (67092)	Yes	No X	The Local Highways service provider has been informed of the proposed activities and expressed no concerns.
Electric Power Line right-of-way (1094)	Yes X	No	No falling of layer 1 trees will be carried out within two tree lengths of the power line that follows Hydraulic road. The upper line has a clearing width that is suitable for falling if required.

PRIVATE PROPERTY

Does private property border the proposed treatment area?	Yes X	No	Sections of the western boundary border private property and treatment boundary has been established outside of the private property. If trees are to be felled along this boundary, they must be felled away from the property line or otherwise retained. The property owner will be notified of the treatment as part of community info sharing requirements. Access for harvesting and hand crews is through gated private land. Permission must be obtained prior to commencement of planned works.

SMOKE MANAGEMENT

Does a smoke management plan exist for the proposed treatment area?	Yes X	No	Pile burning operations will follow objectives set out in the B.C. Smoke Management Framework (see below) and the City of Quesnel Smoke Management Plan. The overall goal of smoke management in B.C. is to reduce health risks by minimizing human exposure to smoke from biomass burning. Human exposure to biomass smoke is minimized by: • reducing emissions of smoke from biomass burning • ensuring that emissions of smoke from biomass burning occur in times and places where dispersion is good so that high concentrations of smoke are not transported to populated areas • warning citizens of high levels of smoke and other pollution and advising appropriate actions to minimize exposure. Burning will only occur when venting is adequate and local fire authorities and residents will be advised in advance. Custom burning indexes will be employed.

H. STAND AND STOCK TABLE TU1

Species and Diameter Class	Average Crown to Base Height (m)	Average Tree Height (m)	STEMS PER HECTARE (sph)			VOLUME PER HECTRARE (m^3/ha)		
			Existing	Cut	Leave	Existing	Cut	Leave
Layer 1 (> 27.5 cm dbh)								
Douglas-fir	<6.7	20	300	0	300			
Spruce			0	0	0			
Paper Birch	<10	17	66	0	66			
Aspen			17	0	66			
Total Dead Potential			0	0	0			
Total Live			383	0	383			
Total All Species			383	0	383			
Total Conifers			300	0	300			
Layer 1 (> 22.5 cm - 27.5 cm dbh) *								
Douglas-fir	<6.7	20	200	0	200			
Spruce			66	0	66			
Paper Birch			29	0	29			
Aspen			0	0	0			
Total Dead Potential			10	10	0			
Total Live			266	0	266			
Total All Species			296	0	296			
Total Conifers			266	0	266			
Layer 1 (> 17.5cm dbh - 22.5 cm dbh)								
Douglas-fir	<6.7	20	233	150	83			
Spruce			66	30	36			
Paper Birch			100	0	100			
Aspen			0					
Total Dead Potential			0		0			
Total Live			399	180	219			
Total All Species			399	180	229			
Total Conifers			299	180	119			
Layer 1 (≥ 12.5 cm - 17.5 cm dbh)								
Douglas-fir	<6.7	20	100	90	10			
Paper Birch			0	0	0			
Total Dead Potential			10	10	0			
Total Live			100	90	10			
Total All Species			110	100	10			
Total Conifers			110	100	10			
Total Layer 1								
Total Layer - All Species			1158	478	558			
Total Layer - Conifers Only			1075	478	597			
Layer 2 (≥ 7.5 - 12.5 dbh)								
Douglas-fir	2.7	8.7	266	150	116			
Spruce			33	10	23			
Paper birch			0	0	25			
Aspen			66	0	66			
Total Dead Potential			0	0	0			
Total Live			323	160	230			
Total Layer 2 - All Species			336	200	136			
Total Layer 2 - Conifers Only			310	200	110			
Layer 3 (≥ 1.3 cm - 7.5cm dbh)								
Douglas-fir		5.4	733	400	333			
Trembling aspen			17	0	17			

Paper birch			300	0	300			
Total Dead Potential			0	0	0			
Total Live			1033	400	640			
Total Layer 3 - All Species			1033	400	633			
Total Layer 3 - Conifers			733	400	333			
Layer 4 (<1.3 cm dbh)								
Douglas-fir		1.2	200	125	75			
Aspen		1.2	400	0	400			
Birch			100	0	100			
Hybrid white spruce			25	0	25			
Total Layer 4 - All Species			725	125	575			
Total Layer 4 - Conifers			225	125	100			

</= 7.0cm in diameter SURFACE FUEL LOADING (kg/m^2)	Existing type: Ave 1.2 kg/m2	Target Distribution: Reduce forest floor fuel loading to 0.7kg/m3 to 1.0 kg/m2 post treatment. Expect accumulation to increase during treatment ie. Post pruning.
	Method used to measure: Photo load method	
>7.0cm in diameter SURFACE FUEL LOADING (k	Existing Distribution: Range from 0.0 kg to 2.5kg/m2, Avg: 1.6 kg/m2 Pockets of heavy accumulations and areas of lighter distribution.	
	Method used to measure: Fixed plot radius (5.64). Measures taken of pieces located within fixed radius plot – length (within plot) and diameter chart used to estimate dry weights.	
Crown Closure (%)	Existing: 20-60%	Target: 20-35%

BIODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS	
COARSE WOODY DEBRIS (CWD) RETENTION TARGET - sph and Distribution	All debris 15cm and over that are >/= 50% decayed by volume will be pruned and cut to lie on the ground dispersed and left on site. For debris decayed less than 50% retention will be set between 5 and 20 logs per hectare that are larger than 15 cm in diameter on the smallest end and must be a minimum of 2 metres long.
WILDLIFE TREE RETENTION TARGET	Retain all deciduous (except danger trees), retain dead snags that do not pose a danger tree risk to workers. No work zones may be required around Douglas-fir snags that have significant wildlife values (cavities, broken tops, hollow stems, loose bark etc.). Retain layer 1 Douglas-fir larger than 22.5 cm dbh. Fall danger trees within 25m of active trails. Migratory birds: Area is within rank 4, moderate to high risk. Avoid falling operations in all layers between May 8th and August 2nd. Avoid active nesting sites during and outside of this time frame.
FOREST HEALTH	None noted.

TREATMENT SPECIFICATION SUMMARY

TU	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)
1 (Motor Manual Hand Treatments)	Thin from below layer 1 (<22.5 cm dbh) and layer 2 (7.5 to 12.5 cm dbh) to a combined density of <130 sph. Target dead and suppressed conifer stems in layer 2 (7.5-12.5cm DBH) and layer 3 (>1.3m -7.5cm DBH) and thin down to a total combined density < 350 stems/hectare. Layer 4 stems density is variable, thin to a intertree distance of 3.4 metres and 3.4 metres outside of drip lines. Total conifer stem retention for the combined diameter classes less than 22.5 cm dbh is 580 sph Retain dead standing trees of all over-story species that do not pose a risk to crew and fall danger trees within 25m of trails. There are many Douglas-fir snags in this treatment unit with very high wildlife values. Protecting these features during operations is a critical element of successfully carrying out the treatment.

TU	TREATMENT SPECIFICATION RATIONALE (See notes to assist)
1 (Motor Manual Hand Treatments)	**Hand treatment/access structures** All dead and dangerous trees over 4 metres in height are to be felled except those that are obvious wildlife trees (cavities, loose bark, broken tops, brooms etc.) Pile and burn 90% of surface debris 0.5cm greater excluding designated coarse woody debris. Leave all debris that are over 50% decayed in volume (bark loose and sapwood brown and crumbly) and debris that is 25% or greater by diameter that are embedded in the forest floor. Cut and lay coarse woody debris to the ground as necessary. Cut, pile, and burn 95% of all sound debris from the thinning of layers 1 through 4. Prune all retained conifers 5m in height and over to a minimum 3 metre crown base height. Conifer stems that are less the 5m in height are to be pruned to 50 percent of the tree height. All crown base heights post treatment will be measured to the lowest branch tip. Stubs from pruning must be 1cm or less. Pile and burn 90 percent of all pruning's. Thin conifer trees to achieve a density of 800sph total and maintain the vertical and species structure of the stand. Retain components of all 4 layers for all species to mimic original stand structure. Retain Douglas Fir and Spruce trees greater than 22.5cm and over in diameter except where discretionary removal is necessary to create appropriate crown separation. The target maximum stand conifer density is 800 sph with a minimum intertree spacing of 3.4 metres. A clumpy distribution of layer 1 Douglas-fir stems is acceptable. Access roads created or re-activated from treatments must be deactivated once treatments are complete. **Open Burning** Expected fire behaviour outcome (as per the 2020 Fuel Management Prescription Guidance document): It is expected that abating surface fuel loadings will reduce the risk of ignition, intensity and rate of spread of ground fires. All qualifying debris will be piled within the boundaries of the treatment area ID11. All piles will be located at least 5m away from external boundaries, trails, viewpoints, fence lines, parking spaces, leave/wildlife trees and special management zones. Piles will be constructed such as to prevent damage to retained trees, not exceed 3m by 3m in area and be as tall as they are wide. Pile burning will be completed in the late fall to early spring and preferably on a snowpack, providing moisture conditions are high enough to minimize the risk of spread and minimize the impact on soil. All burning will require a burn permit issued by the BC Wildfire Service and will need to comply with the BC Smoke Management Framework guidelines and the City of Quesnel Smoke Management Plan. Measurable Standard: All debris piles will be burned to achieve 98% consumption and will be completely extinguished before crews leave the area.

I. TREATMENT DESCRIPTION
MERCHANTABLE TIMBER HARVEST
ROADS, LANDINGS AND TRAILS: N/A
FELLING: YES Green and dead standing and danger trees that pose an immediate risk to crews and all danger trees within 25m of trails except wildlife trees as noted above.
YARDING/SKIDDING: N/A
LOADING AND HAULING: N/A
SLASH DISPOSAL: YES pile and burn, slash piles size maximum is 3m x 3m x 3m.
SITE DISTURBANCE: maximum 10%
SPECIAL MEASURES: Minimize damage to recreation trails. Use caution on and around steep slopes. Exposed rock and rock drop-offs present. Review work area prior to commencing work to identify these areas in addition to any danger trees. Note wildlife trees in prework, must be retained during operations.

STAND MODIFICATION TREATMENTS
MERCHANTABLE TIMBER UTILIZATION: Was commercial timber harvest considered? No If commercial timber harvest not prescribed, explain: Hand treatment is recommended where merchant timber removal is not operationally feasible.
BRUSHING: Only as necessary to fulfill operational requirements.
PRUNING: Up to 3m on retained stems. If stems are less than 5m, prune to 50% of the stem height.
THINNING: Layer one all diameter classes (TU 1), layer one < 27.5cm (TU 2), green standing, suppressed and dead stems in layer 2(7.5-12.5cm DBH)(TU 1, 2) and layer 3 (>1.3m -7.5cm DBH)(TU 1, 2) to <800 SPH, space layer 4 (TU 1, 2).
DEBRIS PILING: Yes, of all thinned stems, pruned branches and coarse woody debris.
PILE BURNING: Yes, preferred all piles in winter season under good burning conditions or as snow free condition safely allow.
MULCHING: n/a
MASTICATION: n/a
GRINDING: n/a
PRESCRIBED FIRE: Prescribed fire can be considered for future stand maintenance treatments.
PLANTING: n/a
OTHER:
AUTHORIZATION AND TIMBER TENURE
FRPA Section 52: Permission required in order to fall danger trees/standing dead/beetle killed trees.
Forestry Licence to Cut (FLTC): Required for merchantable timber removal (TU 1).
Park Use Permit: n/a
Road Permit or Road Use Permit: Required for merchantable timber removal (TU 1).
Other (i.e. local government, utilities, etc.): Hydro, Emcon, City of Quesnel
J. POST TREATMENT
EXPECTED VEGETATION RESPONSE: expect a growth response in shrubs and an increase in Douglas-fir regeneration.
ADDITIONAL TREATMENTS OR MAINTENANCE: Manual brushing and prescribed fire can be considered for stand maintenance.
SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? No
PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? No
STOCKING STANDARDS

TU	Stocking Standard ID	Pref. Spp.	Acc. Spp.	Well Spaced Stem/ha				Minimum Height (m)			Regen Delay	Free Growing (years)
				TSS	MSS Pref. & Acc.	MSS Pref.	MITD	PI	Others	RTH (%)		
1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

K. Outstanding Works
Ribbon trail centrelines.
L. ADMINISTRATION
PREPARATION

FOREST PROFESSIONAL NAME *(Printed)*	FOREST PROFESSIONAL SIGNATURE
Megan Walker (Field work) Ian LeBlanc, RFT, fuel loading assessments and consulting. Roland Jarrett, RPF (Field assessment, prescription review and editing)	
MEMBER NUMBER RPF #2379	DATE Dec 18/23

M. ATTACHMENTS			
MAPS :	Yes ☒ No ☐	FIELD DATA CARDS:	Yes ☒ No ☐
WUI WTA Plots and Photos:	Yes ☒ No ☐	CRUISE DATA:	Yes ☐ No ☒
AIR PHOTOS/IMAGERY:	Yes ☐ No ☒	BURN PLAN:	Yes ☐ No ☒
MODELING/DATA ANALYSIS:	Yes ☐ No ☒	OTHER:	Yes ☐ No ☒
TERRAIN STABILITY ASSESSMENT Completed By: Date:	Yes ☐ No ☒	VISUAL IMPACT ASSESSMENT Completed By: Date:	Yes ☐ No ☒

ARCHAEOLOGY IMPACT ASSESSMENT Yes ☒ No Completed By: Ridgeline Archaeology	BIOLOGIST ASSESSMENT Yes ☐ No ☒ Completed By: Date:
ADDITIONAL COMMENTS:	

References

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