# Chinook Comfor Limited Partnership REQUEST FOR PROPOSAL (RFP) K4R-WR3 Stump to Dump, Pile & Burning

# CHINOOK WRR PROJECT

Chinook Comfor LP Box 969 Burns Lake, B.C. VOJ 1E0 Phone: 1-250-692-0630 Ken.Nielsen@chinookcomfor.ca RFP ID: 2025-26-K4R-WR3 Prepared By: Ken Nielsen Date: June 13, 2025

# REQUEST FOR PROPOSAL K4R-WR3 Stump to Dump Burns Lake, B.C.

# RFP ID: 2025-26-K4R-WR3-Stump to Dump SUBMISSION DEADLINE: July 7, 2025 QUESTION SUBMISSION DEADLINE: June 30, 2025

Questions may be submitted in written form no later than June 30,2025, to:

RFP Contact Name:	Ken Nielsen
Contact Addross:	Box 969
Contact Address.	Burns Lake, VOJ 1E0
Telephone Number:	1-250-692-0630
Email Address:	Ken.Nielsen@chinookcomfor.ca

# INTRODUCTION

Chinook Comfor LP invites and welcomes proposals for our K4R-WR3 Stump to Dump Project. Please take the time to carefully read and become familiar with the proposal requirements. All proposals submitted for consideration must be received by the time as specified above under the "SUBMISSION DEADLINE."

BIDDERS SHOULD NOTE THAT ANY AND ALL WORK INTENDED TO BE SUBCONTRACTED AS PART OF THE BID SUBMITTAL MUST BE ACCOMPANIED BY BACKGROUND MATERIALS AND REFERENCES FOR PROPOSED SUBCONTRACTOR(S) – NO EXCEPTIONS.

# **PROJECT AND LOCATION**

The request for proposal is being requested for Chinook Community Forest K4R licence area, specifically in and around the southside community in the Lakes TSA, Burns Lake, BC.

# **PROJECT MANAGER CONTACT INFORMATION**

For questions or information regarding Planning, contact the following individual(s):

Name: Ken Nielsen Title: General Manage

Title: General Manager

**Phone:** 1-250-692-0630

Email: Ken.Nielsen@chinookcomfor.ca

# **PROJECT OBJECTIVE**

The objective for this project is to harvest Wildfire Risk Reduction Treatment Units to mitigate the risk to communities. Deliver saw log fiber to various manufacturing facilities.

### PROJECT SCOPE AND SPECIFICATIONS

Project Scope and Specifications are detailed on an attached document. (Appendix 1)

### SCHEDULED TIMELINE

The following timeline has been established to ensure that our project objective is achieved; however, the following project timeline shall be subject to change when deemed necessary by management.

MILESTONE	DATE
Start :	August 01, 2025
Detailed Update:	October 1, 2025

**Completion Deadline:** 

March 1, 2026

# **PROPOSAL BIDDING REQUIREMENTS**

### **PROJECT PROPOSAL EXPECTATIONS**

Chinook Comfor LP may award the contract to the proposal that best accommodates the various project requirements. Chinook Comfor LP reserves the right to award any contract prior to the proposal deadline stated within the "Scheduled Timeline" or prior to the receipt of all proposals, award the contract to more than one Bidder, and refuse any proposal or contract without obligation to either Chinook Comfor LP or to any Bidder offering or submitting a proposal.

# INTENT TO SUBMIT PROPOSAL

All invited Bidders are required to submit a "Letter of Intent" no later than June 27, 2025, informing Chinook Comfor LP of their intent to either submit or decline to submit a proposal.

# **DEADLINE TO SUBMIT PROPOSAL**

All proposals must be received by Chinook Comfor LP in a sealed envelope no later than 2:00 pm on July 7, 2025, for consideration in the project proposal selection process. By mail Box 969, Burns Lake, BC VOJ 1E0 or drop off at Chinook's office 485 Hwy 16 W, Burns Lake.

# **PROPOSAL SELECTION CRITERIA**

Only those proposals received by the stated deadline will be considered. All proposals submitted by the deadline will be reviewed and evaluated based upon information provided. In addition, consideration will be given to cost and performance projections. Furthermore, the following criteria will be given considerable weight in the proposal selection process:

- Proposals received by the stipulated deadline in the correct format;
- Bidder's asserted performance effectiveness regarding the project objectives of Chinook Comfor LP;
- Bidder's performance history and asserted ability to timely deliver proposed services;
- Bidder's ability to provide and deliver qualified personnel who have the knowledge and skills required to effectively and efficiently execute proposed services;
- Overall cost effectiveness of the proposal;

Chinook Comfor LP shall reserve the right to cancel, suspend, and/or discontinue any proposal at any time they deem necessary or fit without obligation or notice to the proposing bidder/contractor.

# PROPOSAL SUBMISSION FORMAT

The following is a list of information that the Bidder should include in their proposal submission:

# Summary of Bidder Background

- Bidder's Name(s);
- Bidder's Address;
- Bidder's Contact Information (and preferred method of communication);
- Legal Form of Bidder (e.g. sole proprietor, partnership, corporation);
- Date that the Bidder's Company was Formed;
- Description of Bidder's company in terms of size, range, and clientele as well as the types of services offered.
- Bidder's principal officers (e.g. president, chairman, vice president(s), secretary, chief operating officer, chief financial officer, general managers, etc.) and length of time each officer has performed in his/her field of expertise;
- Evidence of legal authority to conduct business (e.g. business license number);
- Evidence of established track record for providing services and/or deliverables that are the subject of this proposal;
- Organizational chart showing key personnel who would provide services to Chinook Comfor LP.

# **Financial Information**

• State whether the Bidder, or its parent company (if any), has ever filed for bankruptcy or any form of reorganization under the Bankruptcy Code;

• State whether the Bidder, or its parent company (if any), has ever received any sanctions or is currently under investigation by any regulatory or governmental body.

# **Proposed Outcome**

• Summary of timeline and work to be completed.

# **Equipment or Service**

- List all equipment or services required for this proposed project and the quantity of each;
- Detailed estimated cost for each piece of equipment or service;
- List any equipment or services required of a subcontractor, along with a brief explanation;
- List any accommodation, services, or space required from Chinook Comfor LP, along with a brief explanation.

# **Cost Proposal Summary and Breakdown**

- An inclusive price for travel/room and board and utility vehicles.
- A detailed list of all expected costs related to the proposed project;

# Licensing and Bonding

• Provide details of licenses and bonds (if any) for any proposed services that the bidder/contractor may plan on providing for this project.

# Insurance

• Details of any liability or other insurance provided with regard to the staff or project.

# References

• Provide 3 references

Bidder agrees that Chinook Comfor LP may contact all submitted references to obtain all information regarding Bidder's performance.

# **Opening of RFP**

• Bidders are welcome to attend the opening of proposals July7,2025, 4:30 pm at Chinooks office.

# Appendix 1 K4R-WR3

This harvesting is for approximately 21,000 m3 of mixed green and dry stands over multiple blocks along the Keefes Landing Road.

- 1) Prescription Map #1, Blk WWR-1, 2 & 20. 25.6/ha approximate Volume 6,200m3.
- 2) Prescription Map #2, Blk WWR -3 & 5. 8.7/ha approximate volume 2,300m3.
- 3) Prescription Map #3, Blk's WWR-6,7,8 & 9. 20.7/ha approximate volume 3,600m3
- 4) Prescription Map #4, Blk's WWR 10, 11 & 12. 9.9/ha approximate volume 1,400m3
- 5) Prescription Map #6, Blk WRR 14. 1/ha approximate volume 200m3.
- 6) Prescription Map #7, WRR Blk's 15. 29/ha approximate volume 6,300m3.

Prescriptions and maps are attached, along with some photos to give you an idea of stand structure.

Page 11 or 12 of the prescriptions you can find the TREATMENT DESCRIPTION for harvesting.

With in some of these Blk's there are Culturally Modified Tress (CMT's), contractor will work with the Chinook representative on which ones can be snubbed for harvesting and which ones need to be left standing.

Currently Chinook is waiting for an approved Cutting Permit (CP) and Road Permits (RP) expected by August.

Chinook is also up against our cut control period. Only 10,000m3 can be delivered in the 2025 calendar year. The remaining volume can delivered after January 1<sup>st</sup>, 2026.

Also attached is Appendix 2, a cost sheet to be filled out.

Operation	Cubic Meter Cost m3/\$
Bunching	m3/\$
Skidding	m3/\$
Processing	m3/\$
Loading/Piling	m3/\$
Road Building	Linear Meter Cost\$
Hauling to Decker	Tonne/hr rate
Forest Products	
Hauling to Babine Forest Products	Tonne/hr rate
Hauling to Drax Burns Lake Pellet Plant	Tonne/hr rate
Hauling to Tahtsa Timber	Tonne/hr rate

Chinook HIGHLY ADVISES contractors to work/educate processor and buncher operators on how waste is determined. Currently, the benchmark for waste in the Lakes Timber Supply Area is 10m3 per hectare. After 3 years of waste surveys, Chinooks' benchmark is 3m3 per hectare.

Chinook will penalize contractors for waste exceeding 3 m3 per hectare at a rate of \$2.00 per m3 per hectare.

### Appendix 1b

As this project focuses on Wildfire Risk Reduction, Chinook is collaborating with FESBC to address post-harvest fuel loading treatments. Chinook requests that you submit a proposed price for raking and gathering debris across the block post-harvest, piling and then burning of the piles.

This can only be done after Chinook completes waste assessments and given approval to burn rake, pile & burn.

Total Hectares of all blocks	Hectare Rate for racking/piling/burning			
94.9/hectares	\$			



# K4R - 2025-26 Info Share Map Eakin Settlement Road

Forest Region: Northern Interior Forest District: Nadina Date: 2025-02-25

# Legend





Produced By: PO Box 510, 135 1st Ave, Burns Lake, BC V0J 1E0 Ph (250) 692-3443 Fax (250) 692-3464 Email Joretta Johnson @ freegrowing.ca





LAND OR TENURE HOLDER:
Chinook Community Forest Tenure K4R
(CFA:K4R)
GEOGRAPHIC DESCRIPTION:
Eakin Settlement Road, Southside Transfer Station
MAP REFERENCE NUMBER:
93F 091

<b>B. FUEL TREATN</b>	VENT PROJECT DESCRIPTION		
OBJECTIVE:	🛛 Public Safety	Range Improvement	Ecosystem Restoration
	Recreation	Wildlife Habitat	□ Other:
	The Eakin Settlement – Southside Tr François Lake and is bordered by bo Community Forest (CFA:K4R) tenu Columbia Wildfire Service (BCWS) The unit is within the François Lake been assigned a risk class rating of 2 namely the infrastructure and comm Threat Analysis (PSTA) has classifie to extreme (9). This rating considers present as well as historical fire dens (161) fire weather station indicate th southwest. The objectives of this Prescription an reduce the risk of wildfire to p (WUI) areas – specifically the and specifically the Regional I reduce the risk of wildfire to c likely to influence forest fuels develop ecologically appropria overlapping land management develop ecologically appropria site and stand conditions to ma create defensible space for wil incident response by removing safety and reduces fire behavior	ransfer Station Wildfire Risk Reduction th private and Crown land. This unit if re area and has been identified as a hig Wildfire Risk Reduction (WRR) Tac Wildland Urban Interface (WUI) Risk due to the prevalence of High Value unity values along the Eakin Settleme ed stands within the unit as having a F the anticipated head fire intensities an sities. Initial spread index (ISI) roses g at prevailing winds during the core fire ublic safety by modifying forest fuels properties, residences, and infrastruct District of Bulkley Nechako Southside ublic safety by modifying fuels adjaced kin Settlement Road network. ritical infrastructure and property by n adjacent to, identified values at risk. tte and effective wildfire risk reduction objectives and tenure obligations. tte and effective wildfire risk reduction intain forest health and site productiv dland fire fighters to anchor suppressi for modifying hazardous forest fuels if our potential.	on area is on the south side of s entirely within the Chinook gh priority corridor by the British tical Plan. & Class (RC) polygon which has Resources and Assets (HVRAs) nt Road. The Provincial Strategic inal Threat Rating (FTR) of high (7) nd spotting impacts for the fuel types generated by the Grassy Plains Hub re season are typically from the within wildland urban interface ure near the Eakin Settlement Road e Transfer Station. ent to critical evacuation corridors – nodifying forest fuels adjacent to, or n solutions that give due regard to ity. on strategies and tactics from during n a way that improves firefighter



STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this Prescription area will be a Clearcut with reserves Silviculture System since these proposed areas requires significant stand modification to address the hazardous stand conditions. The stand condition is poor in this area due to the impacts of historical insect infestations and subsequent wind events. This area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest methods. Final treatment phases require surface fuel load reductions to dead and down material and treatment residues by mechanical and potentially manual surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Treatment area design and specifications have been developed with consideration of the influence of topography.

C. TRE	ATMEN	T UNIT (	TU) SUN	MMAR	Y	
TU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	SILVICULTURE SYSTEM AND TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)
1	25.6	32.5	6.9	0	25.6	Silviculture System: Clearcut with Reserve (CCRES)
						Treatment Regimes: Conventional Harvest (HARV), Hazard Tree Removal
						(HTR), Surface Fuel Reduction (SFR), Mechanical Pile and Burn (PILE BURN)
TOTALS	25.6	32.5	6.9	0	25.6	

D. SITE C	HARACTERISTICS						
TU	<u>CFFBPS FUEL</u> <u>TYPE</u>	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT
1	C2	MATURE Coniferous	SBS dk 01	840 - 880	Middle	5 – 15	West
FUEL TYPE DETERMINATION C2 – Boreal Black and White Spruce *(the C2 fuel type is used for representing mountain pine beetle (MPB) affected stands).							

E. SOIL CHARACTERISTICS									
		DUFF			SOI	L HARZARD R	ATING		
ΤU	TEXTURE	DEPTH (cm)	COARSE FRAGMENTS (%)	LIMIT (%)	Compaction	Erosion	Displacement		
1	SL	3	55	10	М	М	М		



F. VALUES – FOREST AND RANGE PRACTICES ACT						
<b>RIPARIAN &amp; LAKESHORE AREAS</b> - Forest Planning and Practices Regulation (FPPR) division 3, Government Action Regulation (GAR) section 6, Forest and Range Practices Act (FRPA) sections 180 and 181						
Is the proposed cutting, modification or removal of trees, or site preparation, in an area that contains streams, lakes or wetlands?	Yes 🖂 I	No 🗆	Riparian (CFA) t approve otherwi of the F	Riparian features that occur within the Chinook Community Forest Agreement (CFA) tenure area have been managed in accordance with section 6.5.2 of the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and are otherwise compliant with the requirements of section 47 to 51, 52(2), and 53 of the FPPR.		
RIPARIAN MANAGEMENT AREAS (R	MAs) - F	PPR sec	tions 51	and 52		
STREAM, LAKE, WETLAND ID	CLASS	RRZ (m)	RMZ SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE (m) MANAGEMENT AREAS			
Stream #1 (Hawley Creek)	S6	0	20	The proposed harvest area of WRR-20 is within the RMZ of the S6, but does not cross the S6.		
Wetland #1	W1	10	40	The proposed harvest area on WRR-1 is within the RMZ of the W1, but is 15m away from the W1 edge.		
TEMPERATURE SENSITIVE STREAMS	<b>5</b> - FPPR s	ection !	53, GAR s	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 I No I adjacent to, or an stream.			ent activities have not been prescribed in areas that contain, are t to, or are a direct tributary to an identified temperature sensitive		
ROAD CONSTRUCTION IN RIPARIAN	MANAG	<b>EMENT</b>	AREAS	- FPPR section 50		
Is road construction proposed in riparian management areas within the treatment area or an associated road permit (RP)?	Yes $\Box$ No $\boxtimes$ Road construction activities have not been proposed within the RMA of any identified riparian feature.					
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 🗆 I	☐ No ⊠				
MAINTAINING STREAM BANK AND	CHANNE	L STABI	LITY 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 🗆 I	No 🖂	Treatment activities have not been prescribed within the RMZ of an S4, S5, or S6 stream that is a direct tributary to an S1, S2, or S3 stream, and therefore the basal area retention requirements for maintaining stream bank and channel stability provided by section 52 of the FPPR do not apply.			
DOMESTIC WATER LICENCES (inside	or outsid	de of co	mmunity	y watershed) - FPPR section 59		
Does the proposed treatment area contain water sources that are diverted for human consumption by a licensed waterworks?	Yes 🗆 No 🖂		The trea consum A priva to the E	atment area does not include water sources that are diverted for human ption by a licensed waterworks. te land parcel with an active water licences has been identified 1.0km ast of the proposed treatment area. Since the licenced water works is of the proposed treatment area, activities will not impact this licence		



LICENCED WATER WORKS (inside or outside of a community watershed) - FPPR section 60							
Does the proposed treatment		Treatment and road construction activities have not been proposed within					
include areas that are within	Yes 🗌 No 🖂	100 m of a licensed waterworks that is within a community watershed.					
100m of a licensed waterworks?							
FISHERIES SENSITIVE WATERSHED -	GAR section 14,	FPPR section 8.1					
Are any activities proposed within	Yes 🗌 No 🖂	Treatment activitie	s have not been p	proposed within a fisheries sensitive			
a fisheries sensitive watershed?		watersned.					
COMMUNITY WATERSHED - GAR se	ction 8, FPPR se	ction 8.2, 61, 62 and	84				
Does the proposed treatment area	Yes 🗌 No 🖂	Treatment activitie	s have not been p	proposed within a community watershed.			
include areas that are within a							
community watershed?		T ( 1	1				
Will this project require road	Yes 🗌 No 🖂	I reatment and road	a construction act	tivities have not been proposed within a			
within a community watershed?		community waters	icu.				
WATERSHED ASSESSMENT CONSID		A costion 180 areas	with "significant	watershed consitivity"			
WATERSHED ASSESSIVENT CONSID		Treatment activitie	with Significant	watershed sensitivity			
include areas that have watershed	Yes 🗆 No 🖄	significant watersh	ed sensitivity or	other watershed assessment			
assessment considerations?		considerations.	ed sensitivity of	outer waterblied assessment			
SOIL DISTORBANCE AND PERMANE	Broposod	Bronosod	Droposod				
	Max	Max Soil	Max				
	Allowable Soil	Disturbance	Permanent				
Treatment Unit (TU)	Disturbance	for Roadside	Access	Comments			
	(5% or 10%)	Work Areas	Structures				
1	10%	25%	5%	Proposed permanent access structures			
Ĩ				calculated at 2.1% and they will be planted			
Do the proposed Permanent		Permanent access s	tructures will no	t exceed $7\%$			
Access Structures exceed 7% of	Yes 🗌 No 🖂	i cimanent access s					
the total area?							
LANDSLIDES AND TERRAIN STABILI	TY - FPPR section	37					
Does the proposed treatment area	Yes 🗌 No 🖂	Indicators of slope	instability or lan	dslides were not noted within the			
include areas where terrain		treatment area.	, i i i i i i i i i i i i i i i i i i i				
stability is a concern?							
SUITABLE SECONDARY STRUCTURE - FPPR section 43.1							
Does the proposed treatment area	Yes 🗌 No 🖂	Treatment activitie	s have not been p	proposed in a "targeted pine leading			
include a "targeted pine leading		stand" as defined b	y section 1 of the	e FPPR.			
stand"?		Additionally, the tr	eatment activitie	s proposed will occur entirely within a			
		community forest a	greement (CFA)	license for the purpose of wildfire risk			
		reduction and there	nore, as per section	01143.1(4) and $43.1(2)$ of the FPPK, the specifications set out by section $43.1(1)$			
		secondary stand structure retention specifications set out by section $43.1(1)$ of the EPPR do not apply					
		of the FPPK do not	apply.				
		of the FPPR do not	apply.				



UNGOLATE WINTER RANGE - OAN SE	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 🗌	Treatment activities have been proposed in a Special Resource Management Sub-Zone 4 with identified M1 ungulate winter habitat for Moose. Prior to the commencement of treatment activities the Agreement Holder, will ensure that the habitat requirements for the winter survival of ungulate					
		species specified by s.6.4.2 of the FSP are maintained.					
WILDLIFE HABITAT AREA - GAR section	on 10, FRPA sec	tions 180 and 181, FPPR section 69					
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes 🗌 No 🖂	wildlife habitat areas.					
MIGRATORY BIRD CONVENTION ACT	r — 1994						
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes 🗌 No 🖂	The nest density ranking for this Prescription area is 2 and therefore is not likely to impact Migratory Bird Habitat.					
<b>OBJECTIVES SET BY GOVERNMENT F</b>	OR WILDLIFE - F	FPPR section 7					
Does the proposed treatment area include areas to which objectives for wildlife under FPPR section 7 apply?	Yes 🛛 No 🗌	A legal order establishing objectives set by government for wildlife has not been enacted in the Lakes district and objectives are not specified in the Lakes LRMP or the Lakes South SRMP. Two notices, enabled under section 7(2) of the FPPR, specifying indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species as well as for the survival of species at risk exist for the Lakes and Nadina districts, respectively.					
OBJECTIVES SET BY GOVERNMENT F		TY OBJECTIVES (Landscape Level) - EPPR Part 4 Division 5					
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes 🛛 No 🗌	The design of the proposed Wildfire Risk Reduction areas will resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.					
<b>OBJECTIVES SET BY GOVERNMENT F</b>	OR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5					
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 🛛 No 🗌	One internal and three external Wildlife Tree Patch areas amounting to 6.9ha (21.2%) have been identified with this plan.					
<b>RECREATION FEATURES</b> - FRPA section	on 56 and 149, F	FPPR section 70					
Does the proposed treatment area contain interpretive sites, recreation trails, recreation sites, recreation facilities that are of significant recreation value and are designated a resource feature?	Yes 🗋 No 🗵	The treatment area does not contain known interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature.					



VISUAL QUALITY OBJECTIVES - GAR section 7, FRPA sections 180 and 181, FPPR section 9.2					
Is the proposed treatment within	Yes 🗌 No 🖂	WRR-1, 2 and 20 are not within a Scenic area, nor a VQO – Retention			
a scenic area?		polygon.			
ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	GE RESOURCES - FPPR section 10			
Are there any known	Yes 🗌 No 🖂	All three blocks show minor overlaps into CHR High Archeological			
archaeological sites or cultural		Polygons. This being the case, there were no archaeological site or cultural			
heritage resources that are		heritage resources that were identified within the proposed treatment areas.			
important to First Nations within		In the event that additional CFIK features are identified of otherwise made			
the proposed area?		to protect the CHR or address First Nation concerns must be communicated			
No Deferral to Land Manager is		by an addendum to, or an amendment of this prescription.			
required if proposed TIL is on the		In the event that previously unidentified CHR features are encountered while			
applicant's own First Nation Land.		carrying out treatment activities, work in the area must stop, and an			
		authorized treatment supervisor must be notified. The Agreement Holder			
		will complete a cultural heritage resource evaluation (CHR) and provide			
		management direction to protect or otherwise manage for the identified			
		feature(s).			
<b>INVASIVE PLANTS</b> - FRPA section 47	and FPPR section	n 17			
Is the introduction and spread of	Yes 🛛 No 🗌	Review of the Invasive Alien Plant Program (IAPP) database indicated the			
invasive plants likely as a result of		presence of invasive plant species adjacent to the FTU along the Eakin			
the proposed treatment?		Settlement Road. IAPP sites include Orange Hawkweed (OH), Meadow			
		Tansy (TC) and Vellow Hawkweed (VH)			
NATURAL BANGE BARRIERS - ERDA	section 18 EPPR	section 18			
Are there natural range barriers		Fencelines are already in place throughout this entire area and the proposed			
within the proposed treatment		harvesting will not impact any fencelines. In the event that fencelines are			
area that are likely to be removed		damaged, they will be repaired to the pre-damaged condition.			
or rendered ineffective?					
SPECIES AT RISK – FPPA section 7					
Are there species at risk present	Yes 🗌 No 🖂	No known occurrences of a species at risk were noted during field			
within the boundaries of the		assessments or through review of BC Conservation Data Centre spatial data.			
prescribed treatment area?					
LAND USE OBJECTIVES (Higher Leve	l Plans and obje	ctives set by Government under the <i>Land Act</i> )			
Are there land use objectives	Yes 🛛 No 🗌	WRR-1 and WRR-2 both overlap into the Landscape Corridor (LC)			
(higher level plans or objectives		identified within the Lakes South Sustainable Management Plan. Overlaps			
under the Land Act) that apply to		into LC do not exceed the documented limits and prescribed activities are			
the proposed treatment area or a		not expected to conflict with other land use objectives not specifically			
Road Permit necessary to provide		addressed by this prescription.			
access to the treatment area?					
Do the proposed activities conflict	Yes 🗌 No 🖂	Prescribed activities are not expected to conflict with other land use			
with land use objectives (higher		objectives not specifically addressed by this prescription.			
Land Act)?					
Known and potential species at	Yes 🗀 No 🔀	I reatment activities do not overlap into any UGMAs established by the			
risk, windthrow hazard, old growth		Lakes South SKMP.			
management areas (OGMA)?		Descressed however and WDD 1 availants into the membra design to 1 DD OV			
Do the proposed activities conflict	Yes 🖂 No 🗀	rioposed narvest area w KK-1 overlaps into the newly designated PKOV.			
with Provincial Priority Deferral		an exemption from the Nadina Resource District to allow for the overlap			
Areas (PROV. DEF) identified by the		between the PROV. DEF areas and all Wildfire Risk Reduction proposed			
Old Growth Strategic Review?		areas.			



G. OTHER CONSIDERATIONS AND REQUIREMENTS						
<b>CONSULTATION</b> – FIRST NATIONS: Inf WRR IS1 and is dated July 04, 2022	o-share was initiated on April 2	22, 2022 and Adequacy Letter is called: 10455-50/22 K4R				
FIRST NATION CONCERNS IDENTIFIED AND MEASURES TO ADDRESS						
Nee Tahi Buhn Band	No concerns brought for	rward.				
Skin Tyee Nation	No concerns brought for	rward.				
Stellat'en First Nation	No concerns brought for	rward.				
Wet'suwet'en First Nation	No concerns brought for	rward.				
Office of the Wet'sewet'en	No concerns brought for	rward.				
First Nations consultation complete	?	Yes 🛛 No 🗖				
	TENURE HOLDERS (Forest, Ra	nge, Guide Outfitters, Trappers): Info-share was initiated for				
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns				
Range: George Amendt	Yes 🗌 No 🛛	No concerns brought forward.				
Range: Carl Doglione	Yes 🗌 No 🗵	No concerns brought forward.				
Range: Sharon Robertson	Yes 🗌 No 🗵	No concerns brought forward.				
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Victor Bateson	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Jonathan Solecki	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Clint Lambert	Yes 🗖 No 🖂	No concerns brought forward.				
Range: Elizabeth McEntire	Yes 🗆 No 🖂	No concerns brought forward.				
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.				
Trapline: TR0604T014	Yes 🗆 No 🛛	No concerns brought forward.				
Trapline: TR0604T017	Yes 🗆 No 🛛	No concerns brought forward.				
Trapline: TR0604T018	Yes 🗆 No 🛛	No concerns brought forward.				
Trapline: TR0604T019	Yes 🗆 No 🗵	No concerns brought forward.				
Trapline: TR0604T020	Yes 🗆 No 🗵	No concerns brought forward.				
Guide Outfitter: James Lancaster	Yes 🗆 No 🗵	No concerns brought forward.				
Guide Outfitter: Brett Hall	Yes 🗆 No 🗵	No concerns brought forward.				
Guide Outfitter: Gary Blackwell	Yes 🗆 No 🗵	No concerns brought forward.				

PRIVATE PROPERTY		
Does private property border the proposed treatment area?	Yes 🛛 No 🗌	There is private land immediately adjacent to the SE corner of WRR- 20 and immediately south of WRR-1. The Regional District, Southside Transfer Station Property is just north of WRR-1.
SMOKE MANAGEMENT		
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🖂	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021 Community Wildfire Risk Reduction Open Burning Smoke Control Regulations</i> will be followed for the burning of debris piles.
SAFETY		
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle are no longer able to use this area as it is completely impassable.



UTILITIES					
Are utilities located in or adjacent to the proposed treatment area? i.e. power	Yes 🛛 No 🗌	All three of the proposed shapes within this Prescription area are adjacent to utility lines. WRR-1 is the only treatment area which overlaps with the utility line, therefore, BC Hydro will be informed			
lines, gas intes, etc.		prior to initiation of harvest.			
ACCESS CONTROL					
Are there any foreseen issues with access and access control during and post treatment?	Yes 🗌 No 🛛	There is no alternate access to the proposed treatment areas, so as long as there is active harvesting signs just beyond the one access road there should not be any issues with controlling access.			
TRAFFIC CONTROL					
Is traffic control required at any point during operations?	Yes 🛛 No 🗌	Traffic control will likely be required when operations occur on WRR- 1 due to the close proximity to the Southside Transfer Station Access Road and the Eakin Settlement Road to ensure the safety of operators, workers, and the public. There is no need for traffic control on WRR-2 and WRR-20 because they each have a 50m buffer that was previously harvested along the Eakin Settlement Road.			
OTHER (E.g Public Notification)					
The landowners of private land parcels that are adjacent to the treatment activities area must be notified prior to activities					

commencing and notification to the Community should be posted on Chinook Community Forest's Facebook Page. BC Hydro also needs to be informed prior to harvest start up.

### H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗌 No

About 69.4% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.  $\boxtimes$  Yes  $\square$  No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has been dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. The plan would then be for the non-merch material to also potentially be shipped to a biomass facility, or potentially that a grinding unit would arrive on site to process the debris. Alternatively, debris may be left on site for a small period of time so that community members may come and load out the material for firewood.

REATMENT SPECIFICATIONS SUMMARY							
TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)						
1	Silviculture Systems: Clearcut with Reserve (CCRES)						
	<b>Treatment Regimes:</b> Conventional Harvest (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile and Burn (PILE BURN)						



#### TREATMENT SPECIFICATION RATIONALE

Treatment activities will utilize a clearcut with reserve silviculture system and primarily requires the use of mechanical treatment methods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 139.5 m3/ha hybrid spruce and lodgepole pine – approximately 46% of this volume is dead potential lodgepole pine. Secondary treatment phases will require surface fuel reductions to the specified targets by means of mainly mechanical methods, with the possibility of manual treatment methods. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce \*with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly. Post treatment fire intensities will be dependent on the availability of an appropriate fire management stocking standard and subsequent stand tending activities.

To reduce predicted fire behaviour the following treatment specifications have been applied:

- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Remove all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity objectives or the tree has been identified as a wildlife habitat or cultural heritage feature.
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).

TU 1: STAND AND STOCK TABLE DATA										
Species and Diameter Class <sup>1</sup>	Crown Base Height Range	Average Tree Height	STEM	1S PER HE (sph)	CTARE	VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>			Basal Area (m²)	
	(m)	(m)	Existing	Cut	Leave	Existing	Cut	Leave	Existing	
Layer 1 (≥ 22.5 cm - 27.5 cm dbh)										
Pl	-	23	340	340	0	74	74	0	11.5	
Sx	4.7	22	159	159	0	135	135	0	21.1	
Total Dead Potential			302	302	0	116	116	0	21.0	
Total Live			197	197	0	93	93	0	11.6	
Total All Species		22	499	499	0	209	209	0	32.6	
Total Conifers		22	499	499	0	209	209	0	32.6	
Layer 1 (≥ 17.5cm – 22.5 cm db	oh)									
Pl	-	20	74	74	0	13	13	0	2.3	
Sx	4.1	16	92	92	0	11	11	0	2.3	
Total Dead Potential			74	74	0	13	13	0	2.3	
Total Live			92	92	0	11	11	0	2.3	
Total All Species		18	166	166	0	24	24	0	4.6	
Total Conifers		18	166	166	0	24	24	0	4.6	
Layer 1 (≥ 12.5 cm - 17.5 cm c	lbh)								-	
Pl	-	20	132	132	0	10	10	0	2.3	
Total Dead Potential			132	132	0	10	10	0	2.3	
Total Live			0	0	0	0	0	0	2.3	
Total All Species		20	132	132	0	10	10	0	2.3	
Total Conifers		20	132	132	0	10	10	0	2.3	
TOTALS: Layer 1										
Total Layer 1 - All Species	4.4	23	797	797	0	243	243	0	39.5	
Total Layer - Conifers Only	4.4	23	797	797	0	243	243	0	39.5	

<sup>&</sup>lt;sup>1</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>2</sup> A professional estimate is required for any merchantable cutting



SURFACE FUEL LOADING (kg/m²)									
Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing Distribution	Target (kg/m <sup>2</sup> )	Target Distribution	Methodology Used				
Fine Woody Debris ( =7cm)</td <td>0.70</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m2 (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of ±0.25 kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	0.70	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m2 (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of ±0.25 kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method				
Large Diameter Woody Debris (>7cm – 20cm)	4.80	Continuous distribution of lodgepole pine damaged by mountain pine beetle as	2.5 kg/m2 (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m2. Ensure poor continuity					
Coarse Woody Debris (CWD) (20cm+)	4.86	damaged by wind. Pieces typically have a decay class of 2 to 3.		avoid creating aggregations.					
Crown Closure (%): 20	Existing Total: 1	0.36 kg/m <sup>2</sup>	Target: 3.0 kg/m2 (+/- 0.75 kg/m2)						

BIODIVERSITY AND FOREST HEALTH CONSIDERA	TIONS AND TARGETS
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk.
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to
	maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.
FOREST HEALTH- Should include sections such	Stands have been assessed to be in poor condition due to the impacts of forest health factors.
as agent, affected species, incidence rating, mortality, and targets	Lodgepole pine overstory trees exhibited high mortality (>70%) as a result of historical mountain pine beetle infestation. Significant wind damage has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of incipient mountain pine beetle infestation was not noted. Up to 5% of the stand is affected by Tomentosus Root Rot. WINDTHROW RISK EVALUATION Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations, yet also due to root rot.



#### I. TREATMENT DESCRIPTION

#### MERCHANTABLE TIMBER CUTTING

#### ROADS, LANDINGS AND TRAILS:

Access to the unit will be gained via Eakin Settlement Road, then via the Southside Transfer Station Access Road. Proposed access associated with the treatment area include one (1) road permit, two (2) on-block spur roads.

The proposed road permit commences at the end of the Southside Transfer Station Access Road.

All additional access structure required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

#### FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

#### YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

#### LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

#### SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

### STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

#### STAND MODIFICATION TREATMENTS

BRUSHING: Manual brushing treatments have not been prescribed.

PRUNING: Pruning treatments have not been prescribed.

THINNING: Thinning treatments have not been prescribed.

#### DEBRIS PILING:

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of  $\frac{1}{2}$  the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

CHONOOK

### **BCWS Fuel Management Prescription Ver. 2022**

#### PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 - Nechako River (93F). All open burning activities within the Eakin Settlement area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

Private residences or business buildings have been identified <150 m of the treatment area

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

STRATEGIES FOR PILE BURNING

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.

- Obtain custom venting forecasts to identify optimal burning opportunities.

- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

#### GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris piles locations.

PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed as is shown in the Stocking Standard Table below. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

FRPA Section 52 (1) (b):

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: One new Section for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): Contact BC Hydro regarding close proximity of WRR-1 to the utility line.



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### J. POST TREATMENT

#### EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

#### ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 an even-aged stocking standard has been applied using the table below.

#### **STOCKING STANDARDS:**

APPLICABLE EVEN-AGED STOCKING STANDARDS:

						Well-Spaced Stem/ha			Minimum Height (m)				<b>F</b>
		Stocking	Species	Species		MS	S		IVIIII	iniuni neiį	giit (iii)	Regen	Free Growing
ΤU	SU	Standard ID	(Pref.)	(Accep.)	TSS	Pref. &	Pref.	MITD	Pl	Others	RTH	Delay	(years)
						Acc.					(%)		
1	1	TBD	PLI	-	1200	700	600	2.0	2.0	1.0	-	4	20
			SX										
			FDI										
			LW										
			AT										
			EP										
			AC										



K. Outstanding Works						
1.) Obtain the appropriate authorizations for the FRPA Section 52(1)(b) and for the new section required to R21201 road						
permit.						
CFA:K4R FSP adopt the applicable fire ma	anagement stocking standards if appropriate.					
3.) If required, obtain the appropriate approval	l(s) – under section 15 of the EMA – to exempt pile burning activities from the					
requirements of sections 9, 10, 11, 13, 14 a	nd 15 and Part 3 of OBSCR.					
4.) Obtain the appropriate authorizations or ex	emptions for those portions of the treatment area that are within a Priority					
L. ADMINISTRATION	i Strategie Review and the Old Glowth Teeninear Advisory Faller.					
PREPARATION						
EOREST PROFESSIONAL NAME (Printed):						
	TOREST FROM ESSIONAL SIGNATORE.					
	JEWNIFER TIA HILL BRITISH OLUMINA COLUMNAL COLUMNAL					
MEMBER NUMBER:	DATE:					
3889	2023-01-31					
M ATTACHMENTS						
WI II WTA Plots and Photos:						
AIR PHOTOS/IMAGERY: Yes 🛛	BURN PLAN: Yes 🗆 No 🖂					
No 🗆						
MODELING/DATA ANALYSIS: Yes 🗖	OTHER: Yes 🗆 No 🗆					
No 🗆						
SURFACE FUEL LOADING DATA: Yes 🖂						
No 🗆						
TERRAIN STABILITY ASSESSMENT Yes D	VISUAL IMPACT ASSESSMENT Yes 🗆 No 🖂					
Completed By: Completed By:						
Date: Date:						
ARCHAEOLOGY IMPACT ASSESSMENT Yes 🗌 No	BIOLOGIST ASSESSMENT Yes 🗆 No 🖂					
Completed By:	Completed By:					
Date:	Date:					
ADDITIONAL COMMENTS:						
<ul><li>MAPS: The following maps have been provided to support the prescribed activities:</li><li>Prescription Map</li><li>Ortho Treatment Map</li></ul>						

Location Map



ument Path: Z:\GIS\K4R\_Chinook\_Comfor\FESBC\2022-23\_Fire\_Salvage\_Shapes\Final Maps\K4R\_WWR\_Map1\_Prescription\_Map









A. PROJECT IDENTIFICATION	
PROJECT ID AND UNIT ID:	LAND OR TENURE HOLDER:
K4R/FESBC Wildfire Risk Reduction – Prescription #2	Chinook Community Forest Tenure K4R
0.8 km to 2.0 km Keefe's Landing Road	(CFA:K4R)
Original WRR Shapes #3, 4, 5	
LATITUDE/LONGITUDE:	GEOGRAPHIC DESCRIPTION:
53° 55' 08" N, 125° 54' 34" W	Keefe's Landing Road, 0.8km to 2.0km
HIGHER-LEVEL PLAN(s):	MAP REFERENCE NUMBER:
Lakes District Land and Resource Management Plan - 2000	93F 091
Lakes South Sustainable Resource Management Plan – 2003	

<b>B. FUEL TREATN</b>	B. FUEL TREATMENT PROJECT DESCRIPTION						
OBJECTIVE:	🛛 Public Safety	Range Improvement	Ecosystem Restoration				
			Othori				
	Prescription Area #2: Keefe's Landi François Lake and is bordered by bo Community Forest (CFA:K4R) tenu Columbia Wildfire Service (BCWS) The unit is within the François Lake been assigned a risk class rating of 2 namely the infrastructure and comm Analysis (PSTA) has classified stand extreme (9). This rating considers th present as well as historical fire dens (161) fire weather station indicate th southwest. The objectives of this Prescription an • reduce the risk of wildfire to p (WUI) areas – specifically the • reduce the risk of wildfire to p specifically those along the Ke • reduce the risk of wildfire to cu likely to influence forest fuels • develop ecologically appropria overlapping land management • develop ecologically appropria site and stand conditions to ma • create defensible space for wil- incident response by removing safety and reduces fire behavior	ng Road Wildfire Risk Reduction (Wi th private and Crown land. This unit is re area and has been identified as a hig WRR Tactical Plan. Wildland Urban Interface (WUI) Risk due to the prevalence of High Value unity values along Keefe's Landing R ds within the unit as having a Final Th e anticipated head fire intensities and sities. Initial spread index (ISI) roses g at prevailing winds during the core fir ublic safety by modifying forest fuels properties, residences, and infrastructu- ublic safety by modifying fuels adjace erefe's Landing Road network. ritical infrastructure and property by n adjacent to, identified values at risk. ate and effective wildfire risk reduction objectives and tenure obligations. ate and effective wildfire risk reduction intain forest health and site productive dland fire fighters to anchor suppressi- to or modifying hazardous forest fuels i pur potential.	RR) area is on the south side of s entirely within the Chinook gh priority corridor by the British k Class (RC) polygon which has Resources and Assets (HVRAs) oad. The Provincial Strategic Threat reat Rating (FTR) of high (7) to spotting impacts for the fuel types generated by the Grassy Plains Hub re season are typically from the within wildland urban interface ure near the Keefe's Landing Road. ent to critical evacuation corridors – nodifying forest fuels adjacent to, or n solutions that give due regard to ity. on strategies and tactics from during in a way that improves firefighter				



STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this TU 1 of this Prescription area will be a Clearcut with Reserves (CCRES) Silviculture System and TU 2 will be a Clearcut with Dispersed Retention (CCDRET) Silviculture System as both TU's requires significant stand modification to address the hazardous stand conditions. Stand conditions are poor in these areas due to the impacts of historical insect infestations and subsequent wind events. The prescription area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest (HARV) methods. Final treatment phases require surface fuel load reductions (SFR) to dead and down material and treatment residues by mechanical surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Prescription area design and specifications have been developed with consideration of the influence of topography.

C. TRE	C. TREATMENT UNIT (TU) SUMMARY						
TU	SU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)
1	1	11.1	12.0	0.9	0	11.1	CCRES / HARV / SFR / Mechanical Debris Pile & Burn
2	1	5.5	7.0	1.5	0	5.5	CCDRET / HARV / SFR / Mechanical Debris Pile & Burn
тот	ALS	16.6	19.0	2.4	0	16.6	

D. SITE CI	D. SITE CHARACTERISTICS							
TU	CFFBPS FUEL TYPE	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT	
1	C2	MATURE Coniferous	SBS dk 01	855 - 890	Middle	5 - 15	West (East)	
2	C2	MATURE Coniferous	SBS dk 01	863 - 885	Middle	5 - 10	East (South)	
FUEL TYPE	DETERMINATION	TU1: C2 is the fu TU 2: C2 is the f spruce and hybrid	nel type is used fo nel type used, bas d spruce stands th	r representing n ed upon observ roughout the pr	nountain pine b ed fire behavio ovince.	eetle (MPB) affected ur, for mid-elevation	stands.	



E. SOIL	E. SOIL CHARACTERISTICS							
		DUFF		SOIL DISTURBANCE LIMIT (%)	SOIL HARZARD RATING			
TU	TU SOIL DEPTH COARSE TEXTURE (cm) FRAGMENTS (%)		Compaction		Erosion	Displacement		
1	SL	3	45 - 55	10	Μ	М	L	
2	SL	3	45 - 55	10	М	М	L	

F. VALUES – FOREST AND RANG	E PRACT	ICES AC	СТ	
RIPARIAN & LAKESHORE AREAS - Fo	orest Plan	ining an	d Practio	ces Regulation (FPPR) division 3, Government Action Regulation (GAR)
section 6, Forest and Range Practice	s Act (FR	PA) sect	ions 180	) and 181
Is the proposed cutting,			Riparia	n features that occur within the Chinook Community Forest
modification or removal of trees,	Yes Agreement (CFA) tenure area have been managed in accordance with section			ent (CFA) tenure area have been managed in accordance with section
or site preparation, in an area that	No		6.5.2 of	the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and
contains streams, lakes or	are otherwise compliant with the requirements of section 47 to 51, 52(2), and			prwise compliant with the requirements of section 47 to 51, 52(2), and
wetlands?			53 of th	e FPPR.
RIPARIAN MANAGEMENT AREAS (R	RMAs) - F	PPR sec	tions 51	and 52
STREAM, LAKE, WETLAND ID	CLASS	RRZ (m)	RMZ (m)	SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE MANAGEMENT AREAS
Lake #1 (Tatalaska Lake)	L1-B	10	0	The proposed harvest area of WRR-4 is greater than 10m from the L1 Lake.

TEMPERATURE SENSITIVE STREAMS	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 🗵	Treatment activities have not been prescribed in areas that contain, are adjacent to, or are a direct tributary to an identified temperature sensitive stream.				
ROAD CONSTRUCTION IN RIPARIAN		<b>FAREAS</b> - FPPR section 50				
Is road construction proposed in riparian management areas within the treatment area or an associated road permit (RP)?	Yes 🗆 No 🖂	Road construction activities have not been proposed within the RMA of any identified riparian feature.				
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 🖂	There are no stream crossings associated with this prescription.				
	·					



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 🖂	■ Treatment activities have not been prescribed within the RMZ of an S4, S5, or S6 stream that is a direct tributary to an S1, S2, or S3 stream, and therefore the basal area retention requirements for maintaining stream bank and channel stability provided by section 52 of the FPPR do not apply.				
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 🛛	$No \boxtimes \qquad The treatment area does not include water sources that are diverted for human consumption by a licensed waterworks.$				
LICENCED WATER WORKS (inside or	r outside of a cor	nmunity watershed	) - FPPR section 6	0		
Does the proposed treatment include areas that are within 100m of a licensed waterworks?	Yes 🗌 No 🖂	$\begin{array}{c c} \hline \textbf{No} \boxtimes \end{array} \begin{array}{c} Treatment and road construction activities have not been proposed within 100 \\ m of a licensed waterworks that is within a community watershed. \end{array}$				
FISHERIES SENSITIVE WATERSHED -	GAR section 14,	FPPR section 8.1				
Are any activities proposed within a fisheries sensitive watershed?	Yes 🗌 No 🖂	Treatment activitie watershed.	s have not been p	proposed within a fisheries sensitive		
COMMUNITY WATERSHED - GAR se	ection 8, FPPR see	ction 8.2, 61, 62 and	184			
Does the proposed treatment area include areas that are within a community watershed?	Yes 🗌 No 🖂 🛛	Yes $\Box$ No $\boxtimes$ Treatment activities have not been proposed within a community watershed.				
Will this project require road construction or deactivation within a community watershed?	Yes 🗆 No 🖂	Treatment and road community waters	d construction act hed.	ivities have not been proposed within a		
WATERSHED ASSESSMENT CONSID	ERATIONS - FRPA	A section 180 areas	with "significant	watershed sensitivity"		
Does the proposed treatment area include areas that have watershed assessment considerations?	Yes 🗆 No 🛛	Treatment activitie significant watersh considerations.	s have not been p ed sensitivity or c	roposed in areas identified as having other watershed assessment		
SOIL DISTURBANCE AND PERMANE	NT ACCESS STRU	ICTURES - FPPR sect	tions 35 and 36			
Treatment Unit (TU)	Proposed Max. Allowable Soil Disturbance (5% or 10%) 10%	Proposed Max. Soil Disturbance for Roadside Work Areas 25%	Proposed Max. Permanent Access Structures 5%	<b>Comments</b> Proposed permanent access structures calculated at 3.6%, and they will be planted once all treatment activities are complete.		
Do the proposed Permanent Access Structures exceed 7% of the total area?	Yes 🗌 No 🖂	Permanent access structures will not exceed 7%.				
LANDSLIDES AND TERRAIN STABILI	<b>TY</b> - FPPR section	37				
Does the proposed treatment area include areas where terrain stability is a concern?	Yes 🗌 No 🖂	Indicators of slope instability or landslides were not noted within the treatment area.				



SUITABLE SECONDARY STRUCTURE	- FPPR section 4	3.1
Does the proposed treatment area include a "targeted pine leading stand"? UNGULATE WINTER RANGE - GAR se	Yes 🗌 No 🛛	Treatment activities have not been proposed in a "targeted pine leading stand" as defined by section 1 of the FPPR. Additionally, the treatment activities proposed will occur entirely within a community forest agreement (CFA) license for the purpose of wildfire risk reduction and therefore, as per section 43.1(4) and 43.1(2) of the FPPR, the secondary stand structure retention specifications set out by section 43.1(1) of the FPPR do not apply. ections 180 and 181. FPPR section 69
Does the proposed treatment area		Treatment activities have been proposed in a Special Resource Management
include areas within an Ungulate Winter Range?	Yes 🛛 No 🗌	Sub-Zone 4 with identified M1 ungulate winter habitat for Moose. Prior to the commencement of treatment activities the Agreement Holder, will ensure that the habitat requirements for the winter survival of ungulate species specified by s.6.4.2 of the FSP are maintained.
WILDLIFE HABITAT AREA - GAR sect	ion 10, FRPA sec	tions 180 and 181, FPPR section 69
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes 🗌 No 🖂	The treatment area does not overlap any mapped or otherwise identified wildlife habitat areas.
MIGRATORY BIRD CONVENTION AC	<b>T</b> – 1994	
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes 🗌 No 🛛	The nest density ranking for this Prescription area is 2 and therefore is not likely to impact Migratory Bird Habitat.
OBJECTIVES SET BY GOVERNMENT	FOR WILDLIFE - I	FPPR section 7
Does the proposed treatment area include areas to which objectives for wildlife under FPPR section 7 apply?	Yes 🛛 No 🗌	A legal order establishing objectives set by government for wildlife has not been enacted in the Lakes district and objectives are not specified in the Lakes LRMP or the Lakes South SRMP. Two notices, enabled under section 7(2) of the FPPR, specifying indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species as well as for the survival of species at risk exist for the Lakes and Nadina districts, respectively.
OBJECTIVES SET BY GOVERNMENT	FOR BIODIVERSI	TY OBJECTIVES (Landscape Level) - FPPR Part 4 Division 5
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes 🛛 No 🗆	The design of the proposed Wildfire Risk Reduction areas will resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.
OBJECTIVES SET BY GOVERNMENT	FOR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5
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 🛛 No 🗆	Four external Wildlife Tree Patch areas amounting to 2.4ha (12.6%) have been identified with this plan.



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 of significant recreation value and are designated a resource feature?	Yes 🗆 No 🛛	The treatment area does not contain known interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature.			
VISUAL QUALITY OBJECTIVES - GAR	section 7, FRPA	sections 180 and 181, FPPR section 9.2			
Is the proposed treatment within a scenic area?	Yes 🗌 No 🖂	WRR-3, 4 and 5 are not within a Scenic area, nor a VQO – Retention polygon.			
ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	GE RESOURCES - FPPR section 10			
Are there any known archaeological sites or cultural heritage resources that are important to First Nations within the proposed area? No Referral to Land Manager is required if proposed TU is on the applicant's own First Nation Land.	Yes 🗌 No 🖂	None of these proposed WRR treatment areas overlap with any high archaeological polygons and here are no archaeological site or cultural heritage resources that were identified with the proposed treatment areas. In the event that additional CHR features are identified or otherwise made known during First Nation information sharing and consultation, measures to protect the CHR or address First Nation concerns must be communicated by an addendum to, or an amendment of, this prescription. In the event that previously unidentified CHR features are encountered while carrying out treatment activities, work in the area must stop, and an authorized treatment supervisor must be notified. The Agreement Holder will complete a cultural heritage resource evaluation (CHR) and provide management direction to protect or otherwise manage for the identified feature(s).			
<b>INVASIVE PLANTS</b> - FRPA section 47	and FPPR sectio	n 17			
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes 🛛 No 🗆	Review of the Invasive Alien Plant Program (IAPP) database indicated the presence of invasive plant species adjacent to the FTU along the Keefe's Landing Road. IAPP sites include Orange Hawkweed (OH), Meadow Buttercup (MB), Oxeye Daisy (OD), Scentless Chamomile (SH), Common Tansy (TC), and Yellow Hawkweed (YH).			
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 🖂	Fencelines and a cattleguard are already in place adjacent to WRR-3 and WRR-5b (south side of Keefe's Landing Road). In the event that fencelines are damaged, they will be repaired to the pre-damaged condition.			
SPECIES AT RISK – FPPA section 7					
Are there species at risk present within the boundaries of the prescribed treatment area?	Yes 🗆 No 🛛	No known occurrences of a species at risk were noted during field assessments or through review of BC Conservation Data Centre spatial data.			
LAND USE OBJECTIVES (Higher Leve	I Plans and object	ctives 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 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.			



LAND USE OBJECTIVES (Higher Level Plans and objectives set by Government under the Land Act) Cont'd				
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the Land Act)?	Yes 🗌 No 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.		
Known and potential species at risk, windthrow hazard, and old growth management areas (OGMA)?	Yes 🛛 No 🗌	The treatment activities for WRR-4 overlap 100% into an OGMA established by the Lakes South SRMP. The Agreement Holder has an exemption from the Nadina Resource District to allow for the overlap between OGMA and all Wildfire Risk Reduction proposed areas.		
Do the proposed activities conflict with Provincial Priority Deferral Areas (PROV. DEF) identified by the Old Growth Strategic Review?	Yes 🛛 No 🗌	Proposed harvest area WRR-4 overlaps into the newly designated PROV. DEF by 2% each, and WRR-5 overlaps by 5%. The Agreement Holder has an exemption from the Nadina Resource District to allow for the overlap between the PROV. DEF areas and all Wildfire Risk Reduction proposed areas.		

G. OTHER CONSIDERATIONS AND	REQUIREMENTS					
<b>CONSULTATION</b> – FIRST NATIONS: Int	fo-share was initiated on April 22,	, 2022 and Adequacy Letter is called: 10455-50/22 K4R				
FIRST NATION	CONCERNS	CONCERNS IDENTIFIED AND MEASURES TO ADDRESS				
Nee Tahi Buhn Band	No concerns brought forw	ard.				
Skin Tyee Nation	No concerns brought forw	ard.				
Stellat'en First Nation	No concerns brought forwa	ard.				
Wet'suwet'en First Nation	No concerns brought forwa	ard.				
Office of the Wet'sewet'en	No concerns brought forwa	ard.				
First Nations consultation complete	?	Yes 🛛 No 🗆				
<b>CONSULTATION</b> – GENERAL, EXISTING	G TENURE HOLDERS (Forest, Rang	e, Guide Outfitters, Trappers): Info-share was initiated for				
existing Tenure Holders on April 22, 2	2022.					
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns				
Range: George Amendt	Yes 🗌 No 🗵	No concerns brought forward.				
Range: Carl Doglione	Yes 🗌 No 🛛	No concerns brought forward.				
Range: Sharon Robertson	Yes 🗌 No 🗵	No concerns brought forward.				
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Victor Bateson	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Jonathan Solecki	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Clint Lambert	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Elizabeth McEntire	Yes 🗆 No 🗵	No concerns brought forward.				
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.				
Trapline: TR0604T014	Yes 🗌 No 🗵	No concerns brought forward.				
Trapline: TR0604T017	Yes 🗌 No 🗵	No concerns brought forward.				
Trapline: TR0604T018	Yes 🗌 No 🗵	No concerns brought forward.				
Trapline: TR0604T019	Yes 🗌 No 🗵	No concerns brought forward.				
Trapline: TR0604T020	Yes 🗌 No 🗵	No concerns brought forward.				
Guide Outfitter: James Lancaster	Yes 🗌 No 🗵	No concerns brought forward.				
Guide Outfitter: Brett Hall	Yes 🗌 No 🗵	No concerns brought forward.				
Guide Outfitter: Gary Blackwell	Yes 🗌 No 🗵	No concerns brought forward.				



PRIVATE PROPERTY		
Does private property border the proposed treatment area?	Yes 🛛 No 🗆	There is private land immediately to the east of WRR- 3. This land owner has just finished fire-proofing this property, therefore, this Wildfire Mitigation project will go along tactically with those efforts.
SMOKE MANAGEMENT		
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🔀	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021</i> <i>Community Wildfire Risk Reduction Open Burning</i> <i>Smoke Control Regulations</i> will be followed for the burning of debris piles.
SAFETY		
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle within this range tenure area are no longer able to use portions of this area as they are completely impassable.
UTILITIES		
Are utilities located in or adjacent to the proposed treatment area? i.e. power lines, gas lines, etc.	Yes 🛛 No 🗆	All four of the proposed shapes within this Prescription area are adjacent to Utility Lines.
ACCESS CONTROL		
Are there any foreseen issues with access and access control during and post treatment?	Yes 🛛 No 🗌	WRR-4 and WRR-5 are adjacent to an access road to a private residence, which will require access control during the treatment phase to ensure the safety of the residents. There are no foreseen access issues for access to Wildfire Risk Reduction shapes WRR-3 and WRR- 5b (south side of Keefe's Landing Road).
TRAFFIC CONTROL		
Is traffic control required at any point during operations?	Yes 🗆 No 🗵	There is no need for traffic control on these shapes because timber will be felled into the blocks, and there is a minimum of a tree length previously cleared between the blocks and the Keefe's Landing Road.
OTHER (E.g Public Notification	)	
The landowner of private land parcel Community should be posted on Chir	to the East of WRR-3 must be notifinook Community Forest's Facebook	ied prior to activities commencing and notification to the Page.

#### H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗌 No

About 69.5% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.

🛛 Yes 🗌 No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has be dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. The plan would then be for the non-merch material to also potentially be shipped to a biomass facility, or potentially that a grinding unit would arrive on site to process the debris. Alternatively, debris may be left on site for a small period of time so that community members may come and load the material for firewood.



TREATMENT SPECIFICATIONS SUMMARY		
TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)	
1	<i>Silviculture Systems:</i> Clearcut with Reserve (CCRES) <i>Treatment Regimes:</i> Conventional Harvest or Forwarder (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)	
2	Silviculture Systems: Clearcut with Dispersed Retention (CCDRET) Treatment Regimes: Conventional or Forwarder Harvest (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)	
TU 1 - TREATMENT SPECIFICATION RATIONALE		
Treatment at treatment mo spruce and le will require manual treat manual/mec affected star	ctivities will utilize a Clearcut with Reserve silviculture system which primarily requires the use of mechanical ethods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 118.9 m3/ha hybrid odgepole pine – approximately 62.4% of this volume is dead potential lodgepole pine. Secondary treatment phases surface fuel reductions to the specified targets by means of mainly mechanical methods, (with the potential for tment methods). Final treatment phases will require surface fuel reductions to the specified targets by means of hanical piling. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce *with MPB pds) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly	

To reduce predicted fire behaviour the following treatment specifications have been applied:

- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Remove all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity objectives or the tree has been identified as a wildlife habitat or cultural heritage feature.
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).

#### **TU 2** - TREATMENT SPECIFICATION RATIONALE

Treatment activities will utilize a clearcut with Dispersed Retention silviculture system to be carried out using primarily mechanical treatment methods. Initial treatment phases will remove dead or otherwise hazardous overstory trees. The removal of live overstory and understory trees will reduce continuity between fuel strata and accommodate the recovery of treatment fibre and residues. Secondary treatment phases will mechanically (and potential manual methods), thin understory trees to reduce vertical and horizontal continuity to overstory retention. Final treatment phases will require surface fuel reductions to the specified targets by means of manual/mechanical piling. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce \*with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly.

To reduce predicted fire behaviour the following treatment specifications apply:

- Remove all dead overstory and understory trees except where the tree is to be retained to achieve biodiversity objectives or the tree has been identified as a wildlife habitat or cultural heritage feature.
- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Retain 200 sph ( $\pm 100$  sph) of live L1 coniferous trees.
- Retain 200 sph ( $\pm 50$  sph) of live L2 coniferous trees.
- Recruitment between L1 and L2 conifers stocking is acceptable to a maximum total target conifer stocking of 400 sph (±100 sph).
- Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.
- Substitution of deciduous stems (where they exist) for coniferous stocking is acceptable.
- Remove all L3 and L4 understory trees, (where they exist).
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).


TU 1: STAND AN	ND STOCK	TABLE DATA									
Species and Diar	meter Clas	Crown Base s <sup>1</sup> Height	Crown Base Average STEMS PER HECTARE Height Tree Height (sph)		VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>			Basal Area (m²)			
		Range (m)	(m)	Existing	Cu	ut	Leave	Existing	Cut	Leave	Existing
Layer 1 (≥ 22.5 c	cm - 27.5 c	m dbh) (Merchant	ability criteria c	an also be i	nclud	ed he	ere.)				
Pl		-	24	134	13	34	0	41	41	0	7.0
Sx		3.6	27	123	12	23	0	78	78	0	10.6
Total Dead Pote	ntial			204	20	)4	0	101	101	0	17.6
Total Live				53	5	3	0	18	18	0	2.3
Total All Species	;		18.9	257	25	57	0	119	119	0	19.9
Total Conifers			18.9	257	25	57	0	119	119	0	19.9
Layer 1 (≥ 17.5cm	n - 22.5 cm	dbh)	•						• •	•	
Pl		3.4	17	75	7	5	0	10	10	0	1.3
Sx		3.1	16	195	19	95	0	32	32	0	6.8
Bl		2.6	17	123	12	23	0	22	22	0	4.7
Total Dead Pote	ntial			89	8	9	0	11	11	0	2.3
Total Live				304	30	)4	0	54	54	0	10.5
Total All Species	;		16	392	39	92	0	65	65	0	12.8
Total Conifers			16	392	39	)2	0	65	65	0	12.8
Layer 1 (≥ 12.5 c	cm - 17.5 c	m dbh)									
Pl		-	14	133	13	33	0	7	7	0	2.3
Total Dead Pote	ntial			133	1.	33	0	7	7	0	2.3
Total Live				0	(	)	0	0	0	0	0
Total All Species	;		14	133	13	33	0	7	7	0	2.3
Total Conifers			14	133	13	33	0	7	7	0	2.3
TOTALS: Layer 1	L							•	1		
Total Layer 1 - A (Conifers Only	All Species	3.2	23	781	78	81	0	191	191	0	34.9
TU 1: SURFAC	E FUEL LO	DADING (kg/m²)									
Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing [	Existing Distribution			Target (kg/m <sup>2</sup> ) Target Distribution					Method- ology Used
Fine Woody	0.70	Moderately continuo accumulations assoc	ous distribution wi iated with suspend	th $0.5 \text{ kg}$ ded $(+/-0)$	0.5 kg/m <sup>2</sup> Reduce to target levels with an acceptable $(\pm/2, 0.25)$ range of $\pm 0.25$ kg/m <sup>2</sup> . Maintain poor					otable r	Line Intersect

kg/m2)

2.5 kg/m<sup>2</sup>

(+/- 0.5

kg/m2)

Continuous distribution of lodgepole pine

some hybrid spruce damaged by wind.

Pieces typically have a decay class of 2.

damaged by mountain pine beetle as well as

and jackpotted lodgepole pine.

Existing Total: 10.36 kg/m<sup>2</sup>

<sup>1</sup> Modify diameter classes as required to suite treatment.

Crown Closure (%): 20

Debris (</=7cm)

Large Diameter

Woody Debris

(>7cm - 20cm)

Coarse Woody Debris (CWD) (>20cm)

<sup>2</sup> A professional estimate is required for any merchantable cutting

4.80

4.86

Intersect

Sampling

Method

creating aggregations.

aggregations.

Target: 3.0 kg/m2 (+/- 0.75 kg/m2)

continuity between residual pieces and avoid

Reduce below target levels with an acceptable

range of  $\pm 0.5$  kg/m<sup>2</sup>. Ensure poor continuity

between retained pieces and avoid creating



TU 2: STAND AND STOCK TABLE DATA												
Species and Diameter Class <sup>3</sup>	Crown Base Height Range	Average Tree Height	STEN	IS PER HE (sph)	CTARE	VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>4</sup>			Basal Area (m²)			
	(m)	(m)	Existing	Cut	Leave	Existing	Cut	Leave	Existing			
Layer 1 (≥ 12.5 cm dbh)												
Pl	-	18.3	342	342	0	58	58	0	10.6			
Sx	3.6	21.5	318	84	234	110	61	49	6.8			
Total Dead Potential			426	426	0	119	119	0	22.1			
Total Live			234	0	0	49	0	49	12.8			
Total All Species		19.9	660	426	234	168	119	49	34.9			
Total Conifers		19.9	660	426	234	168	119	49	34.9			
Layer 2 (≥ 7.5cm - 12.5 cm dbh)												
Sx	2.8	11.5	240	0	240	5.2	0	5.2	6.8			
Total Dead Potential			0	0	0	0	0	0	0			
Total Live			240	0	240	5.2	0	5.2	6.8			
Total All Species		11.5	240	0	240	5.2	0	5.2	6.8			
Total Conifers		11.5	240	0	240	5.2	0	5.2	6.8			
Layer 3 (≥1.3 m ht 7.5 cm)												
Sx	1.0	3.6	425	425	0	-	-	-	-			
Total Dead Potential			0	0	0	-	-	-	-			
Total Live			425	425	0	-	-	-	-			
Total All Species		3.6	425	425	0	-	-	-	-			
Total Conifers		3.6	425	425	0	-	-	-	-			
Layer 4 (< 1.3 m height)												
Sx	0	0.4	310	310	0	-	-	-	-			
Total All Species		0.4	310	310	0	-	-	-	-			
Total Conifers		0.4	310	310	0	-	-	-	-			

TU 2: SURFACE FUEL LOADING (kg/m²)												
Size Class (cm)	Existing (kg/m²)	Existing Distribution	Target (kg/m²)	Target Distribution	Method- ology Used							
Fine Woody Debris ( =7cm)</td <td>0.72</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of <math>\pm 0.25</math> kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	0.72	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m <sup>2</sup> (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of $\pm 0.25$ kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method							
Large Diameter Woody Debris (>7cm – 20cm) Coarse Woody Debris (CWD) (>20cm)	4.16 0.3	Moderately continuous distribution of lodgepole pine damaged by mountain pine beetle as well as some hybrid spruce damaged by wind. Pieces typically have a decay class of 2.	2.5 kg/m <sup>2</sup> (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m2. Ensure poor continuity between retained pieces and avoid creating aggregations.	Wiemou							
Crown Closure (%): 20		Existing Total: 5.18 kg/m <sup>2</sup>	Target:	3.0 kg/m2 (+/- 0.75 kg/m2)								

<sup>&</sup>lt;sup>3</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>4</sup> A professional estimate is required for any merchantable cutting



BIODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS								
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk.							
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.							
	Stands have been assessed to be in poor condition due to the impacts of forest							
FOREST HEALTH- Should include sections such	health factors.							
as agent, affected species, incidence rating,	Lodgepole pine overstory trees exhibited high mortality $(62.4\%)$ as a result of							
mortality, and targets	historical mountain pine beetle infestation. Significant wind damage (40%) has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of emerging mountain pine beetle infestation was not noted. WINDTHROW RISK EVALUATION Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations.							

# I. TREATMENT DESCRIPTION

MERCHANTABLE TIMBER CUTTING

ROADS, LANDINGS AND TRAILS:

Access to the units will be gained via Keefe's Landing Road. Proposed access associated with the treatment areas will include two (2) road permits and three (3) on-block spur roads.

Both new proposed Road Permit Sections commence off of the Spencha Lake FSR.

All additional access structures required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

# YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

# LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

CHONOOK

# SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

### STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

### STAND MODIFICATION TREATMENTS

### BRUSHING: Manual brushing treatments have not been prescribed.

### PRUNING: Pruning treatments have not been prescribed.

**THINNING:** Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.

### DEBRIS PILING:

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of  $\frac{1}{2}$  the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

# PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 – Nechako River (93F). All open burning activities within the Keefe's Landing WRR Area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

No Private residences or business buildings have been identified <150 m of the treatment area

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

# STRATEGIES FOR PILE BURNING:

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.
- Obtain custom venting forecasts to identify optimal burning opportunities.
- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

# GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris piles locations.



PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

### PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

FRPA Section 52:

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: Two new Section for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): N/A

# J. POST TREATMENT

### EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

# ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 (both TU 1 and TU 2) an even-aged stocking standard has been applied as is shown in the table below.

STOC APPL	STOCKING STANDARDS: APPLICABLE EVEN-AGED STOCKING STANDARDS for all variations of Clearcut Silviculture Systems:													
						Well-Spac	ed Stem/ł	na	Min	imum Hei	aht (m)		Free	
		Stocking	Species	Species		MS	SS		Minimum Height (III)		Reg		Regen	Growing
TU	SU	Standard ID	(Pref.)	(Accep.)	TSS	Pref. &	Pref.	MITD	PI	Others	RTH	Delay	(years)	
						Acc.					(%)			
1 / 2	1	TBD	PLI	-	1200	700	600	2.0	2.0	1.0	-	4	20	
			SX											
			FDI											
			LW											
			AT											
			EP											
			AC											



K. Outstanding Works
1.) Obtain the appropriate authorizations for the FRPA Section 52(1)(b) and for the new sections required to R21201 road perm
2.) Obtain District Manager approval for the proposed alternative stocking standards, or upon the approval of the Chinook CFA:K4R FSP adopt the applicable fire management stocking standards if appropriate.
3.) If required, obtain the appropriate approval(s) – under section 15 of the EMA – to exempt pile burning activities from the requirements of sections 9, 10, 11, 13, 14 and 15 and Part 3 of OBSCR.
4.) Obtain the appropriate authorizations or exemptions for those portions of the treatment area that are within a Priority Deferrance identified by the Old Growth Strategic Review and the Old Growth Technical Advisory Panel.

L. ADMINISTRATION										
PREPARATION	PREPARATION									
FOREST PROFESSIONAL NAME (Printed):		FOREST PROFESSIONAL SIGNATURE:								
Jennifer Hill, RPF		JELMIFER TIA HILL BRITISH VO 3369								
MEMBER NUMBER:		DATE:								
3889		2023-01-28								
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: Migratory Bird Nest Ranking	Yes 🔀 No 🗖							
		Spreadsheet OTHER: WTA Worksheets	Yes 🛛 No 🗖							
SURFACE FUEL LOADING DATA:	Yes 🛛 No 🗖									
TERRAIN STABILITY ASSESSMENT	Yes 🗖 No 🖂	VISUAL IMPACT ASSESSMENT	Yes 🗖 No 🖂							
Completed By:		Completed By:								
Date:		Date:								
ARCHAEOLOGY IMPACT ASSESSMENT Yes	🗌 No 🖂	BIOLOGIST ASSESSMENT Yes 🗖 No 🖂								
Completed By:		Completed By:								
Date:		Date:								
ADDITIONAL COMMENTS:										
Prescription Map	vided to support the	prescribed activities:								
resemption mup										

- Ortho Treatment Map
- Location Map



nent Path: Z:\GIS\K4R\_Chinook\_Comfor\FESBC 23 Fire Sa





LAND OR TENURE HOLDER:
Chinook Community Forest Tenure K4R
(CFA:K4R)
GEOGRAPHIC DESCRIPTION:
Keefe's Landing Road, 2.3km to 3.7km
MAP REFERENCE NUMBER:
93F 091

B. FUEL TREATMENT PROJECT DESCRIPTION											
OBJECTIVE:	⊠ Public Safety	Range Improvement	Ecosystem Restoration								
	Recreation	🗆 Wildlife Habitat	Other:								
	Prescription Area #3: Keefe's Landi François Lake and is bordered by Cr (CFA:K4R) tenure area and has beer Service (BCWS) WRR Tactical Plan The unit is within the François Lake been assigned a risk class rating of 2 namely the infrastructure and comm Threat Analysis (PSTA) has classified to extreme (9). This rating considers present as well as historical fire dens (161) fire weather station indicate th southwest. The objectives of this Prescription an • reduce the risk of wildfire to p (WUI) areas – specifically the • reduce the risk of wildfire to cr likely to influence forest fuels • develop ecologically appropria overlapping land management • create defensible space for wil incident response by removing safety and reduces fire behavior	ng Road Wildfire Risk Reduction (WF rown land. This unit is entirely within the in identified as a high priority corridor in. Wildland Urban Interface (WUI) Risk due to the prevalence of High Value I unity values along the Keefe's Landin ed stands within the unit as having a F the anticipated head fire intensities an sities. Initial spread index (ISI) roses g at prevailing winds during the core fir ublic safety by modifying forest fuels properties, residences, and infrastructu- ublic safety by modifying fuels adjace eefe's Landing Road network. ritical infrastructure and property by n adjacent to, identified values at risk. ate and effective wildfire risk reduction objectives and tenure obligations. ate and effective wildfire risk reduction intain forest health and site productivi dland fire fighters to anchor suppression g or modifying hazardous forest fuels i bour potential.	R) area is on the south side of the Chinook Community Forest by the British Columbia Wildfire c Class (RC) polygon which has Resources and Assets (HVRAs) g Road. The Provincial Strategic inal Threat Rating (FTR) of high (7) id spotting impacts for the fuel types enerated by the Grassy Plains Hub e season are typically from the within wildland urban interface ure near the Keefe's Landing Road. int to critical evacuation corridors – nodifying forest fuels adjacent to, or n solutions that give due regard to in solutions that give due regard to ity. on strategies and tactics from during n a way that improves firefighter								



STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this TU 1 of this Prescription area will be a Clearcut with Reserves (CCRES) Silviculture System and TU 2 will be a Clearcut with Dispersed Retention (CCDRET) Silviculture System as both TU's requires significant stand modification to address the hazardous stand conditions. Stand conditions are poor in these areas due to the impacts of historical insect infestations and subsequent wind events. The prescription area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest (HARV) methods. Final treatment phases require surface fuel load reductions (SFR) to dead and down material and treatment residues by mechanical surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Prescription area design and specifications have been developed with consideration of the influence of topography. However, fine adjustments to initial spread indexes (ISI) to account for the influence of slope have not been incorporated into treatment specifications.

-												
C. TREATMENT UNIT (TU) SUMMARY												
TU	SU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)					
1	1	9.1	9.5	0.4	0	9.1	CCRES / HARV / SFR / Mechanical Debris Pile & Burn					
2	1	11.6	14.4	2.8	0	11.6	CCDRET / HARV / SFR / Mechanical Debris Pile & Burn					
тот	ALS	20.7	23.9	3.2	0	20.7						

D. SITE CH	HARACTERISTICS						
TU	<u>CFFBPS FUEL</u> <u>TYPE</u>	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT
1	C2	MATURE Coniferous	SBS dk 01	862 - 885	Middle	3 – 10	Southeast
2	C2	MATURE Coniferous	SBS dk 01	858 - 870	Middle	3 – 10	Southeast
FUEL TYPE	DETERMINATION	TU1: C2 is the ft TU 2: C2 is the f spruce and hybrid	iel type is used fo uel type used, bas d spruce stands th	r representing r red upon observ roughout the pr	nountain pine b ved fire behavio rovince.	peetle (MPB) affected pur, for mid-elevation	stands.



E. SOIL CHARACTERISTICS										
		DUFF			SOIL HARZARD RATING					
TU	TEXTURE	DEPTH (cm)	COARSE FRAGMENTS (%)	LIMIT (%)	Compaction	Erosion	Displacement			
1	SL	3	45 - 55	10	Μ	М	L			
2	SL	3	45 - 55	10	Μ	М	L			
		•		·						

F. VALUES – FOREST AND RANGE PRACTICES ACT									
<b>RIPARIAN &amp; LAKESHORE AREAS</b> - Forest Planning and Practices Regulation (FPPR) division 3, Government Action Regulation (GAR) section 6, Forest and Range Practices Act (FRPA) sections 180 and 181									
Is the proposed cutting, modification or removal of trees, or site preparation, in an area that contains streams, lakes or wetlands?				Riparian features that occur within the Chinook Community Forest Agreement (CFA) tenure area have been managed in accordance with section 6.5.2 of the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and are otherwise compliant with the requirements of section 47 to 51, 52(2), and 53 of the FPPR.					
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					
Stream #2	S6	0	20	The proposed harvest area of WRR-7 is at least 20m from Stream #2.					
Stream #3, R1	NCD	0	0	The proposed harvest area of WRR-9 is greater than 5m from Stream #3, R1.					
Stream #3, R2	<b>S</b> 6	0	20	The proposed harvest area of WRR-8 is greater than 20m from Stream #2, R2.					
Wetland #4	W3	0	30	The proposed harvest area of WRR-8 is greater than 30m from Wetland #4.					

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 🖂	Treatment activities have not been prescribed in areas that contain, are adjacent to, or are a direct tributary to an identified temperature sensitive stream.						
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 🛛	Road construction activities have not been proposed within the RMA of any identified riparian feature.						
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 🗌	There will be one crossing associated with this prescription, where Steam #2 (S6) crosses proposed Road Permit R21201-202.						



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 🛛	Treatment activities have not been prescribed within the RMZ of an S4, S5, or S6 stream that is a direct tributary to an S1, S2, or S3 stream, and therefore the basal area retention requirements for maintaining stream bank and channel stability provided by section 52 of the FPPR do not apply.						
DOMESTIC WATER LICENCES (inside	e or outside of co	mmunity watershee	d) - FPPR section	59				
Does the proposed treatment area contain water sources that are diverted for human consumption by a licensed waterworks?	atment area that are nsumption rks?Yes $\Box$ No $\boxtimes$ The treatment area does not include water sources that are diverted for human consumption by a licensed waterworks.							
LICENCED WATER WORKS (inside of	r outside of a cor	nmunity watershed	) - FPPR section 6	0				
Does the proposed treatment include areas that are within 100m of a licensed waterworks?Treatment and road construction activities have not been proposed within 1 m of a licensed waterworks that is within a community watershed.								
FISHERIES SENSITIVE WATERSHED - GAR section 14, FPPR section 8.1								
Are any activities proposed within a fisheries sensitive watershed?Yes $\Box$ No $\boxtimes$ Treatment activities have not been proposed within a fisheries sensitive watershed.								
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 🖂	No $\boxtimes$ Treatment activities have not been proposed within a community watershed.						
Will this project require road construction or deactivation within a community watershed?	Yes 🗆 No 🖂	Treatment and road community waters	d construction act hed.	ivities have not been proposed within a				
WATERSHED ASSESSMENT CONSID	ERATIONS - FRP	A section 180 areas	with "significant	watershed sensitivity"				
Does the proposed treatment area include areas that have watershed assessment considerations?	Yes 🗌 No 🖂	Treatment activitie significant watersh considerations.	s have not been p ed sensitivity or o	roposed in areas identified as having other watershed assessment				
SOIL DISTURBANCE AND PERMANE	NT ACCESS STRU	JCTURES - FPPR sect	tions 35 and 36					
Treatment Unit (TU)	Proposed Max. Allowable Soil Disturbance (5% or 10%) 10%	Proposed Max. Soil Disturbance for Roadside Work Areas 25%	Proposed Max. Permanent Access Structures 5%	<b>Comments</b> Proposed permanent access structures calculated at 2.4%, and they will be planted once all treatment activities are complete.				
Do the proposed Permanent Access Structures exceed 7% of the total area?	Yes 🗆 No 🖂	Permanent access s	structures will not	t exceed 7%.				
LANDSLIDES AND TERRAIN STABILI	TY - FPPR section	37						
Does the proposed treatment area include areas where terrain stability is a concern?	Yes 🗌 No 🛛	Indicators of slope instability or landslides were not noted within the treatment area.						



SUITABLE SECONDARY STRUCTURE	- FPPR section 4	3.1
Does the proposed treatment area include a "targeted pine leading stand"? UNGULATE WINTER RANGE - GAR se	Yes 🗆 No 🗵	Treatment activities have not been proposed in a "targeted pine leading stand" as defined by section 1 of the FPPR. Additionally, the treatment activities proposed will occur entirely within a community forest agreement (CFA) license for the purpose of wildfire risk reduction and therefore, as per section 43.1(4) and 43.1(2) of the FPPR, the secondary stand structure retention specifications set out by section 43.1(1) of the FPPR do not apply. ections 180 and 181. FPPR section 69
Does the proposed treatment area		Treatment activities have been proposed in a Special Resource Management
include areas within an Ungulate Winter Range?	Yes 🛛 No 🗌	Sub-Zone 4 with identified M1 and M2 ungulate winter habitat for Moose, 40% M1 coverage of WRR-6 and 100% M2 coverage for WRR-9. Prior to the commencement of treatment activities the Agreement Holder will ensure that the habitat requirements for the winter survival of ungulate species specified by s.6.4.2 of the FSP are maintained.
WILDLIFE HABITAT AREA - GAR sect	ion 10, FRPA sec	tions 180 and 181, FPPR section 69
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes 🗌 No 🖂	The treatment area does not overlap any mapped or otherwise identified wildlife habitat areas.
MIGRATORY BIRD CONVENTION AC	<b>T</b> – 1994	
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes 🗌 No 🛛	The nest density ranking for this Prescription area is 2 and therefore is not likely to impact Migratory Bird Habitat.
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR WILDLIFE - F	FPPR section 7
Does the proposed treatment area include areas to which objectives for wildlife under FPPR section 7 apply?	Yes 🛛 No 🗆	A legal order establishing objectives set by government for wildlife has not been enacted in the Lakes district and objectives are not specified in the Lakes LRMP or the Lakes South SRMP. Two notices, enabled under section 7(2) of the FPPR, specifying indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species as well as for the survival of species at risk exist for the Lakes and Nadina districts, respectively.
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR BIODIVERSI	TY OBJECTIVES (Landscape Level) - FPPR Part 4 Division 5
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes 🛛 No 🗆	The design of the proposed Wildfire Risk Reduction areas will resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5
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 🛛 No 🗆	Five external Wildlife Tree Patch areas amounting to 3.2ha (13.4%) have been identified with this plan.



<b>RECREATION FEATURES</b> - FRPA sect	ion 56 and 149, I	FPPR section 70
Does the proposed treatment area contain interpretive sites, recreation trails, recreation sites, recreation facilities that are of significant recreation value and are designated a resource feature?	Yes 🗌 No 🛛	The treatment area does not contain known interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature.
VISUAL QUALITY OBJECTIVES - GAR	section 7, FRPA	sections 180 and 181, FPPR section 9.2
Is the proposed treatment within a scenic area?	Yes 🗌 No 🖂	Proposed WRR blocks are not within a Scenic area nor a VQO – Retention polygon.
ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	GE 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 🗌 No 🗵	These proposed WRR blocks do not overlap with any CHR High Archaeological polygons nor were any archaeological sites or cultural heritage resources (CHR) identified with the proposed treatment areas. In the event that additional CHR features are identified or otherwise made known during First Nation information sharing and consultation, measures to protect the CHR or address First Nation concerns must be communicated by
No Referral to Land Manager is required if proposed TU is on the applicant's own First Nation Land.		an addendum to, or an amendment of this prescription. In the event that previously unidentified CHR features are encountered while carrying out treatment activities, work in the area must stop, and an authorized treatment supervisor must be notified. The Agreement Holder will complete a cultural heritage resource evaluation (CHR) and provide management direction to protect or otherwise manage for the identified feature(s).
INVASIVE PLANTS - FRPA section 47	and FPPR sectio	n 17
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes 🛛 No 🗆	Review of the Invasive Alien Plant Program (IAPP) database indicated the presence of invasive plant species adjacent to the FTU along the Keefe's Landing Road. IAPP sites include Orange Hawkweed (OH), Meadow Buttercup (MB), Oxeye Daisy (OD), Scentless Chamomile (SH), Common Tansy (TC), and Yellow Hawkweed (YH).
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 🖂	Fencelines and two cattleguards are already on the existing access into WRR-6 and WRR-8 (North side of Keefe's Landing Road). In the event that fencelines or cattleguards are damaged, they will be repaired to the pre-damaged condition.
SPECIES AT RISK – FPPA section 7		
Are there species at risk present within the boundaries of the prescribed treatment area?	Yes 🗆 No 🛛	No known occurrences of a species at risk were noted during field assessments or through review of BC Conservation Data Centre spatial data.
LAND USE OBJECTIVES (Higher Leve	l Plans and object	ctives 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 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.



LAND USE OBJECTIVES (Higher Level Plans and objectives set by Government under the Land Act) Cont'd						
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the Land Act)?	Yes 🗌 No 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.				
Known and potential species at risk, windthrow hazard, and old growth management areas?	Yes 🗌 No 🖂	Treatment activities have not been proposed in an old growth management area (OGMA) established by the Lakes South SRMP.				
Do the proposed activities conflict with Provincial Priority Deferral Areas (PROV. DEF) identified by the Old Growth Strategic Review?	Yes 🛛 No 🗌	Proposed harvest area WRR-7 overlaps into the newly designated PROV. DEF by 10%, and WRR-8 overlaps by 40%. The Agreement Holder has an exemption from the Nadina Resource District to allow for the overlap between the PROV. DEF areas and all Wildfire Risk Reduction proposed areas.				

G. OTHER CONSIDERATIONS AND	REQUIREMENTS						
CONSULTATION – FIRST NATIONS: In	fo-share was initiated on April 22, 2	2022 and Adequacy Letter is called: 10455-50/22 K4R					
WRR IS1 and is dated July 04, 2022							
		CONCERNS IDENTIFIED AND MEASURES TO ADDRESS					
Nee I ani Bunn Band	No concerns brought forwar	d.					
Skin Tyee Nation	No concerns brought forwar	rd.					
Stellat'en First Nation	No concerns brought forwar	rd.					
Wet'suwet'en First Nation	No concerns brought forwar	·d.					
Office of the Wet'sewet'en	No concerns brought forwar	·d.					
First Nations consultation complete	e?	Yes 🛛 No 🗌					
<b>CONSULTATION</b> – GENERAL, EXISTIN	G TENURE HOLDERS (Forest, Range	, Guide Outfitters, Trappers): Info-share was initiated for					
existing Tenure Holders on April 22,	2022.						
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns					
Range: George Amendt	Yes 🗌 No 🖂	No concerns brought forward.					
Range: Carl Doglione	Yes 🗌 No 🖂	No concerns brought forward.					
Range: Sharon Robertson	Yes 🗌 No 🛛	No concerns brought forward.					
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🖂	No concerns brought forward.					
Range: Victor Bateson	Yes 🗆 No 🖂	No concerns brought forward.					
Range: Jonathan Solecki	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Clint Lambert	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Elizabeth McEntire	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.					
Trapline: TR0604T014	Yes 🗆 No 🖂	No concerns brought forward.					
Trapline: TR0604T017	Yes 🗆 No 🖂	No concerns brought forward.					
Trapline: TR0604T018	Yes 🗆 No 🖂	No concerns brought forward.					
Trapline: TR0604T019	Yes 🗆 No 🖂	No concerns brought forward.					
Trapline: TR0604T020	Yes 🗆 No 🖂	No concerns brought forward.					
Guide Outfitter: James Lancaster	Yes 🗌 No 🗵	No concerns brought forward.					
Guide Outfitter: Brett Hall	Yes 🗆 No 🖂	No concerns brought forward.					
Guide Outfitter: Gary Blackwell	Yes 🗌 No 🗵	No concerns brought forward.					



PRIVATE PROPERTY							
Does private property border the proposed treatment area?	Yes 🗆 No 🖂	There is no private land immediately adjacent to any of these proposed WRR shapes.					
SMOKE MANAGEMENT							
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🔀	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021</i> <i>Community Wildfire Risk Reduction Open Burning</i> <i>Smoke Control Regulations</i> will be followed for the burning of debris piles.					
SAFETY							
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle within this range tenure area are no longer able to use portions of this area as they are completely impassable.					
UTILITIES							
Are utilities located in or adjacent to the proposed treatment area? i.e. power lines, gas lines, etc.	Yes 🛛 No 🗆	All six of the proposed shapes within this Prescription area are adjacent to Utility Lines.					
ACCESS CONTROL							
Are there any foreseen issues with access and access control during and post treatment?	Yes 🗋 No 🖂	There are no foreseen access issues for access to any of the proposed Wildfire Risk Reduction shapes in this Prescription.					
TRAFFIC CONTROL							
Is traffic control required at any point during operations?	Yes 🗌 No 🛛	There is no need for traffic control on these shapes because timber will be felled into the blocks, and there is a minimum of a tree length previously cleared between the blocks and the Keefe's Landing Road.					
OTHER (E.g Public Notification	)						
Notification of commencement of harvesting activities should be posted on Chinook Community Forest's Facebook Page.							

# H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗆 No

About 75.9% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.

🛛 Yes 🔼 No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has be dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. The plan would then be for the non-merch material to also potentially be shipped to a biomass facility, or potentially that a grinding unit would arrive on site to process the debris. Alternatively, debris may be left on site for a small period of time so that community members may come and load the material for firewood.



u u u	Dews ruer management rescription ver. 2022							
TREATMEN	IT SPECIFICATIONS SUMMARY							
TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)							
1	<i>Silviculture Systems:</i> Clearcut with Reserve (CCRES) <i>Treatment Regimes:</i> Conventional Harvest or Forwarder (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)							
2	Silviculture Systems: Clearcut with Dispersed Retention (CCDRET) Treatment Regimes: Conventional or Forwarder Harvest (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)							
<b>TU 1</b> - TRE	ATMENT SPECIFICATION RATIONALE							
Treatment treatment is spruce and will requir manual tre manual/me affected st To reduce - Reta - Ren obje - Red - Red	activities will utilize a Clearcut with Reserve silviculture system which primarily requires the use of mechanical nethods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 76.7 m3/ha hybrid lodgepole pine – approximately 43.9% of this volume is dead potential lodgepole pine. Secondary treatment phases e surface fuel reductions to the specified targets by means of mainly mechanical methods, (with the potential for atment methods). Final treatment phases will require surface fuel reductions to the specified targets by means of echanical piling. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce *with MPB unds) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly. predicted fire behaviour the following treatment specifications have been applied: in all live deciduous trees except where their removal is necessary to address a safety concern. nove all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity ctives or the tree has been identified as a wildlife habitat or cultural heritage feature. uce <7.0 cm surface fuel loads to 0.5 kg/m <sup>2</sup> (+/- 0.25 kg/m <sup>2</sup> ). uce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).							
<b>TU 2</b> - TRE	ATMENT SPECIFICATION RATIONALE							
Treatment mechanica live overst and residu vertical an specified t type (Bore	activities will utilize a clearcut with Dispersed Retention silviculture system to be carried out using primarily I treatment methods. Initial treatment phases will remove dead or otherwise hazardous overstory trees. The removal of ory and understory trees will reduce continuity between fuel strata and accommodate the recovery of treatment fibre es. Secondary treatment phases will mechanically (and potential manual methods), thin understory trees to reduce d horizontal continuity to overstory retention. Final treatment phases will require surface fuel reductions to the argets by means of manual/mechanical piling. Treatment activities are expected to transition stands from a C-2 fuel al Spruce *with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly.							
To reduce - Ren	predicted fire behaviour the following treatment specifications apply: nove all dead overstory and understory trees except where the tree is to be retained to achieve biodiversity objectives or							

- the tree has been identified as a wildlife habitat or cultural heritage feature.
- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Retain 200-400 sph (±100 sph) of live L1 coniferous trees.
- Retain 200 sph ( $\pm 50$  sph) of live L2 coniferous trees.
- Recruitment between L1 and L2 conifers stocking is acceptable to a maximum total target conifer stocking of 600 sph (±100 sph).
- Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.
- Substitution of deciduous stems (where they exist) for coniferous stocking is acceptable.
- Remove all L3 and L4 understory trees, (where they exist).
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).



**Target:** 3.0 kg/m2 (+/- 0.75 kg/m2)

TU 1: STAND A	ND STOCK	TABLE DATA									
Species and Dia	meter Clas	Crown Base s <sup>1</sup> Height	Average Tree Height	S	STEMS PER HE (sph)			VOLUM	VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>		
		Range (m)	(m)	Exist	ing	Cut	Leave	Existing	Cut	Leave	Existing
Layer 1 (≥ 22.5	cm - 27.5 c	m dbh) (Merchant	ability criteria c	an also	be inc	luded h	nere.)	•			•
Pl		-	22	12	4	124	0	37.1	37.1	0	6.6
Sx		3.6	25	16	0	160	0	57.5	57.5	0	8.0
Total Dead Pote	ential			15	0	150	0	48.1	48.1	0	8.1
Total Live				13	4	134	0	46.5	46.5	0	6.4
Total All Species	S		23	28	4	284	0	94.6	94.6	0	14.6
Total Conifers			23	28	4	284	0	94.6	94.6	0	14.6
Layer 1 (≥ 17.5cn	n - 22.5 cm	dbh)	1							1	1
Pl		3.4	17	26	9	269	0	47.4	47.4	0	8.5
Sx		3.1	16	16	5	165	0	27.8	27.8	0	5.5
Total Dead Pote	ential			15	5	155	0	23.8	23.8	0	4.6
Total Live				27	9	279	0	51.4	51.4	0	9.4
Total All Species	S		16	43	4	434	0	75.2	75.2	0	14.0
Total Conifers			16	43	4	434	0	75.2	75.2	0	14.0
Layer 1 (≥ 12.5	cm - 17.5 c	m dbh)		T					-	1	•
Pl		-	14	14	8	148	0	4.8	4.8	0	2.0
Total Dead Pote	ential			14	8	148	0	4.8	4.8	0	2.0
Total Live				0		0	0	0	0	0	0
Total All Species	s		14	14	8	148	0	4.8	4.8	0	2.0
Total Conifers			14	14	8	148	0	4.8	4.8	0	2.0
TOTALS: Layer	1						_	_			_
<b>Total Layer 1</b> - A (Conifers Only	All Species	3.2	18.8	86	6	866	0	174.6	174.6	0	30.6
TU 1: SURFAC	CE FUEL LO	DADING (kg/m²)									
Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing [	Existing Distribution			Target (kg/m²)		rget Distribution			Method- ology Used
Fine Woody	Fine Woody 0.94 Moderately continuous distribution with			ith 0	$0.5 \text{ kg/m}^2$ Reduce to target levels with an acceptable			otable	Line		
Debris ( =7cm)</td <td></td> <td>and jackpotted lodge</td> <td colspan="3">ind jackpotted lodgepole pine.</td> <td>conti</td> <td colspan="3">continuity between residual pieces and avoid creating aggregations.</td> <td>Sampling Method</td>		and jackpotted lodge	ind jackpotted lodgepole pine.			conti	continuity between residual pieces and avoid creating aggregations.			Sampling Method	
Large Diameter	4.41	Continuous distribut	ion of lodgepole p	pine 2	.5 kg/m	n <sup>2</sup> Redu	ice below $a = a = b = b = b = b = b = b = b = b = $	target level	s with an a	cceptable	moulou
Woody Debris $(>7cm - 20cm)$		some hybrid spruce	damaged by wind		(+/-0.5) kg/m2)	betw	e of $\pm 0.5$ k een retain	ed pieces ar	ne poor co nd avoid ci	reating	
(27011-20011)	6.02	Pieces typically have	Pieces typically have a decay class of 2.				aggregations.				

Crown Closure (%): 20

Coarse Woody Debris (CWD) (>20cm)

6.02

Existing Total: 11.37 kg/m<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>2</sup> A professional estimate is required for any merchantable cutting



# TU 2: STAND AND STOCK TABLE DATA

Species and Diameter Class <sup>3</sup>	Crown Base Height Range (m)	Average Tree Height (m)	STEN	IS PER HE (sph)	CTARE	VOLUME PER HECTARE (m³/ha) <sup>4</sup>			Basal Area (m²)		
			Existing	Cut	Leave	Existing	Cut	Leave	Existing		
Layer 1 (≥ 12.5 cm dbh)											
Pl	-	17.7	541	541	0	89.3	89.3	0	17.1		
Sx	3.6	20.5	325	0	325	85.3	0	85.3	13.5		
Total Dead Potential			453	453	0	76.7	76.7	0	14.7		
Total Live			413	0	413	97.9	0	97.9	15.9		
Total All Species		19.1	866	453	413	174.6	76.7	97.9	30.6		
Total Conifers		19.1	866	453	413	174.6	76.7	97.9	30.6		
Layer 2 (≥ 7.5cm - 12.5 cm dbh)								-			
Sx	2.5	8.4	260	0	260	4.3	0	4.6	5.1		
Total Dead Potential			0	0	0	0	0	0	0		
Total Live			260	0	260	4.3	0	4.6	5.1		
Total All Species		8.4	260	0	260	4.3	0	4.3	5.1		
Total Conifers		8.4	260	0	260	4.3	0	4.3	5.1		
Layer 3 (≥1.3 m ht 7.5 cm)											
Sx	0.6	4.2	574	574	0	-	-	-	-		
Total Dead Potential			0	0	0	-	-	-	-		
Total Live			574	574	0	-	-	-	-		
Total All Species		3.6	574	574	0	-	-	-	-		
Total Conifers		3.6	574	574	0	-	-	-	-		
Layer 4 (< 1.3 m height)			1		1		1				
Sx	0.2	0.6	255	255	0	-	-	-	-		
Total All Species		0.6	255	255	0	-	-	-	-		
Total Conifers		0.6	255	255	0	-	-	-	-		

#### TU 2: SURFACE FUEL LOADING (kg/m<sup>2</sup>) Method-Target Existing **Existing Distribution** Size Class (cm) **Target Distribution** ology $(kg/m^2)$ $(kg/m^2)$ Used 0.58 Moderately continuous distribution with $0.5 \text{ kg/m}^2$ Reduce to target levels with an acceptable Line Fine Woody range of $\pm 0.25$ kg/m<sup>2</sup>. Maintain poor accumulations associated with suspended (+/- 0.25 Intersect Debris (</=7cm) continuity between residual pieces and avoid and jackpotted lodgepole pine. kg/m2) Sampling creating aggregations. Method Reduce below target levels with an acceptable 3.92 Moderately continuous distribution of $2.5 \text{ kg/m}^2$ Large Diameter lodgepole pine damaged by mountain pine range of $\pm 0.5$ kg/m<sup>2</sup>. Ensure poor continuity (+/- 0.5 Woody Debris beetle as well as some hybrid spruce between retained pieces and avoid creating (>7cm - 20cm) kg/m2) damaged by wind. Pieces typically have a aggregations. 1.98 Coarse Woody decay class of 2. Debris (CWD) (>20cm) Crown Closure (%): 23 Target: 3.0 kg/m2 (+/- 0.75 kg/m2) Existing Total: 6.48 kg/m<sup>2</sup>

<sup>&</sup>lt;sup>3</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>4</sup> A professional estimate is required for any merchantable cutting



BIODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS					
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk.				
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.				
	Stands have been assessed to be in poor condition due to the impacts of forest				
FOREST HEALTH- Should include sections such	health factors.				
as agent, affected species, incidence rating,	Lodgepole pine overstory trees exhibited high mortality $(43.9\%)$ as a result of $(200/)$ 1				
mortality, and targets	historical mountain pine beetle infestation. Significant wind damage (39%) has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of emerging mountain pine beetle infestation was not noted. WINDTHROW RISK EVALUATION Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations.				

# I. TREATMENT DESCRIPTION

#### MERCHANTABLE TIMBER CUTTING

#### ROADS, LANDINGS AND TRAILS:

Access to the units will be gained via Keefe's Landing Road and existing Spur Roads and FSR's adjacent to the block. Proposed access associated with the treatment areas will include one (1) road permits section and two (2) on-block spur roads. One road permit sections will commence off the Murdoch FSR to access WRR-9 and the access to WRR-7 will be accessed via the Road Permit Section being applied for with Prescription #2.

All additional access structures required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

#### FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

#### YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

#### LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

CHONOOK Community Forest

# SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

# STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

# STAND MODIFICATION TREATMENTS

BRUSHING: Manual brushing treatments have not been prescribed.

### PRUNING: Pruning treatments have not been prescribed.

**THINNING:** Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.

### DEBRIS PILING:

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of ½ the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

# PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 – Nechako River (93F). All open burning activities within the Keefe's Landing WRR area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

No Private residences or business buildings have been identified <150 m of the treatment area

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

# STRATEGIES FOR PILE BURNING:

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.
- Obtain custom venting forecasts to identify optimal burning opportunities.
- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

# GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris piles locations.



PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

### PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

### FRPA Section 52(1)(b):

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: One new Section for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): N/A

# J. POST TREATMENT

# EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

# ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 (both TU 1 and TU 2) an even-aged stocking standard has been applied as is shown in the table below.

STOC APPI	STOCKING STANDARDS: APPLICABLE EVEN-AGED STOCKING STANDARDS for all variations of Clearcut Silviculture Systems:												
		Stocking	Species	Species		Well-Space	ed Stem/ł SS	na	· Min	imum Hei	ght (m)	Regen	Free
τυ	SU	Standard ID	(Pref.)	(Accep.)	TSS	Pref. & Acc.	Pref.	MITD	PI	Others	RTH (%)	Delay	(years)
1/2	1	TBD	PLI SX FDI LW AT EP AC	-	1200	700	600	2.0	2.0	1.0	-	4	20



# K. Outstanding Works

- 1.) Obtain the appropriate authorizations for the FRPA Section 52(1)(b) and for the new sections required to R21201 road permit.
- 2.) Obtain District Manager approval for the proposed alternative stocking standards, or upon the approval of the Chinook CFA:K4R FSP adopt the applicable fire management stocking standards if appropriate.
- 3.) If required, obtain the appropriate approval(s) under section 15 of the EMA to exempt pile burning activities from the requirements of sections 9, 10, 11, 13, 14 and 15 and Part 3 of OBSCR.
- 4.) Obtain the appropriate authorizations or exemptions for those portions of the treatment area that are within a Priority Deferral Area identified by the Old Growth Strategic Review and the Old Growth Technical Advisory Panel.

#### L. ADMINISTRATION PREPARATION FOREST PROFESSIONAL NAME (Printed): FOREST PROFESSIONAL SIGNATURE: Jennifer Hill, RPF JELMIFER TIA HIL ERITISH DATE: MEMBER NUMBER: 3889 2023-01-31 **M. ATTACHMENTS** MAPS: FIELD DATA CARDS: Yes 🛛 No 🗖 Yes 🛛 No 🗖 WUI WTA Plots and Photos: Yes 🖂 No 🗖 CRUISE DATA: Yes 🛛 No 🗖 AIR PHOTOS/IMAGERY: **BURN PLAN:** Yes 🔀 No 🗖 Yes 🗖 No 🖂 MODELING/DATA ANALYSIS: Yes 🗆 No 🗖 **OTHER:** Migratory Bird Nest Ranking Yes 🛛 No 🗖 Spreadsheet Yes 🔀 No 🗖 **OTHER: WTA Worksheets** SURFACE FUEL LOADING DATA: Yes 🛛 No 🗖 TERRAIN STABILITY ASSESSMENT VISUAL IMPACT ASSESSMENT Yes 🗆 No 🖂 Yes 🗆 No 🖂 Completed By: Completed By: Date: Date: ARCHAEOLOGY IMPACT ASSESSMENT Yes 🗌 No 🖂 BIOLOGIST ASSESSMENT Yes □ No 🖂 Completed By: Completed By: Date: Date: ADDITIONAL COMMENTS: MAPS: The following maps have been provided to support the prescribed activities: • Prescription Map • Ortho Treatment Map Location Map









LAND OR TENURE HOLDER:
Chinook Community Forest Tenure K4R
(CFA:K4R)
GEOGRAPHIC DESCRIPTION:
Keefe's Landing Road, 4.0 km to 5.1 km
MAP REFERENCE NUMBER:
93F 081

<b>B. FUEL TREATM</b>	B. FUEL TREATMENT PROJECT DESCRIPTION								
OBJECTIVE:	🛛 Public Safety	Range Improvement	Ecosystem Restoration						
	□ Recreation	🗆 Wildlife Habitat	└┘ Other:						
	Prescription Area #4: Keefe's Landin	ng Road Wildfire Risk Reduction (WI	RR) area is on the south side of						
	François Lake and is bordered by Cr	own land. This unit is entirely within	the Chinook Community Forest						
	Service (BCWS) WRR Tactical Plan	l dentified as a lingit priority corridor	by the Brush Columbia whome						
	The unit is within the François Lake	Wildland Urban Interface (WUI) Risl	c Class (RC) polygon which has						
	been assigned a risk class rating of 2	due to the prevalence of High Value	Resources and Assets (HVRAs)						
	namely the infrastructure and community the infrastructure and com	unity values along the Keefe's Landin ed stands within the unit as having a F	g Road. The Provincial Strategic inal Threat Rating (FTR) of high (7)						
	to extreme (9). This rating considers	the anticipated head fire intensities ar	ad spotting impacts for the fuel types						
	present as well as historical fire dens	ities. Initial spread index (ISI) roses g	enerated by the Grassy Plains Hub						
	(161) fire weather station indicate the	at prevailing winds during the core fir	e season are typically from the						
	southwest.								
	The objectives of this Prescription and	re to:							
	• reduce the risk of wildfire to pu	ublic safety by modifying forest fuels	within wildland urban interface						
	• reduce the risk of wildfire to p	properties, residences, and infrastruct ublic safety by modifying fuels adjace	ent to critical evacuation corridors –						
	specifically those along the Ke	efe's Landing Road network.							
	• reduce the risk of wildfire to cr likely to influence forest fuels	ritical infrastructure and property by n adjacent to, identified values at risk.	nodifying forest fuels adjacent to, or						
	develop ecologically appropria	te and effective wildfire risk reduction	n solutions that give due regard to						
	• develop ecologically appropriate and effective wildfire risk reduction solutions that give due regard to								
	site and stand conditions to ma	intain forest health and site productiv	ity.						
	• create defensible space for wildland fire fighters to anchor suppression strategies and tactics from during								
	safety and reduces fire behavior	or mounying nazardous forest fuels i our potential.	n a way inat improves firefighter						
		r							



STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this TU 1 of this Prescription area will be a Clearcut with Reserves (CCRES) Silviculture System and TU 2 will be a Clearcut with Dispersed Retention (CCDRET) Silviculture System as both TU's requires significant stand modification to address the hazardous stand conditions. Stand conditions are poor in these areas due to the impacts of historical insect infestations and subsequent wind events. The prescription area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest (HARV) methods. Final treatment phases require surface fuel load reductions (SFR) to dead and down material and treatment residues by mechanical surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Prescription area design and specifications have been developed with consideration of the influence of topography. However, fine adjustments to initial spread indexes (ISI) to account for the influence of slope have not been incorporated into treatment specifications.

C. TRE	C. TREATMENT UNIT (TU) SUMMARY										
TU	SU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)				
1	1	3.0	3.0	0	0	3.0	CCRES / HARV / SFR / Mechanical Debris Pile & Burn				
2	1	6.9	8.2	1.3	0	6.9	CCDRET / HARV / SFR / Mechanical Debris Pile & Burn				
тот	ALS	9.9	11.2	1.3	0	9.9					

D. SITE CI	D. SITE CHARACTERISTICS								
TU	<u>CFFBPS FUEL</u> <u>TYPE</u>	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT		
1	C2	MATURE Coniferous	SBS dk 01	885 - 905	Middle	3 - 7	Southeast		
2	C2	MATURE Coniferous	SBS dk 01	885 - 910	Middle	2 - 6	Southeast		
FUEL TYPE	DETERMINATION	TU1: C2 is the fu TU 2: C2 is the f spruce and hybrid	iel type is used fo uel type used, bas d spruce stands th	r representing r ed upon observ roughout the pr	nountain pine b red fire behavio rovince.	peetle (MPB) affected pur, for mid-elevation	stands.		



E. SOIL CHARACTERISTICS								
		DUFF			SOIL HARZARD RATING			
TU	TEXTURE	DEPTH (cm)	COARSE FRAGMENTS (%)	LIMIT (%)	Compaction	Erosion	Displacement	
1	SL	3	45 - 55	10	Μ	М	L	
2	SL	3	45 - 55	10	М	М	L	

F. VALUES – FOREST AND RANGE PRACTICES ACT							
<b>RIPARIAN &amp; LAKESHORE AREAS</b> - Forest Planning and Practices Regulation (FPPR) division 3, Government Action Regulation (GAR) section 6, Forest and Range Practices Act (FRPA) sections 180 and 181							
Is the proposed cutting, modification or removal of trees, or site preparation, in an area that contains streams, lakes or wetlands?	Yes 🛛 No 🗌		Riparian (CFA) to approve otherwi of the F	Riparian features that occur within the Chinook Community Forest Agreement (CFA) tenure area have been managed in accordance with section 6.5.2 of the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and are otherwise compliant with the requirements of section 47 to 51, 52(2), and 53 of the FPPR.			
RIPARIAN MANAGEMENT AREAS (F	RMAs) - F	PPR sec	tions 51	and 52			
STREAM, LAKE, WETLAND ID	CLASS	RRZ (m)	RMZ (m)	SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE MANAGEMENT AREAS			
Stream #4	NCD	0	0	A 50m section of the NCD is within the boundary of WRR-10.			
TEMPERATURE SENSITIVE STREAMS	S - FPPR s	ection !	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 🗵		Treatment activities have not been prescribed in areas that contain, are adjacent to, or are a direct tributary to an identified temperature sensitive stream.				
ROAD CONSTRUCTION IN RIPARIAN		<b>EMEN</b>	AREAS	- FPPR section 50			
Is road construction proposed in riparian management areas within the treatment area or an associated road permit (RP)?	Yes 🗆 I	No 🖂	Road co identifie	onstruction activities have not been proposed within the RMA of any ed riparian feature.			
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 🗌 I	No 🖂	There a	re no riparian crossings associated with this prescription.			



MAINTAINING STREAM BANK AND	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 🛛	Treatment activitie or S6 stream that is the basal area reten channel stability pr	s have not been p s a direct tributary ntion requirements rovided by section	prescribed within the RMZ of an S4, S5, 7 to an S1, S2, or S3 stream, and therefore 8 for maintaining stream bank and 1 52 of the FPPR do not apply.				
DOMESTIC WATER LICENCES (inside	e or outside of co	mmunity watershee	d) - FPPR section	59				
Does the proposed treatment area contain water sources that are diverted for human consumption by a licensed waterworks?	Yes 🗆 No 🛛	The treatment area consumption by a l	does not include licensed waterwo	water sources that are diverted for human rks.				
LICENCED WATER WORKS (inside o	r outside of a cor	nmunity watershed	) - FPPR section 6	0				
Does the proposed treatment include areas that are within 100m of a licensed waterworks?	Yes 🗆 No 🖂	Treatment and road m of a licensed wa	d construction act terworks that is w	ivities have not been proposed within 100 <i>i</i> thin a community watershed.				
FISHERIES SENSITIVE WATERSHED -	GAR section 14,	FPPR section 8.1						
Are any activities proposed within a fisheries sensitive watershed?	Yes 🗌 No 🖂	Treatment activitie watershed.	s have not been p	proposed within a fisheries sensitive				
COMMUNITY WATERSHED - GAR se	ection 8, FPPR se	ction 8.2, 61, 62 and	184					
Does the proposed treatment area include areas that are within a community watershed?	Yes 🗌 No 🖂	Treatment activitie	s have not been p	roposed within a community watershed.				
Will this project require road construction or deactivation within a community watershed?	Yes 🗆 No 🖂	Treatment and road community waters	d construction act hed.	ivities have not been proposed within a				
WATERSHED ASSESSMENT CONSID	ERATIONS - FRP	A section 180 areas	with "significant	watershed sensitivity"				
Does the proposed treatment area include areas that have watershed assessment considerations?	Yes 🗌 No 🖂	Treatment activitie significant watersh considerations.	s have not been p ed sensitivity or o	roposed in areas identified as having other watershed assessment				
SOIL DISTURBANCE AND PERMANE	NT ACCESS STRU	ICTURES - FPPR sect	tions 35 and 36					
Treatment Unit (TU)	Proposed Max. Allowable Soil Disturbance (5% or 10%) 10%	Proposed Max. Soil Disturbance for Roadside Work Areas 25%	Proposed Max. Permanent Access Structures 5%	Comments Proposed permanent access structures calculated at 3.0%, and they will be planted once all treatment activities are complete.				
Do the proposed Permanent Access Structures exceed 7% of the total area?	Yes 🗆 No 🖂	Permanent access structures will not exceed 7%.						
LANDSLIDES AND TERRAIN STABILI	TY - FPPR section	37						
Does the proposed treatment area include areas where terrain stability is a concern?	Yes 🗌 No 🛛	Indicators of slope treatment area.	instability or land	dslides were not noted within the				



SUITABLE SECONDARY STRUCTURE	- FPPR section 4	3.1
Does the proposed treatment area include a "targeted pine leading stand"?	Yes 🗆 No 🗵	Treatment activities have not been proposed in a "targeted pine leading stand" as defined by section 1 of the FPPR. Additionally, the treatment activities proposed will occur entirely within a community forest agreement (CFA) license for the purpose of wildfire risk reduction and therefore, as per section 43.1(4) and 43.1(2) of the FPPR, the secondary stand structure retention specifications set out by section 43.1(1) of the FPPR do not apply.
Dess the areased treatment area	CUON 12, FRPA S	Tractment activities have been proposed in a Second Deseures Management
include areas within an Ungulate Winter Range?	Yes 🛛 No 🗌	Sub-Zone 4 with identified M2 ungulate winter habitat for Moose for WRR- 10, 11 & 12. Prior to the commencement of treatment activities the Agreement Holder will ensure that the habitat requirements for the winter survival of ungulate species specified by s.6.4.2 of the FSP are maintained.
WILDLIFE HABITAT AREA - GAR sect	ion 10, FRPA sec	tions 180 and 181, FPPR section 69
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes 🗌 No 🖂	The treatment area does not overlap any mapped or otherwise identified wildlife habitat areas.
MIGRATORY BIRD CONVENTION AC	<b>T</b> – 1994	
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes 🗌 No 🛛	The nest density ranking for this Prescription area is 2 and therefore is not likely to impact Migratory Bird Habitat.
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 🗆	A legal order establishing objectives set by government for wildlife has not been enacted in the Lakes district and objectives are not specified in the Lakes LRMP or the Lakes South SRMP. Two notices, enabled under section 7(2) of the FPPR, specifying indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species as well as for the survival of species at risk exist for the Lakes and Nadina districts, respectively.
OBJECTIVES SET BY GOVERNMENT	FOR BIODIVERSI	TY OBJECTIVES (Landscape Level) - FPPR Part 4 Division 5
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes 🛛 No 🗆	The design of the proposed Wildfire Risk Reduction areas will resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.
OBJECTIVES SET BY GOVERNMENT	FOR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5
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 🛛 No 🗌	Two external Wildlife Tree Patch areas amounting to 1.3ha (11.6%) have been identified with this plan.



<b>RECREATION FEATURES</b> - FRPA sect	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 of significant recreation value and are designated a resource feature?	Yes 🗆 No 🖂	The treatment area does not contain known interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature.					
VISUAL QUALITY OBJECTIVES - GAR	section 7, FRPA	sections 180 and 181, FPPR section 9.2					
Is the proposed treatment within a scenic area?	Yes 🗌 No 🖂	Proposed WRR blocks are not within a Scenic area nor a VQO – Retention polygon.					
ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	GE 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 🗌 No 🖂	The proposed WRR blocks do not overlap with any CHR High Archaeological polygons nor were any archaeological sites or cultural heritage resources (CHR) identified with the proposed treatment areas. In the event that additional CHR features are identified or otherwise made known during First Nation information sharing and consultation, measures to protect the CHR or address First Nation concerns must be communicated by					
No Referral to Land Manager is required if proposed TU is on the applicant's own First Nation Land.		an addendum to, or an amendment of this prescription. In the event that previously unidentified CHR features are encountered while carrying out treatment activities, work in the area must stop, and an authorized treatment supervisor must be notified. The Agreement Holder will complete a cultural heritage resource evaluation (CHR) and provide management direction to protect or otherwise manage for the identified feature(s).					
<b>INVASIVE PLANTS</b> - FRPA section 47	and FPPR sectio	n 17					
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes 🛛 No 🗆	Review of the Invasive Alien Plant Program (IAPP) database indicated the presence of invasive plant species adjacent to the FTU along the Keefe's Landing Road. IAPP sites include Orange Hawkweed (OH), Meadow Buttercup (MB), Oxeye Daisy (OD), Scentless Chamomile (SH), Common Tansy (TC), and Yellow Hawkweed (YH).					
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 🛛	Fencelines exist along both sides of Keefe's Landing Road and there is one cattleguard on the Fish Lake FSR (Moose Pit Rd). In the event that fencelines or cattleguards are damaged, they will be repaired to the pre-damaged condition.					
SPECIES AT RISK – FPPA section 7							
Are there species at risk present within the boundaries of the prescribed treatment area?	Yes 🗋 No 🛛	No known occurrences of a species at risk were noted during field assessments or through review of BC Conservation Data Centre spatial data.					
LAND USE OBJECTIVES (Higher Leve	l Plans and object	ctives 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 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.					



LAND USE OBJECTIVES (Higher Level Plans and objectives set by Government under the Land Act) Cont'd						
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the	Yes 🗌 No 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.				
Land Act)?						
Known and potential species at	Yes 🗌 No 🖂	Treatment activities have not been proposed in an old growth management				
risk, windthrow hazard, and old		area (OGMA) established by the Lakes South SRMP.				
growth management areas?						
Do the proposed activities conflict	Yes 🔀 No 🗌	Proposed harvest area WRR-10 overlaps into the newly designated PROV.				
with Provincial Priority Deferral		DEF by 60%. The Agreement Holder has an exemption from the Nadina				
Areas (PROV. DEF) identified by the		Resource District to allow for the overlap between the PROV. DEF areas and				
Old Growth Strategic Review?		all Wildfire Risk Reduction proposed areas.				

G. OTHER CONSIDERATIONS AND REQUIREMENTS								
<b>CONSULTATION –</b> FIRST NATIONS: Info-share was initiated on April 22, 2022 and Adequacy Letter is called: 10455-50/22 K4R WRR IS1 and is dated July 04, 2022								
FIRST NATION	CONCERN	CONCERNS IDENTIFIED AND MEASURES TO ADDRESS						
Nee Tahi Buhn Band	No concerns brought for	No concerns brought forward.						
Skin Tyee Nation	No concerns brought for	No concerns brought forward.						
Stellat'en First Nation	No concerns brought for	No concerns brought forward.						
Wet'suwet'en First Nation	No concerns brought for	No concerns brought forward.						
Office of the Wet'sewet'en	No concerns brought for	No concerns brought forward.						
First Nations consultation complete	e?	Yes 🗵 No 🗆						
<b>CONSULTATION</b> – GENERAL, EXISTING	<b>CONSULTATION</b> – GENERAL, EXISTING TENURE HOLDERS (Forest, Range, Guide Outfitters, Trappers): Info-share was initiated for							
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns						
Range: George Amendt	Yes 🗌 No 🗵	No concerns brought forward.						
Range: Carl Doglione	Yes 🗌 No 🗵	No concerns brought forward.						
Range: Sharon Robertson	Yes 🗌 No 🗵	No concerns brought forward.						
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Victor Bateson	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Jonathan Solecki	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Clint Lambert	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Elizabeth McEntire	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T014	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T017	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T018	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T019	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T020	Yes 🗌 No 🗵	No concerns brought forward.						
Guide Outfitter: James Lancaster	Yes 🗌 No 🗵	No concerns brought forward.						
Guide Outfitter: Brett Hall	Yes 🗆 No 🗵	No concerns brought forward.						
Guide Outfitter: Gary Blackwell	Yes 🗌 No 🗵	No concerns brought forward.						



PRIVATE PROPERTY							
Does private property border the proposed treatment area?	Yes 🗆 No 🖂	There is no private land immediately adjacent to any of these proposed WRR shapes.					
SMOKE MANAGEMENT							
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🔀	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021</i> <i>Community Wildfire Risk Reduction Open Burning</i> <i>Smoke Control Regulations</i> will be followed for the burning of debris piles.					
SAFETY							
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle within this range tenure area are no longer able to use portions of this area as they are completely impassable.					
UTILITIES							
Are utilities located in or adjacent to the proposed treatment area? i.e. power lines, gas lines, etc.	Yes 🛛 No 🗆	All four of the proposed shapes within this Prescription area are adjacent to Utility Lines.					
ACCESS CONTROL							
Are there any foreseen issues with access and access control during and post treatment?	Yes 🗆 No 🗵	There are no foreseen access issues for access to any of the proposed Wildfire Risk Reduction shapes in this Prescription.					
TRAFFIC CONTROL							
Is traffic control required at any point during operations?	Yes 🗆 No 🗵	There is no need for traffic control on these shapes because timber will be felled into the blocks, and there is a minimum of a tree length previously cleared between the blocks and the Keefe's Landing Road.					
OTHER (E.g Public Notification)							
Notification of commencement of harvesting activities should be posted on Chinook Community Forest's Facebook Page.							

# H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗆 No

About 73.8% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.

🛛 Yes 🔼 No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has be dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. The plan would then be for the non-merch material to also potentially be shipped to a biomass facility, or potentially that a grinding unit would arrive on site to process the debris. Alternatively, debris may be left on site for a small period of time so that community members may come and load the material for firewood.



TREATMEN	T SPECIFICATIONS SUMMARY					
TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)					
1	<i>Silviculture Systems:</i> Clearcut with Reserve (CCRES) <i>Treatment Regimes:</i> Conventional Harvest or Forwarder (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)					
2	Silviculture Systems: Clearcut with Dispersed Retention (CCDRET) Treatment Regimes: Conventional or Forwarder Harvest (HARV), Hazard Tree Removal (HTR), Surface Fu- Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)					
<b>TU 1</b> - TRE	ATMENT SPECIFICATION RATIONALE					
Treatment r treatment r spruce and will require manual trea manual/me affected sta To reduce - Reta - Rem obje - Red - Red	activities will utilize a Clearcut with Reserve silviculture system which primarily requires the use of mechanical nethods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 73.1 m3/ha hybrid lodgepole pine – approximately 51.6% of this volume is dead potential lodgepole pine. Secondary treatment phases e surface fuel reductions to the specified targets by means of mainly mechanical methods, (with the potential for ttment methods). Final treatment phases will require surface fuel reductions to the specified targets by means of chanical piling. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce *with MPB nds) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly. predicted fire behaviour the following treatment specifications have been applied: in all live deciduous trees except where their removal is necessary to address a safety concern. ove all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity ctives or the tree has been identified as a wildlife habitat or cultural heritage feature. ace < 7.0 cm surface fuel loads to 0.5 kg/m <sup>2</sup> (+/- 0.25 kg/m <sup>2</sup> ). ace > 7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).					
<b>TU 2</b> - TRE/	ATMENT SPECIFICATION RATIONALE					
Treatment mechanica live oversta and residue vertical and specified ta type (Bore	activities will utilize a clearcut with Dispersed Retention silviculture system to be carried out using primarily treatment methods. Initial treatment phases will remove dead or otherwise hazardous overstory trees. The removal of ory and understory trees will reduce continuity between fuel strata and accommodate the recovery of treatment fibre s. Secondary treatment phases will mechanically (and potential manual methods), thin understory trees to reduce 1 horizontal continuity to overstory retention. Final treatment phases will require surface fuel reductions to the argets by means of manual/mechanical piling. Treatment activities are expected to transition stands from a C-2 fuel al Spruce *with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly.					

- Remove all dead overstory and understory trees except where the tree is to be retained to achieve biodiversity objectives or the tree has been identified as a wildlife habitat or cultural heritage feature.
- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Retain 200 sph ( $\pm 100$  sph) of live L1 coniferous trees.
- Retain up to 100 sph ( $\pm$ 50 sph) of live L2 coniferous trees.
- Recruitment between L1 and L2 conifers stocking is acceptable to a maximum total target conifer stocking of 450 sph (±100 sph).
- Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.
- Substitution of deciduous stems (where they exist) for coniferous stocking is acceptable.
- Remove all L3 and L4 understory trees, (where they exist).
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).



Г

TU 1: STAND A	ND STOCK	TABLE DATA									
Species and Diameter Class <sup>1</sup>		Crown Base s <sup>1</sup> Height	Average Tree Height	S	STEMS PER HECTARE (sph)			VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>			Basal Area (m²)
		Range (m)	(m)	Exist	ing	Cut	Leave	Existing	Cut	Leave	Existing
Layer 1 (≥ 22.5 cm - 27.5 cm dbh)											
Pl		-	-			0	0	0	0	0	0
Sx		3.6	24	43	6	43	0	21.7	21.7	0	2.1
Total Dead Pote	ential			0		0	0	0	0	0	0
Total Live				43	5	43	0	21.7	21.7	0	2.1
Total All Species	5		24	43	5	43	0	21.7	21.7	0	2.1
Total Conifers			24	43	5	43	0	21.7	21.7	0	2.1
Layer 1 (≥ 17.5cn	n - 22.5 cm	dbh)		,							-
Pl		-	20	19	9	199	0	38.4	38.4	0	7.3
Sx		3.4	20	19	6	196	0	47.0	47.0	0	6.4
Total Dead Potential				19	9	199	0	38.4	38.4	0	7.3
Total Live				19	6	196	0	47.0	47.0	0	6.4
Total All Species			20	39	5	395	0	85.4	85.4	0	13.7
Total Conifers			20	39	5	395	0	85.4	85.4	0	13.7
Layer 1 (≥ 12.5	cm - 17.5 c	m dbh)									
Pl		-	16	57	3	573	0	34.7	34.7	0	9.8
Total Dead Pote	ential			57	3	573	0	34.7	34.7	0	9.8
Total Live				0		0	0	0	0	0	0
Total All Species			16	57	3	573	0	34.7	34.7	0	9.8
Total Conifers			16	57	3	573	0	34.7	34.7	0	9.8
TOTALS: Layer	1						1			<u>.</u>	•
Total Layer 1 - All Species		3.5	20	1,0	11	1,011	0	141.8	141.8	0	25.6
(Conifers Only											
TU 1: SURFAC	E FUEL LO	ADING (kg/m²)									
	Fxisting										Method-
Size Class (cm)	(kg/m <sup>2</sup> )	Existing Distribution			(kg/m <sup>2</sup> )		Target Distribution ology Used				
Fine Woody	ne Woody 1.0 Moderately continuous distribution with		th 0	.5 kg/m	<sup>2</sup> Redu	Reduce to target levels with an acceptable Line $range of +0.25 kg/m^2$ . Maintain poor					
Debris ( =7cm)</td <td></td> <td>and jackpotted lodge</td> <td colspan="2">id jackpotted lodgepole pine.</td> <td>+/- 0.25 kø/m2)</td> <td colspan="3">continuity between residual pieces and avoid</td> <td>nd avoid</td> <td>Sampling</td>		and jackpotted lodge	id jackpotted lodgepole pine.		+/- 0.25 kø/m2)	continuity between residual pieces and avoid			nd avoid	Sampling	
						creat	creating aggregations.				
Large Diameter Woody Debris	5.93	damaged by mountai	amaged by mountain pine beetle as well as			range	range of $\pm 0.5$ kg/m <sup>2</sup> . Ensure poor continuity				

kg/m2)

Crown Closure (%): 22

5.04

Woody Debris

(>7cm - 20cm)

Coarse Woody Debris (CWD) (>20cm)

aggregations.

**Target:** 3.0 kg/m2 (+/- 0.75 kg/m2)

between retained pieces and avoid creating

some hybrid spruce damaged by wind.

Existing Total: 9.96 kg/m<sup>2</sup>

Pieces typically have a decay class of 2.

<sup>&</sup>lt;sup>1</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>2</sup> A professional estimate is required for any merchantable cutting


# TU 2: STAND AND STOCK TABLE DATA

Species and Diameter Class <sup>3</sup>	Crown Base Height Range	Average Tree	STEMS PER HECTARE (sph)			VOLUME PER HECTARE (m³/ha) <sup>4</sup>			Basal Area (m²)	
	(m)	Height (m)	Existing	Cut	Leave	Existing	Cut	Leave	Existing	
Layer 1 (≥ 12.5 cm dbh)										
Pl	-	18	772	772	0	73.1	73.1	0	17.1	
Sx	3.5	22	239	39	200	68.7	11.2	57.5	8.5	
Total Dead Potential			772	772	0	73.1	73.1	0	17.1	
Total Live			239	39	200	68.7	11.2	57.5	8.5	
Total All Species		20	1,011	811	200	141.8	84.3	57.5	25.6	
Total Conifers		20	1,011	811	200	141.8	84.3	57.5	25.6	
Layer 2 (≥ 7.5cm - 12.5 cm dbh)	Layer 2 (≥ 7.5cm - 12.5 cm dbh)									
Sx	1.3	7.1	72	0	72	1.4	0	1.4	4.2	
Total Dead Potential			0	0	0	0	0	0	0	
Total Live			72	0	72	1.4	0	1.4	4.2	
Total All Species		7.1	72	0	72	1.4	0	1.4	4.2	
Total Conifers		7.1	72	0	72	1.4	0	1.4	4.2	
Layer 3 (≥1.3 m ht 7.5 cm)										
Sx	0.5	4.5	270	270	0	-	-	-	-	
Total Dead Potential			0	0	0	-	-	-	-	
Total Live			270	270	0	-	-	-	-	
Total All Species		4.5	270	270	0	-	-	-	-	
Total Conifers		4.5	270	270	0	-	-	-	-	
Layer 4 (< 1.3 m height)						-				
Sx	0.1	0.4	220	220	0	-	-	-	-	
Total All Species		0.4	220	220	0	-	-	-	-	
Total Conifers		0.4	220	220	0	-	-	-	-	

# TU 2: SURFACE FUEL LOADING (kg/m<sup>2</sup>)

Size Class (cm)	Existing (kg/m²)	Existing Distribution	Target (kg/m <sup>2</sup> )	Target Distribution	Method- ology Used
Fine Woody Debris ( =7cm)</td <td>0.90</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of <math>\pm 0.25</math> kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	0.90	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m <sup>2</sup> (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of $\pm 0.25$ kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method
Large Diameter Woody Debris (>7cm – 20cm)	4.89	Moderately continuous distribution of lodgepole pine damaged by mountain pine beetle as well as some hybrid spruce	2.5 kg/m <sup>2</sup> (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m <sup>2</sup> . Ensure poor continuity between retained pieces and avoid creating	Wethod
Coarse Woody Debris (CWD) (>20cm)	1.82	decay class of 2.		aggregations.	
Crown Closure (%): 24		Existing Total: 5.79 kg/m <sup>2</sup>	Target:	3.0 kg/m2 (+/- 0.75 kg/m2)	

<sup>&</sup>lt;sup>3</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>4</sup> A professional estimate is required for any merchantable cutting



**BCWS Fuel Management Prescription Ver. 2022** 

BIODIVERSITY AND FOREST HEALTH CONSIDERA	TIONS AND TARGETS
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk.
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.
FOREST HEALTH- Should include sections such as agent, affected species, incidence rating, mortality, and targets	Stands have been assessed to be in poor condition due to the impacts of forest health factors. Lodgepole pine overstory trees exhibited high mortality (51,6%) as a result of historical mountain pine beetle infestation. Significant wind damage (39%) has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of emerging mountain pine beetle infestation was not noted. WINDTHROW RISK EVALUATION Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations.

# I. TREATMENT DESCRIPTION

#### MERCHANTABLE TIMBER CUTTING

#### ROADS, LANDINGS AND TRAILS:

Access to the units will be gained via Keefe's Landing Road and existing Spur Roads and FSR's adjacent to the block. Proposed access associated with the treatment areas will include two (2) road permit sections and three (3) on-block spur roads. One road permit section will commence off the Fish Lake FSR to access WRR-11 and one that will come off an old existing block road at approximately 4.0km on the Keefe's Landing Road.

All additional access structures required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

#### FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

# YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

# LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

CHONOOK Community Forest

# SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

#### STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

#### STAND MODIFICATION TREATMENTS

BRUSHING: Manual brushing treatments have not been prescribed.

#### PRUNING: Pruning treatments have not been prescribed.

**THINNING:** Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.

#### DEBRIS PILING:

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of ½ the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

### PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 – Nechako River (93F). All open burning activities within the Keefe's Landing WRR area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

No Private residences or business buildings have been identified <150 m of the treatment area

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

# STRATEGIES FOR PILE BURNING:

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.
- Obtain custom venting forecasts to identify optimal burning opportunities.
- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

#### GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris piles locations.



PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

#### PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

#### FRPA Section 52(1)(b):

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: Two new Sections for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): N/A

# J. POST TREATMENT

#### EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

## ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 (both TU 1 and TU 2) an even-aged stocking standard has been applied as is shown in the table below.

STOC APPI	STOCKING STANDARDS: APPLICABLE EVEN-AGED STOCKING STANDARDS for all variations of Clearcut Silviculture Systems:													
		Stocking	Species	Species Species		Species		Well-Spaced Stem/ha MSS		Minimum Height (m)			Regen	Free
τυ	SU	Standard ID	(Pref.)	(Accep.)	TSS	Pref. & Acc.	Pref.	MITD	PI	Others	RTH (%)	Delay	(years)	
1/2	1	TBD	PLI SX FDI LW AT EP AC	-	1200	700	600	2.0	2.0	1.0	-	4	20	



# K. Outstanding Works

- 1.) Obtain the appropriate authorizations for the FRPA Section 52(1)(b) and for the new sections required to R21201 road permit.
- 2.) Obtain District Manager approval for the proposed alternative stocking standards, or upon the approval of the Chinook CFA:K4R FSP adopt the applicable fire management stocking standards if appropriate.
- 3.) If required, obtain the appropriate approval(s) under section 15 of the EMA to exempt pile burning activities from the requirements of sections 9, 10, 11, 13, 14 and 15 and Part 3 of OBSCR.
- 4.) Obtain the appropriate authorizations or exemptions for those portions of the treatment area that are within a Priority Deferral Area identified by the Old Growth Strategic Review and the Old Growth Technical Advisory Panel.

L. ADMINISTRATION						
PREPARATION						
FOREST PROFESSIONAL NAME (Printed,	):	FOREST F	PROFESSIONAL SIGNATURE:			
Jennifer Hill, RPF			STATES AND A STATE			
MEMBER NUMBER:		DATE:				
3889			2023-02-02			
M. ATTACHMENTS						
MAPS:	Yes 🛛 No 🗖	FIELD DA	TA CARDS:	Yes 🖂 No 🗖		
WUI WTA Plots and Photos:	Yes 🛛 No 🗖	CRUISE D	DATA:	Yes 🖂 No 🗖		
AIR PHOTOS/IMAGERY:	Yes 🛛 No 🗖	BURN PL	AN:	Yes 🗖 No 🖂		
MODELING/DATA ANALYSIS:	Yes 🗆 No 🗖	OTHER:	Migratory Bird Nest Ranking	Yes 🖂 No 🗖		
		Spreadsh OTHER:	ieet WTA Worksheets	Yes 🛛 No 🗖		
SURFACE FUEL LOADING DATA:	Yes 🛛 No 🗖					
TERRAIN STABILITY ASSESSMENT	Yes 🗖 No 🖂	VISUAL II	MPACT ASSESSMENT	Yes 🗖 No 🖂		
Completed By:		Complet	ed By:			
Date:		Date:				
ARCHAEOLOGY IMPACT ASSESSMENT Y	es 🗌 No 🖂	BIOLOGIST ASSESSMENT Yes 🗖 No 🖂				
Completed By:		Complete	ed By:			
Date:		Date:				
ADDITIONAL COMMENTS: MAPS: The following maps have been • Prescription Map • Ortho Treatment Map • Location Map	provided to support the	prescribed	l activities:			





Rx 4 – Crown Photo:





LAND OR TENURE HOLDER:
Chinook Community Forest Tenure K4R (CFA:K4R)
GEOGRAPHIC DESCRIPTION:
Keefe's Landing Road, 6.0 km
MAP REFERENCE NUMBER:
93F 081

<b>B. FUEL TREATN</b>	IENT PROJECT DESCRIPTION				
OBJECTIVE:	⊠ Public Safety	Range Improvement	Ecosystem Restoration		
	□ Recreation	Wildlife Habitat	□ Other:		
	Prescription Area #5 – Wildfire Risk Road on the south side of François L (CFA:K4R) tenure area, and has bee Service (BCWS) Wildfire Risk Redu The unit is within the François Lake been assigned a risk class rating of 2 namely the infrastructure and commu Threat Analysis (PSTA) has classified to extreme (9). This rating considers present as well as historical fire dense (161) fire weather station indicate th southwest.	Reduction (WRR) treatment area is a cake. This unit is entirely within the Cl n identified as a high priority corridor action (WRR) Tactical Plan. Wildland Urban Interface (WUI) Risk due to the prevalence of High Value unity values along the Eakin Settlement ed stands within the unit as having a F the anticipated head fire intensities an sities. Initial spread index (ISI) roses g at prevailing winds during the core fir	tt 6.0km on the Keefe's Landing hinook Community Forest by the British Columbia Wildfire c Class (RC) polygon which has Resources and Assets (HVRAs) nt Road. The Provincial Strategic inal Threat Rating (FTR) of high (7) nd spotting impacts for the fuel types generated by the Grassy Plains Hub re season are typically from the		
	<ul> <li>The objectives of this Prescription and reduce the risk of wildfire to p (WUI) areas – specifically the reduce the risk of wildfire to p specifically those along the Ear reduce the risk of wildfire to create the risk of wildfire to create develop ecologically appropriate overlapping land management</li> <li>develop ecologically appropriates and stand conditions to mate create defensible space for wild incident response by removing safety and reduces fire behavior</li> </ul>	re to: ublic safety by modifying forest fuels properties, residences, and infrastructu- ublic safety by modifying fuels adjace kin Settlement Road network. ritical infrastructure and property by n adjacent to, identified values at risk. ate and effective wildfire risk reduction objectives and tenure obligations. ate and effective wildfire risk reduction intain forest health and site productive dland fire fighters to anchor suppressi- or modifying hazardous forest fuels i bur potential.	within wildland urban interface ure near Keefe's Landing Road. ent to critical evacuation corridors – nodifying forest fuels adjacent to, or n solutions that give due regard to n solutions that give due regard to ity. on strategies and tactics from during n a way that improves firefighter		



# BCWS Fuel Management Prescription Ver. 2022

STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this Prescription area will be a Clearcut with reserves Silviculture System since these proposed areas requires significant stand modification to address the hazardous stand conditions. The stand condition is poor in this area due to the impacts of historical insect infestations and subsequent wind events. This area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest methods. Final treatment phases require surface fuel load reductions to dead and down material and treatment residues by mechanical and potentially manual surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Treatment area design and specifications have been developed with consideration of the influence of topography.

C. TREA	. TREATMENT UNIT (TU) SUMMARY									
ΤU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	SILVICULTURE SYSTEM AND TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)				
1	0.7	1.9	1.2	0	0.7	CCRES / HARV / SFR / Mechanical Debris Pile & Burn				
TOTALS	0.7	1.9	1.2	0	0.7					

D. SITE CH	HARACTERISTICS						
TU	<u>CFFBPS FUEL</u> <u>TYPE</u>	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT
1	C2	MATURE Coniferous	SBS dk 01	890 - 898	Middle	2-6	South
FUEL TYPE	DETERMINATION	C2 – Boreal Blac beetle (MPB) aff	ek and White Spru ected stands).	ice *(the C2 fue	el type is used f	or representing mount	tain pine

E. SOIL	E. SOIL CHARACTERISTICS									
		DUFF			SOI	L HARZARD R	ATING			
ΤU	TEXTURE	DEPTH (cm)	COARSE FRAGMENTS (%)	LIMIT (%)	Compaction	Erosion	Displacement			
1	SL	4	50	10	М	М	L			



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 Practice	s Act (FR	PA) sect	ions 180	and 181				
Is the proposed cutting, modification or removal of trees			There an Riparian	re no riparian features associated with this prescription area.				
or site preparation, in an area that	Yes 🗆 I	NO 🖄	Agreement (CFA) tenure area have been managed in accordance with section					
contains streams, lakes or			6.5.2 of	the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and				
wetlands?			are otherwise compliant with the requirements of section 47 to 51, 52(2), and					
			53 of th	e FPPR.				
<b>RIPARIAN MANAGEMENT AREAS (</b>	<b>MAs)</b> - F	PPR sec	tions 51	and 52				
STREAM, LAKE, WETLAND ID	CLASS RRZ (m)		RMZ (m)	SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE MANAGEMENT AREAS				
n/a								

TEMPERATURE SENSITIVE STREAMS	<b>5</b> - FPPR section S	53, GAR section 15, FRPA sections 180 and 181
Are there temperature sensitive		Treatment activities have not been prescribed in areas that contain, are
streams or direct tributaries to	Yes 🗌 No 🖂	adjacent to, or are a direct tributary to an identified temperature sensitive
temperature sensitive streams		stream.
within or adjacent to the proposed		
treatment area?	(	
ROAD CONSTRUCTION IN RIPARIAN	I MANAGEMENT	AREAS - FPPR section 50
Is road construction proposed in		Road construction activities have not been proposed within the RMA of any
riparian management areas within	Yes 🗌 No 🖂	identified riparian feature.
the treatment area or an		
associated road permit (RP)?		
STREAM CROSSINGS - FPPR section	55	
Will stream crossings be		There are no stream crossings associated with this prescription.
constructed within the proposed	Yes 🗌 No 🖂	
treatment area or a road permit		
road providing access to the		
treatment area?		
MAINTAINING STREAM BANK AND	CHANNEL STABI	LITY ON S4, S5, and S6 STREAMS - FPPR section 52 (2)
Is the proposed treatment in the		Treatment activities have not been prescribed within the RMZ of an S4, S5,
RMZ of an S4, S5 or S6 stream that		or S6 stream that is a direct tributary to an S1, S2, or S3 stream, and therefore
is directly tributary to an S1, S2 or		the basal area retention requirements for maintaining stream bank and
S3 stream and the activity is likely	Yes 🗌 No 🖂	channel stability provided by section 52 of the FPPR do not apply.
to contribute significantly to the		
destabilization of the stream bank		
or the stream channel?		
DOMESTIC WATER LICENCES (inside	or outside of co	mmunity watershed) - FPPR section 59
Does the proposed treatment area		The treatment area does not include water sources that are diverted for human
contain water sources that are	Yes 🗌 No 🖂	consumption by a licensed waterworks.
diverted for human consumption		
by a licensed waterworks?		



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LICENCED WATER WORKS (inside of	r outside of a cor	nmunity watershed	l) - FPPR section 6	50			
Does the proposed treatment		Treatment and road	d construction act	tivities have not been proposed within			
include areas that are within	Yes 🗌 No 🖂	100 m of a license	d waterworks that	t is within a community watershed.			
100m of a licensed waterworks?							
FISHERIES SENSITIVE WATERSHED -	GAR section 14,	FPPR section 8.1	1 . 1				
Are any activities proposed within	Yes 🗌 No 🖂	Treatment activitie	es have not been p	proposed within a fisheries sensitive			
a fisheries sensitive watershed?		watersneu.					
COMMUNITY WATERSHED - GAR se	ction 8, FPPR se	ction 8.2, 61, 62 and	d 84				
Does the proposed treatment area	Yes 🗌 No 🖂	Treatment activitie	es have not been p	proposed within a community watershed.			
include areas that are within a							
community watershed?							
will this project require road	Yes 🗌 No 🖂	community waters	hed	invities have not been proposed within a			
within a community watershed?		community waters	incu.				
WATERSHED ASSESSMENT CONSID	ERATIONS - FRP	A section 180 areas	with "significant	watershed sensitivity"			
Does the proposed treatment area		Treatment activitie	es have not been r	proposed in areas identified as having			
include areas that have watershed		significant watersh	ned sensitivity or	other watershed assessment			
assessment considerations?		considerations.					
SOIL DISTURBANCE AND PERMANENT ACCESS STRUCTURES - FPPR sections 35 and 36							
	Proposed	Proposed	Proposed				
	Max.	Max. Soil	Max.				
Treatment Unit (TU)	Allowable Soil	Disturbance	Permanent	Comments			
	Disturbance	for Roadside	Access	comments			
	(5% or 10%)	Work Areas	Structures				
1	10%	25%	5%	The proposed access road is within the R/W			
Do the proposed Permanent		Permanent access	structures will no	t exceed 7%.			
Access Structures exceed 7% of	Yes 🗆 No 🖂						
the total area?							
LANDSLIDES AND TERRAIN STABILI	<b>FY</b> - FPPR section	37					
Does the proposed treatment area	Yes 🗌 No 🖂	Indicators of slope	instability or land	dslides were not noted within the			
include areas where terrain		treatment area.					
stability is a concern?							
SUITABLE SECONDARY STRUCTURE	- FPPR section 4	3.1					
Does the proposed treatment area	Yes 🗌 No 🖂	Treatment activitie	es have not been p	proposed in a "targeted pine leading			
stand"?		Additionally the t	by section 1 of the	s proposed will occur entirely within a			
stand r		community forest	agreement (CFA)	license for the purpose of wildfire risk			
		reduction and there	efore, as per section	on $43.1(4)$ and $43.1(2)$ of the FPPR, the			
		secondary stand sta	ructure retention	specifications set out by section 43.1(1)			
		of the FPPR do no	t apply.				
UNGULATE WINTER RANGE - GAR s	ection 12, FRPA	sections 180 and 18	31, FPPR section 6	9			
Does the proposed treatment area		Treatment activitie	es have been prop	osed in a Special Resource Management			
include areas within an Ungulate	Yes 🛛 No 🗌	Sub-Zone 4 with id	dentified M2 ung	ulate winter habitat for Moose. Prior to			
Winter Range?		ensure that the hab	it of treatment act	for the winter survival of ungulate			
		species specified h	v s.6.4.2 of the F	SP are maintained.			



WILDLIFE HABITAT AREA - GAR sect	ion 10, FRPA sec	tions 180 and 181, FPPR section 69
Does the proposed treatment area	Yes 🗆 No 🖂	The treatment area does not overlap any mapped or otherwise identified
include any wildlife habitat areas		wildlife habitat areas.
	<b>T</b> – 1994	
Does the proposed treatment have		The nest density ranking for this Prescription area is 2 and therefore is not
the potential to impact migratory		likely to impact Migratory Bird Habitat.
bird habitat?		
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR WILDLIFE -	FPPR section 7
Does the proposed treatment area	Yes 🛛 No 🗆	A legal order establishing objectives set by government for wildlife has not
include areas to which objectives		been enacted in the Lakes district and objectives are not specified in the
for wildlife under FPPR section 7		Lakes LRMP or the Lakes South SRMP.
apply?		Two notices, enabled under section $7(2)$ of the FPPR, specifying indicators
		of the amount, distribution and attributes of wildlife habitat required for the
		winter survival of ungulate species as well as for the survival of species at right exist for the Lakes and Nodine districts, respectively.
		TX OPJECTIVES (Londcone Level) EDDP Part 4 Division 5
Deep the proposed treatment		The design of the monograd Wildfine Did Deduction access will not all
Does the proposed treatment area	Yes 🖄 No 🗀	both spatially and temporally, the patterns of natural disturbance that occur
for landscape level big diversity		within the landscape
under EPPR section 9 apply2		within the fulldoupe.
under reek section 5 apply:		
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5
Are considerations for maintaining	Yes 🛛 No 🗆	One external Wildlife Tree Patch areas amounting to 1.2ha (63.2%) has
stand structure (wildlife trees,		been identified with this plan.
wildlife tree reserves, etc.), coarse		
woody debris, and maintaining		
tree and vegetation species		
composition incorporated into this		
prescription?		
<b>RECREATION FEATURES</b> - FRPA sect	ion 56 and 149, I	FPPR section 70
Does the proposed treatment area	Yes 🗆 No 🖂	The treatment area does not contain known interpretive sites, recreation
contain interpretive sites,		trails, recreation sites, recreation facilities that are considered to be of
recreation trails, recreation sites,		significant recreation value and are designated a resource feature.
recreation facilities that are of		
significant recreation value and		
are designated a resource		
feature?		
VISUAL QUALITY OBJECTIVES - GAR	section 7, FRPA	sections 180 and 181, FPPR section 9.2
Is the proposed treatment within	Yes 📙 No 🖂	WRR-13 is not within a Scenic area, nor a VQO – Retention polygon.
a scenic area?		
	1	1



ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	GE RESOURCES - FPPR section 10
Are there any known archaeological sites or cultural heritage resources that are important to First Nations within the proposed area? No Referral to Land Manager is required if proposed TU is on the applicant's own First Nation Land.	Yes 🗆 No 🖂	The proposed block does not overlap into CHR High Archeological Polygon, and no archaeological sites or cultural heritage resources that were identified within the proposed treatment areas. In the event that additional CHR features are identified or otherwise made known during First Nation information sharing and consultation, measures to protect the CHR or address First Nation concerns must be communicated by an addendum to, or an amendment of, this prescription. In the event that previously unidentified CHR features are encountered while carrying out treatment activities, work in the area must stop, and an authorized treatment supervisor must be notified. The Agreement Holder will complete a cultural heritage resource evaluation (CHR) and provide management direction to protect or otherwise manage for the identified feature(s).
<b>INVASIVE PLANTS</b> - FRPA section 47	and FPPR sectio	n 17
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes 🛛 No 🗌	Review of the Invasive Alien Plant Program (IAPP) database indicated the presence of invasive plant species adjacent to the FTU along the Eakin Settlement Road. IAPP sites include Orange Hawkweed (OH), Meadow Buttercup (MB), Oxeye Daisy (OD), Scentless Chamomile (SH), Common Tansy (TC), and Yellow Hawkweed (YH).
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 🛛	A fenceline is already in place along the southeast boundary of this block. In the event that fencelines are damaged, they will be repaired to the pre- damaged condition.
SPECIES AT RISK – FPPA section 7		
Are there species at risk present within the boundaries of the prescribed treatment area?	Yes 🗆 No 🖂	No known occurrences of a species at risk were noted during field assessments or through review of BC Conservation Data Centre spatial data.
LAND USE OBJECTIVES (Higher Leve	l Plans and objec	ctives set by Government under the Land Act)
Are there land use objectives (higher level plans or objectives under the <i>Land Act</i> ) that apply to the proposed treatment area or a Road Permit necessary to provide access to the treatment area?	Yes 🛛 No 🗆	WRR-13 overlaps into the Landscape Corridor (LC) identified within the Lakes South Sustainable Management Plan by 10%. Overlaps into LC do not exceed the documented limits and prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the Land Act)?	Yes 🗆 No 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.
Known and potential species at risk, windthrow hazard, old growth management areas (OGMA)?	Yes 🗌 No 🖂	Treatment activities do not overlap into any OGMAs established by the Lakes South SRMP.
Do the proposed activities conflict with Provincial Priority Deferral Areas (PROV. DEF) identified by the Old Growth Strategic Review?	Yes 🗌 No 🛛	Proposed harvest area WRR-13 does not overlap into the newly designated PROV. DEF.



G. OTHER CONSIDERATIONS AND	REQUIREMENTS	
<b>CONSULTATION</b> – FIRST NATIONS: Inf WRR IS1 and is dated July 04, 2022	o-share was initiated on April	22, 2022 and Adequacy Letter is called: 10455-50/22 K4R
FIRST NATION	CONCER	NS IDENTIFIED AND MEASURES TO ADDRESS
Nee Tahi Buhn Band	No concerns brought for	rward.
Skin Tyee Nation	No concerns brought for	rward.
Stellat'en First Nation	No concerns brought for	rward.
Wet'suwet'en First Nation	No concerns brought for	rward.
Office of the Wet'sewet'en	No concerns brought for	rward.
First Nations consultation complete	?	Yes 🛛 No 🗆
<b>CONSULTATION</b> – GENERAL, EXISTING	G TENURE HOLDERS (Forest, Ra	nge, Guide Outfitters, Trappers): Info-share was initiated for
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns
Range: George Amendt	Yes 🗌 No 🖂	No concerns brought forward.
Range: Carl Doglione	Yes 🗌 No 🛛	No concerns brought forward.
Range: Sharon Robertson	Yes 🗌 No 🗵	No concerns brought forward.
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🗵	No concerns brought forward.
Range: Victor Bateson	Yes 🗆 No 🗵	No concerns brought forward.
Range: Jonathan Solecki	Yes 🗆 No 🗵	No concerns brought forward.
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.
Range: Clint Lambert	Yes 🗆 No 🗵	No concerns brought forward.
Range: Elizabeth McEntire	Yes 🗆 No 🗵	No concerns brought forward.
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.
Trapline: TR0604T014	Yes 🗆 No 🗵	No concerns brought forward.
Trapline: TR0604T017	Yes 🗆 No 🗵	No concerns brought forward.
Trapline: TR0604T018	Yes 🗆 No 🗵	No concerns brought forward.
Trapline: TR0604T019	Yes 🗆 No 🗵	No concerns brought forward.
Trapline: TR0604T020	Yes 🗆 No 🗵	No concerns brought forward.
Guide Outfitter: James Lancaster	Yes 🗆 No 🗵	No concerns brought forward.
Guide Outfitter: Brett Hall	Yes 🗆 No 🗵	No concerns brought forward.
Guide Outfitter: Gary Blackwell	Yes 🗆 No 🗵	No concerns brought forward.

PRIVATE PROPERTY		
Does private property border the proposed treatment area?	Yes 🗌 No 🛛	There is no private land immediately adjacent to WRR-13.
SMOKE MANAGEMENT		
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🛛	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021 Community Wildfire Risk Reduction Open Burning Smoke Control Regulations</i> will be followed for the burning of debris piles.
SAFETY		
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle are no longer able to use this area as it is completely impassable.



UTILITIES		
Are utilities located in or adjacent to the	Yes 🔀 No 🗌	The proposed shape is adjacent to utility lines which are along the
proposed treatment area? i.e. power		Keefe's Landing Road.
lines, gas lines, etc.		
ACCESS CONTROL		
Are there any foreseen issues with	Yes 🗌 No 🖂	There are no foreseen access issues for access to the proposed
access and access control during and		Wildfire Risk Reduction shape in this Prescription.
post treatment?		
TRAFFIC CONTROL		
Is traffic control required at any point	Yes 🗌 No 🖂	There is no need for traffic control on this shapes because timber will
during operations?		be felled into the block, and there is a minimum of a tree length right
		of way cleared between the blocks and the Keefe's Landing Road.
OTHER (E.g Public Notification)		
Notification of commencement of harvest	ng activities sho	uld be posted on Chinook Community Forest's Facebook Page.

# H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗌 No

About 71% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.  $\boxtimes$  Yes  $\square$  No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has been dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. Because this is a very small block, debris may be left on site for a small period of time so that community members may come and load out the material for firewood. Any debris that remains after that period of time ends will be burnt.



### TREATMENT SPECIFICATIONS SUMMARY

TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)
1	Silviculture Systems: Clearcut with Reserve (CCRES)
	<i>Treatment Regimes:</i> Conventional Harvest (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile and Burn (PILE BURN)

# TREATMENT SPECIFICATION RATIONALE

Treatment activities will utilize a clearcut with reserve silviculture system and primarily requires the use of mechanical treatment methods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 138.5 m3/ha hybrid spruce and lodgepole pine – approximately 59.9% of this volume is dead potential lodgepole pine. Secondary treatment phases will require surface fuel reductions to the specified targets by means of mainly mechanical methods, with the possibility of manual treatment methods. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce \*with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly. Post treatment fire intensities will be dependent on the availability of an appropriate fire management stocking standard and subsequent stand tending activities.

To reduce predicted fire behaviour the following treatment specifications have been applied:

- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Remove all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity objectives or the tree has been identified as a wildlife habitat or cultural heritage feature.
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).

TU 1: STAND AND STOCK TABLE DATA									
Species and Diameter Class <sup>1</sup>	Crown Base Height Range	Average Tree Height	STEMS PER HECTARE (sph)			VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>			Basal Area (m²)
	(m)	(m)	Existing	Cut	Leave	Existing	Cut	Leave	Existing
Layer 1 (≥ 22.5 cm - 27.5 c	m dbh)								
Pl	-	23	173	173	0	59.4	59.4	0	10.5
Sx	4.7	23	257	257	0	101.3	101.3	0	14.0
Total Dead Potential			234	234	0	88.4	88.4	0	14.0
Total Live			196	196	0	76.3	76.3	0	10.5
Total All Species		23	430	430	0	164.7	164.7	0	24.5
Total Conifers		23	430	430	0	164.7	164.7	0	24.5
Layer 1 (≥ 17.5cm - 22.5 cm	dbh)	•							
Pl	-	18	351	351	0	54.1	54.1	0	10.5
Sx	3.7	18	92	92	0	16.1	16.1	0	3.5
Total Dead Potential			351	351	0	54.1	54.1	0	10.5
Total Live			92	92	0	16.1	16.1	0	3.5
Total All Species		18	443	443	0	70.2	70.2	0	14.0
Total Conifers		18	443	443	0	70.2	70.2	0	14.0
TOTALS: Layer 1	TOTALS: Layer 1								
Total Layer 1 - All Species	4.2	20	873	873	0	234.9	234.9	0	38.5
Total Layer - Conifers Only	4.2	20	873	873	0	234.9	234.9	0	38.5

<sup>1</sup> Modify diameter classes as required to suite treatment.

<sup>2</sup> A professional estimate is required for any merchantable cutting



SURFACE FUEL LOADING (kg/m²)										
Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing Distribution	Target (kg/m <sup>2</sup> )	Target Distribution	Methodology Used					
Fine Woody Debris ( =7cm)</td <td>0.73</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m2 (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of ±0.25 kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	0.73	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m2 (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of ±0.25 kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method					
Large Diameter Woody Debris (>7cm – 20cm) Coarse Woody Debris (CWD) (20cm+)	3.80 5.16	Continuous distribution of lodgepole pine damaged by mountain pine beetle as well as some hybrid spruce damaged by wind. Pieces typically have a decay class of 2 to 3.	2.5 kg/m2 (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m2. Ensure poor continuity between retained pieces and avoid creating aggregations.						
Crown Closure (%): 21	Existing Total: 9	0.69 kg/m <sup>2</sup>	Target: 3.0 kg/m	2 (+/- 0.75 kg/m2)						

BIODIVERSITY AND FOREST HEALTH CONSIDERA	BIODIVERSITY AND FOREST HEALTH CONSIDERATIONS AND TARGETS					
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk.					
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.					
FOREST HEALTH- Should include sections such as agent, affected species, incidence rating, mortality, and targets	Stands have been assessed to be in poor condition due to the impacts of forest health factors. Lodgepole pine overstory trees exhibited high mortality (>60%) as a result of historical mountain pine beetle infestation. Significant wind damage has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of incipient mountain pine beetle infestation was not noted. WINDTHROW RISK EVALUATION Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations, yet also due to root rot.					



# I. TREATMENT DESCRIPTION

#### MERCHANTABLE TIMBER CUTTING

#### ROADS, LANDINGS AND TRAILS:

Access to the unit will be gained via Keefe's Landing Road, using an old existing block road at approximately 5.8km. Proposed access associated with the treatment area will include one (1) new road permit section.

# All additional access structure required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

#### YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

#### LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

#### SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

# STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

#### STAND MODIFICATION TREATMENTS

BRUSHING: Manual brushing treatments have not been prescribed.

PRUNING: Pruning treatments have not been prescribed.

THINNING: Thinning treatments have not been prescribed.

### DEBRIS PILING:

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of  $\frac{1}{2}$  the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

CHONOOK

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## PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 – Nechako River (93F). All open burning activities within the Eakin Settlement area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

No private residences or business buildings have been identified <150 m of the treatment area.

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

STRATEGIES FOR PILE BURNING:

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.
- Obtain custom venting forecasts to identify optimal burning opportunities.
- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

#### GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris pile locations.

PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed as is shown in the Stocking Standard Table below. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

FRPA Section 52 (1) (b):

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: One new Section for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): n/a



# J. POST TREATMENT

# EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

#### ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 an even-aged stocking standard has been applied using the table below.

### **STOCKING STANDARDS:**

APPLICABLE EVEN-AGED STOCKING STANDARDS:

						Well-Spaced Stem/ha			Minimum Hoight (m)				Free
		Stocking	Species	Species		MS	1SS		IVIII	imum Heij	gnt (m)	Regen	Free Growing
ΤU	SU	Standard ID	(Pref.)	(Accep.)	TSS	Pref. &	Pref.	MITD	PI	Others	RTH	Delay	(years)
						Acc.					(%)		
1	1	TBD	PLI	-	1200	700	600	2.0	2.0	1.0	-	4	20
			SX										
			FDI										
			LW										
			AT										
			EP										
			AC										



K. Outstanding Works					
1.) Obtain the appropriate authorizations for the	he FRPA Section 52(1)(b) and for the new section required to R21201 road				
permit.					
CFA:K4R FSP adopt the applicable fire ma	anagement stocking standards if appropriate.				
3.) If required, obtain the appropriate approval	l(s) – under section 15 of the EMA – to exempt pile burning activities from the				
requirements of sections 9, 10, 11, 13, 14 a	and 15 and Part 3 of OBSCR.				
4.) Obtain the appropriate authorizations or ex Deferral Area identified by the Old Growth	comptions for those portions of the treatment area that are within a Priority				
L. ADMINISTRATION	i Strategie Review and the Old Glowin Technical Advisory Funct.				
PREPARATION					
FOREST PROFESSIONAL NAME (Printed):	FOREST PROFESSIONAL SIGNATURE:				
lennifer Hill RDF					
	S PROFESSION PROVINCE JEMMIFER TIA HILL STATE S				
MEMBER NUMBER:	DATE:				
3889	2023-02-02				
M. ATTACHMENTS					
MAPS: Yes 🛛	FIELD DATA CARDS: Yes 🛛 No 🗖				
No 🗆					
WUI WTA Plots and Photos: Yes 🖂	CRUISE DATA: Yes 🛛 No 🗖				
No 🗆					
AIR PHOTOS/IMAGERY: Yes 🖂	BURN PLAN: Yes 🗆 No 🖂				
No 🗆					
MODELING/DATA ANALYSIS: Yes	OTHER: Yes D No D				
No 🗆					
SURFACE FUEL LOADING DATA: Yes 🛛					
No L					
TERRAIN STABILITY ASSESSMENT Yes	VISUAL IMPACT ASSESSMENT Yes 🗆 No 🖂				
Completed By:	Completed By:				
Date:	Date:				
ARCHAEOLOGY IMPACT ASSESSMENT Yes 🗌 No	BIOLOGIST ASSESSMENT Yes 🗖 No 🖂				
Completed By:	Completed By:				
Date:	Date:				
ADDITIONAL COMMENTS:	_1				
MAPS: The following maps have been provided t	to support the prescribed activities:				
<ul><li> Prescription Map</li><li> Ortho Treatment Map</li></ul>					

Location Map







A. PROJECT IDENTIFICATION	
PROJECT ID AND UNIT ID:	LAND OR TENURE HOLDER:
K4R/FESBC Wildfire Risk Reduction – Prescription #6	Chinook Community Forest Tenure K4R (CFA:K4R)
Keefe's Landing Road, 8.2 km	
Original WRR Shapes #14	
LATITUDE/LONGITUDE:	GEOGRAPHIC DESCRIPTION:
53° 52' 24" N, 125° 57' 29" W	Keefe's Landing Road, 8.2 km
HIGHER-LEVEL PLAN(s):	MAP REFERENCE NUMBER:
Lakes District Land and Resource Management Plan - 2000	93F 081
Lakes South Sustainable Resource Management Plan – 2003	
LATITUDE/LONGITUDE: 53° 52' 24" N, 125° 57' 29" W HIGHER-LEVEL PLAN(s): Lakes District Land and Resource Management Plan – 2000 Lakes South Sustainable Resource Management Plan – 2003	GEOGRAPHIC DESCRIPTION: Keefe's Landing Road, 8.2 km MAP REFERENCE NUMBER: 93F 081

<b>B. FUEL TREATN</b>	B. FUEL TREATMENT PROJECT DESCRIPTION					
OBJECTIVE:	🛛 Public Safety	🛛 Range Improvement	Ecosystem Restoration			
	$\Box$ Recreation	🗆 Wildlife Habitat	🗆 Other:			
	Prescription Area #6 – Wildfire Risk	Reduction (WRR) treatment area is a	at 8.2 km on the Keefe's Landing			
	Road on the south side of François L	ake. This unit is entirely within the C	hinook Community Forest			
	(CFA:K4R) tenure area, and has bee	n identified as a high priority corridor	by the British Columbia Wildfire			
	Service (BCWS) Wildfire Risk Redu	Wildland Urban Interface (WIII) Piel	Class (PC) polygon which has			
	been assigned a risk class rating of 2	due to the prevalence of High Value	Resources and Assets (HVRAs)			
	namely the infrastructure and comm	unity values along the Eakin Settleme	nt Road. The Provincial Strategic			
	Threat Analysis (PSTA) has classifie	ed stands within the unit as having a F	inal Threat Rating (FTR) of high (7)			
	to extreme (9). This rating considers	the anticipated head fire intensities ar	nd spotting impacts for the fuel types			
	present as well as historical fire dens	sities. Initial spread index (ISI) roses g	enerated by the Grassy Plains Hub			
	(161) fire weather station indicate the	at prevailing winds during the core fir	re season are typically from the			
	southwest.					
	The objectives of this Prescription are to:					
	<ul> <li>reduce the risk of wildfire to public safety by modifying forest fuels within wildland urban interface (WUI) areas – specifically the properties, residences, and infrastructure near Keefe's Landing Road.</li> </ul>					
	• reduce the risk of wildfire to p	ublic safety by modifying fuels adjace	ent to critical evacuation corridors -			
	specifically those along the Ea	kin Settlement Road network.				
	<ul> <li>reduce the risk of wildfire to cr likely to influence forest fuels</li> </ul>	ritical infrastructure and property by n	nodifying forest fuels adjacent to, or			
	develop ecologically appropria	adjacent to, identified values at fisk.	n solutions that give due regard to			
	overlapping land management	objectives and tenure obligations.	in solutions that give due regula to			
	• develop ecologically appropria	te and effective wildfire risk reduction	n solutions that give due regard to			
	site and stand conditions to ma	intain forest health and site productiv	ity.			
	• create defensible space for wild	dland fire fighters to anchor suppressi	on strategies and tactics from during			
	incident response by removing	or modifying hazardous forest fuels i	n a way that improves firefighter			
	<ul> <li>safety and reduces fire behavior</li> </ul>	our potential.				



# BCWS Fuel Management Prescription Ver. 2022

STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this Prescription area will be a Clearcut with reserves Silviculture System since these proposed areas requires significant stand modification to address the hazardous stand conditions. The stand condition is poor in this area due to the impacts of historical insect infestations and subsequent wind events. This area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest methods. Final treatment phases require surface fuel load reductions to dead and down material and treatment residues by mechanical and potentially manual surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Treatment area design and specifications have been developed with consideration of the influence of topography.

C. TREA	C. TREATMENT UNIT (TU) SUMMARY							
ΤU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	SILVICULTURE SYSTEM AND TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)		
1	0.8	1.8	1.0	0	0.8	CCRES / HARV / SFR / Mechanical Debris Pile & Burn		
TOTALS	0.8	1.8	1.0	0	0.8			

D. SITE CH	D. SITE CHARACTERISTICS								
TU	<u>CFFBPS FUEL</u> <u>TYPE</u>	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT		
1	C2	MATURE Coniferous	SBS dk 06	895 - 898	Middle	1 - 4	South		
FUEL TYPE	DETERMINATION	C2 – Boreal Blac beetle (MPB) aff	ek and White Spru ected stands).	ice *(the C2 fue	el type is used f	or representing mount	tain pine		

E. SOIL CHARACTERISTICS							
	601	DUFF			SOI	L HARZARD R	ATING
ΤU	TEXTURE	DEPTH (cm)	COARSE FRAGMENTS (%)	LIMIT (%)	Compaction	Erosion	Displacement
1	SL	5	45	10	М	М	L



F. VALUES – FOREST AND RANGE PRACTICES ACT					
RIPARIAN & LAKESHORE AREAS - Fo	orest Plan	ning an	d Practio	ces Regulation (FPPR) division 3, Government Action Regulation (GAR)	
section 6, Forest and Range Practice	s Act (FR	PA) sect	ions 180	) and 181	
Is the proposed cutting,			There is	s a W3 Wetland the east of the block.	
modification or removal of trees,	Yes 🖂 I	No 🗆 🛛	Riparia	n features that occur within the Chinook Community Forest	
or site preparation, in an area that			Agreem	ent (CFA) tenure area have been managed in accordance with section	
contains streams, lakes or			6.5.2 of	the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and	
wetlands?			are othe	erwise compliant with the requirements of section 47 to 51, 52(2), and	
			53 of th	e FPPR.	
RIPARIAN MANAGEMENT AREAS (R	RMAs) - F	PPR sect	tions 51	and 52	
		RRZ	RMZ	SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE	
STREAM, LAKE, WETLAND ID	CLASS	(m)	(m)	MANAGEMENT AREAS	
Wetland #2	W3	0	30	The block is within the RMZ of the W3 wetland by 5m, mainly due to	
		an existing trail into block, which will be re-used with the salvaging			
				of this permit.	

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 🖂	Treatment activities have not been prescribed in areas that contain, are adjacent to, or are a direct tributary to an identified temperature sensitive stream.				
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 🗵	Road construction activities have not been proposed within the RMA of any identified riparian feature.				
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 🛛	There are no stream crossings associated with this prescription.				
MAINTAINING STREAM BANK AND	CHANNEL STABI	LITY 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 🖂	Treatment activities have not been prescribed within the RMZ of an S4, S5, or S6 stream that is a direct tributary to an S1, S2, or S3 stream, and therefore the basal area retention requirements for maintaining stream bank and channel stability provided by section 52 of the FPPR do not apply.				
DOMESTIC WATER LICENCES (inside	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 🖂	The treatment area does not include water sources that are diverted for human consumption by a licensed waterworks.				



LICENCED WATER WORKS (inside or	r outside of a cor	nmunity watershed	) - FPPR section 6	50		
Does the proposed treatment		Treatment and road construction activities have not been proposed within				
include areas that are within	Yes 🗌 No 🖂	100 m of a licensed waterworks that is within a community watershed.				
100m of a licensed waterworks?						
FISHERIES SENSITIVE WATERSHED -	GAR section 14,	FPPR section 8.1				
Are any activities proposed within	Yes 🗌 No 🖂	Treatment activitie	s have not been p	proposed within a fisheries sensitive		
a fisheries sensitive watershed?		watershed.				
COMMUNITY WATERSHED - GAR se	ection & FPPR se	tion 8 2 61 62 and	184			
Does the proposed treatment area		Treatment activitie	s have not been r	roposed within a community watershed		
include areas that are within a	Yes 🗌 No 🖂		s have not been p	stoposed within a community watershed.		
community watershed?						
Will this project require read		Treatment and road	d construction act	ivities have not been proposed within a		
construction or deactivation	Yes 🗌 No 🖂	community waters	hed	invities have not been proposed within a		
within a community watershed?		community waters	neu.			
WATERSHED ASSESSIVENT CONSID		A section 180 areas	with significant	watershed sensitivity		
include areas that have watershed	Yes 🗆 No 🖄	significant watersh	ed sensitivity or	other watershed assessment		
assessment considerations?		considerations	icu schisitivity of	outer watershed assessment		
		considerations.				
SOIL DISTURBANCE AND PERMANE	NT ACCESS STRU	JCTURES - FPPR sect	tions 35 and 36			
	Proposed	Proposed	Proposed			
	Max.	Max. Soil	Max.			
Treatment Unit (TU)	Allowable Soil	Disturbance	Permanent	Comments		
	Disturbance	for Roadside	Access			
	(5% or 10%)	Work Areas	Structures			
I	10%	25%	5%	The proposed access road is within the R/W		
Do the proposed Permanent		Di an existing trait and not within the b				
Access Structures exceed 7% of	Yes 🗌 No 🖂	Termanent access structures will not exceed 770.				
the total area?						
	<b>FY</b> - FPPR section	37				
Does the proposed treatment area		Indicators of slope	instability or lan	delides were not noted within the		
include areas where terrain	Yes 🗆 No 🖾	treatment area	instability of fair	usides were not noted within the		
stability is a concern?						
	- EPPR section /	3 1				
Does the proposed treatment area		Treatment activitie	s have not been r	proposed in a "targeted pine leading		
include a "targeted nine leading	Yes 🗋 No 🖾	stand" as defined b	v section 1 of the	S FPPR		
stand"?		Additionally the t	reatment activitie	s proposed will occur entirely within a		
		community forest	agreement (CFA)	license for the purpose of wildfire risk		
		reduction and there	efore, as per secti	on $43.1(4)$ and $43.1(2)$ of the FPPR, the		
		secondary stand str	ructure retention	specifications set out by section 43.1(1)		
		of the FPPR do not	t apply.			
UNGULATE WINTER RANGE - GAR s	ection 12, FRPA	sections 180 and 18	1, FPPR section 6	9		
Does the proposed treatment area		Treatment activitie	s overlap by about	ut 40% into a Special Resource		
include areas within an Ungulate	Yes 🔀 No 🗌	Management Sub-Z	Zone 4 with ident	tified M2 ungulate winter habitat for		
Winter Range?		Moose. Prior to the	e commencement	of treatment activities the Agreement		
		Holder, will ensure	e that the habitat i	requirements for the winter survival of		
	1	ungulate species sr	becified by $s.6.4.2$	2 of the FSP are maintained.		



WILDLIFE HABITAT AREA - GAR sect	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 🖂	The treatment area does not overlap any mapped or otherwise identified wildlife habitat areas.			
MIGRATORY BIRD CONVENTION AC	<b>T</b> – 1994				
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes 🗌 No 🖂	The nest density ranking for this Prescription area is 2 and therefore is not likely to impact Migratory Bird Habitat.			
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR WILDLIFE -	FPPR section 7			
Does the proposed treatment area include areas to which objectives for wildlife under FPPR section 7 apply?	Yes 🛛 No 🗌	A legal order establishing objectives set by government for wildlife has not been enacted in the Lakes district and objectives are not specified in the Lakes LRMP or the Lakes South SRMP. Two notices, enabled under section 7(2) of the FPPR, specifying indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species as well as for the survival of species at risk exist for the Lakes and Nadina districts, respectively.			
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR BIODIVERSI	TY OBJECTIVES (Landscape Level) - FPPR Part 4 Division 5			
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes 🛛 No 🗌	The design of the proposed Wildfire Risk Reduction areas will resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.			
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5			
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 🛛 No 🗆	Two external Wildlife Tree Patch areas amounting to 1.0ha (55.6%) has been identified with this plan.			
<b>RECREATION FEATURES</b> - FRPA sect	ion 56 and 149	EPPR section 70			
Does the proposed treatment area contain interpretive sites, recreation trails, recreation sites, recreation facilities that are of significant recreation value and are designated a resource feature?	Yes 🗆 No 🛛	The treatment area does not contain known interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature.			
VISUAL QUALITY OBJECTIVES - GAR	section 7, FRPA	sections 180 and 181, FPPR section 9.2			
Is the proposed treatment within a scenic area?	Yes 🗌 No 🖂	WRR-14 is not within a Scenic area, nor a VQO – Retention polygon.			
		·			



ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	GE RESOURCES - FPPR section 10
Are there any known archaeological sites or cultural heritage resources that are important to First Nations within the proposed area? No Referral to Land Manager is required if proposed TU is on the applicant's own First Nation Land.	Yes 🗆 No 🖂	The proposed block does not overlap into CHR High Archeological Polygon, and no archaeological sites or cultural heritage resources that were identified within the proposed treatment areas. In the event that additional CHR features are identified or otherwise made known during First Nation information sharing and consultation, measures to protect the CHR or address First Nation concerns must be communicated by an addendum to, or an amendment of, this prescription. In the event that previously unidentified CHR features are encountered while carrying out treatment activities, work in the area must stop, and an authorized treatment supervisor must be notified. The Agreement Holder will complete a cultural heritage resource evaluation (CHR) and provide management direction to protect or otherwise manage for the identified feature(s).
<b>INVASIVE PLANTS</b> - FRPA section 47	and FPPR sectio	n 17
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes 🛛 No 🗌	Review of the Invasive Alien Plant Program (IAPP) database indicated the presence of invasive plant species adjacent to the FTU along the Eakin Settlement Road. IAPP sites include Orange Hawkweed (OH), Meadow Buttercup (MB), Oxeye Daisy (OD), Scentless Chamomile (SH), Common Tansy (TC), and Yellow Hawkweed (YH).
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 🖂	A fenceline is already in place along the northwest boundary of this block. In the event that fencelines are damaged, they will be repaired to the pre- damaged condition.
SPECIES AT RISK – FPPA section 7		
Are there species at risk present within the boundaries of the prescribed treatment area?	Yes 🗆 No 🗵	No known occurrences of a species at risk were noted during field assessments or through review of BC Conservation Data Centre spatial data.
LAND USE OBJECTIVES (Higher Leve	l Plans and object	ctives set by Government under the <i>Land Act</i> )
Are there land use objectives (higher level plans or objectives under the <i>Land Act</i> ) that apply to the proposed treatment area or a Road Permit necessary to provide access to the treatment area?	Yes 🛛 No 🗆	WRR-14 overlaps into the Landscape Corridor (LC) identified within the Lakes South Sustainable Management Plan by 5%. Overlaps into LC do not exceed the documented limits and prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the Land Act)?	Yes 🗌 No 🖂	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.
Known and potential species at risk, windthrow hazard, old growth management areas (OGMA)?	Yes 🗌 No 🖂	Treatment activities do not overlap into any OGMAs established by the Lakes South SRMP.
Do the proposed activities conflict with Provincial Priority Deferral Areas (PROV. DEF) identified by the Old Growth Strategic Review?	Yes 🗌 No 🛛	Proposed harvest area WRR-14 overlaps by 100% into the newly designated PROV. DEF.



G. OTHER CONSIDERATIONS AND	REQUIREMENTS						
<b>CONSULTATION</b> – FIRST NATIONS: Inf WRR IS1 and is dated July 04, 2022	o-share was initiated on April	22, 2022 and Adequacy Letter is called: 10455-50/22 K4R					
FIRST NATION	CONCER	NS IDENTIFIED AND MEASURES TO ADDRESS					
Nee Tahi Buhn Band	No concerns brought for	rward.					
Skin Tyee Nation	No concerns brought for	No concerns brought forward.					
Stellat'en First Nation	No concerns brought for	No concerns brought forward.					
Wet'suwet'en First Nation	No concerns brought for	rward.					
Office of the Wet'sewet'en	No concerns brought for	rward.					
First Nations consultation complete	?	Yes 🛛 No 🗆					
<b>CONSULTATION</b> – GENERAL, EXISTING	G TENURE HOLDERS (Forest, Ra	nge, Guide Outfitters, Trappers): Info-share was initiated for					
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns					
Range: George Amendt	Yes 🗌 No 🖂	No concerns brought forward.					
Range: Carl Doglione	Yes 🗌 No 🛛	No concerns brought forward.					
Range: Sharon Robertson	Yes 🗌 No 🗵	No concerns brought forward.					
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Victor Bateson	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Jonathan Solecki	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Clint Lambert	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Elizabeth McEntire	Yes 🗆 No 🗵	No concerns brought forward.					
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.					
Trapline: TR0604T014	Yes 🗆 No 🗵	No concerns brought forward.					
Trapline: TR0604T017	Yes 🗆 No 🗵	No concerns brought forward.					
Trapline: TR0604T018	Yes 🗆 No 🗵	No concerns brought forward.					
Trapline: TR0604T019	Yes 🗆 No 🗵	No concerns brought forward.					
Trapline: TR0604T020	Yes 🗆 No 🗵	No concerns brought forward.					
Guide Outfitter: James Lancaster	Yes 🗆 No 🗵	No concerns brought forward.					
Guide Outfitter: Brett Hall	Yes 🗆 No 🗵	No concerns brought forward.					
Guide Outfitter: Gary Blackwell	Yes 🗆 No 🗵	No concerns brought forward.					

PRIVATE PROPERTY		
Does private property border the proposed treatment area?	Yes 🗌 No 🛛	There is no private land immediately adjacent to WRR-14.
SMOKE MANAGEMENT		
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🛛	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021 Community Wildfire Risk Reduction Open Burning Smoke Control Regulations</i> will be followed for the burning of debris piles.
SAFETY		
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle are no longer able to use this area as it is completely impassable.



UTILITIES		
Are utilities located in or adjacent to the	Yes 🔀 No 🗌	The proposed shape is adjacent to utility lines which are along the
proposed treatment area? i.e. power		Keefe's Landing Road.
lines, gas lines, etc.		
ACCESS CONTROL		
Are there any foreseen issues with	Yes 🗌 No 🖂	There are no foreseen access issues for access to the proposed
access and access control during and		Wildfire Risk Reduction shape in this Prescription.
post treatment?		
TRAFFIC CONTROL		
Is traffic control required at any point	Yes 🗌 No 🖂	There is no need for traffic control on this shape because timber will
during operations?		be felled into the block, and there is a minimum of a tree length right
		of way cleared between the blocks and the Keefe's Landing Road.
OTHER (E.g Public Notification)		
Notification of commencement of harvesti	ing activities sho	uld be posted on Chinook Community Forest's Facebook Page.

# H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗌 No

About 56.4% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below. ☑ Yes □ No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has been dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. Because this is a very small block, debris may be left on site for a small period of time so that community members may come and load out the material for firewood. Any debris that remains after that period of time ends will be burnt.



#### TREATMENT SPECIFICATIONS SUMMARY

TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)
1	Silviculture Systems: Clearcut with Reserve (CCRES)
	<i>Treatment Regimes:</i> Conventional Harvest (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile and Burn (PILE BURN)

# TREATMENT SPECIFICATION RATIONALE

Treatment activities will utilize a clearcut with reserve silviculture system and primarily requires the use of mechanical treatment methods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 197.6 m3/ha lodgepole pine, of which 100% of this volume is dead potential lodgepole pine. Secondary treatment phases will require surface fuel reductions to the specified targets by means of mainly mechanical methods, with the possibility of manual treatment methods. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce \*with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly. Post treatment fire intensities will be dependent on the availability of an appropriate fire management stocking standard and subsequent stand tending activities.

To reduce predicted fire behaviour the following treatment specifications have been applied:

- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Remove all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity objectives or the tree has been identified as a wildlife habitat or cultural heritage feature.
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).

TU 1: STAND AND STOCK TABLE DATA										
Species and Diameter	Crown Base Height Range	Average Tree Height	STEMS PER HECTARE (sph)			VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>			Basal Area (m²)	
	(m)	(m)	Existing	Cut	Leave	Existing	Cut	Leave	Existing	
Layer 1 (≥ 22.5 cm - 27.5 cm dbh)										
Pl	-	24	491	491	0	197.6	197.6	0	35	
Total Dead Potential			491	491	0	197.6	197.6	0	35	
Total Live			0	0	0	0	0	0	0	
Total All Species		24	491	491	0	197.6	197.6	0	35	
Total Conifers		24	491	491	0	197.6	197.6	0	35	
TOTALS: Layer 1										
Total Layer 1 - All Species	-	24	491	491	0	197.6	197.6	0	35	
Total Layer - Conifers Only	-	24	491	491	0	197.6	197.6	0	35	

<sup>&</sup>lt;sup>1</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>2</sup> A professional estimate is required for any merchantable cutting



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SURFACE FUEL LOADING (kg/m <sup>2</sup> )										
Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing Distribution	Target (kg/m²)	Target Distribution	Methodology Used					
Fine Woody Debris ( =7cm)</th <td>1.24</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m2 (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of <math>\pm 0.25</math> kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	1.24	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m2 (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of $\pm 0.25$ kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method					
Large Diameter Woody Debris (>7cm – 20cm)	3.35	Continuous distribution of lodgepole pine damaged by mountain pine beetle as	2.5 kg/m2 (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m2. Ensure poor continuity						
Coarse Woody Debris (CWD) (20cm+)	5.59	damaged by wind. Pieces typically have a decay class of 2 to 3.		avoid creating aggregations.						
Crown Closure (%): 20	Existing Total: 1	0.17 kg/m <sup>2</sup>	Target: 3.0 kg/m.	2 (+/- 0.75 kg/m2)						

BIODIVERSITY AND FOREST HEALTH CONSIDERA	ATIONS AND TARGETS
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk.
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.
FOREST HEALTH- Should include sections such as agent, affected species, incidence rating, mortality, and targets	Stands have been assessed to be in poor condition due to the impacts of forest health factors. Lodgepole pine overstory trees exhibited total mortality (100%) as a result of historical mountain pine beetle infestation. Significant wind damage has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of incipient mountain pine beetle infestation was not noted. WINDTHROW RISK EVALUATION Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations, yet also due to root rot.



# I. TREATMENT DESCRIPTION

#### MERCHANTABLE TIMBER CUTTING

#### ROADS, LANDINGS AND TRAILS:

Access to the unit will be gained by using the Moss FSR at 8.2km on the Keefe's Landing Road. There is an existing old trail at 0+450m on the Moss FSR which will be the main access point, which will include one (1) new road permit section.

# All additional access structure required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

#### YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

#### LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

#### SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

# STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

#### STAND MODIFICATION TREATMENTS

BRUSHING: Manual brushing treatments have not been prescribed.

PRUNING: Pruning treatments have not been prescribed.

THINNING: Thinning treatments have not been prescribed.

### DEBRIS PILING:

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of  $\frac{1}{2}$  the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

CHONOOK

# **BCWS Fuel Management Prescription Ver. 2022**

## PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 – Nechako River (93F). All open burning activities within the Eakin Settlement area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

No private residences or business buildings have been identified <150 m of the treatment area.

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

STRATEGIES FOR PILE BURNING:

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.
- Obtain custom venting forecasts to identify optimal burning opportunities.
- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

#### GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris pile locations.

PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed as is shown in the Stocking Standard Table below. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

FRPA Section 52 (1) (b):

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: One new Section for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): n/a



# J. POST TREATMENT

# EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

#### ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 an even-aged stocking standard has been applied using the table below.

### **STOCKING STANDARDS:**

APPLICABLE EVEN-AGED STOCKING STANDARDS:

						Well-Space	ed Stem/h	na					_		
		Stocking	Species	ecies Species		Species		MS	SS		Minimum Height (m)			Regen	Free Growing
ΤU	SU	Standard ID	(Pref.)	(Accep.)	(Accep.)	.) TSS	Pref. &	Pref.	MITD	PI	Others	RTH	Delay	(years)	
						Acc.					(%)				
1	1	TBD	PLI	-	1200	700	600	2.0	2.0	1.0	-	4	20		
			SX												
			FDI												
			LW												
			AT												
			EP												
			AC												


K. Outstanding Works					
1.) Obtain the appropriate authorizations for the	he FRPA Section 52(1)(b) and for the new section required to R21201 road				
permit.					
CFA:K4R FSP adopt the applicable fire m	anagement stocking standards if appropriate.				
3.) If required, obtain the appropriate approva	l(s) – under section 15 of the EMA – to exempt pile burning activities from the				
requirements of sections 9, 10, 11, 13, 14 a	and 15 and Part 3 of OBSCR.				
4.) Obtain the appropriate authorizations or ex Deferral Area identified by the Old Growth	kemptions for those portions of the treatment area that are within a Priority				
L. ADMINISTRATION	in Strategie Review and the Old Glowin Teeninear Advisory Failer.				
PREPARATION					
FOREST PROFESSIONAL NAME (Printed):	FOREST PROFESSIONAL SIGNATURE:				
lennifer Hill RPF					
	STROFESSION STROVINC DF JEWNIFER TIA HILL COLUMN I COLUMN I				
MEMBER NUMBER:	DATE:				
3889	2023-02-03				
M. ATTACHMENTS					
MAPS: Yes 🛛	FIELD DATA CARDS:				
No 🗆					
WUI WTA Plots and Photos: Yes 🖂	CRUISE DATA: Yes 🛛 No 🗖				
No 🗖					
AIR PHOTOS/IMAGERY: Yes 🖂	BURN PLAN: Yes 🗆 No 🖂				
No 🗆					
MODELING/DATA ANALYSIS: Yes	OTHER: Yes 🗆 No 🗖				
No 🗆					
SURFACE FUEL LOADING DATA: Yes 🛛					
No L					
TERRAIN STABILITY ASSESSMENT Yes	VISUAL IMPACT ASSESSMENT Yes 🗆 No 🖂				
Completed By:	Completed By:				
Date:	Date:				
ARCHAEOLOGY IMPACT ASSESSMENT Yes 🗌 No	BIOLOGIST ASSESSMENT Yes 🛛 No 🖂				
Completed By:	Completed By:				
Date:	Date:				
ADDITIONAL COMMENTS:					
MAPS: The following maps have been provided t	to support the prescribed activities:				
• Ortho Treatment Map					

Location Map





Votland #





LAND OR TENURE HOLDER:
Chinook Community Forest Tenure K4R
(CFA:K4R)
GEOGRAPHIC DESCRIPTION:
Keefe's Landing Road, 9.4 km to 11.8 km
MAP REFERENCE NUMBER:
93F 081

B. FUEL TREATMENT PROJECT DESCRIPTION						
OBJECTIVE:	⊠ Public Safety	Range Improvement	Ecosystem Restoration			
	Recreation	🗆 Wildlife Habitat	Other:			
	<ul> <li>Prescription Area #7 – Wildfire Risk Landing Road on the south side of F (CFA:K4R) tenure area, and has bee Service (BCWS) Wildfire Risk Redu The unit is within the François Lake been assigned a risk class rating of 2 namely the infrastructure and commu Threat Analysis (PSTA) has classified to extreme (9). This rating considers present as well as historical fire dens (161) fire weather station indicate th southwest.</li> <li>The objectives of this Prescription an • reduce the risk of wildfire to p (WUI) areas – specifically the • reduce the risk of wildfire to p specifically those along the Kee • reduce the risk of wildfire to cre likely to influence forest fuels • develop ecologically appropria overlapping land management • develop ecologically appropria site and stand conditions to ma • create defensible space for wil- incident response by removing safety and reduces fire behavior</li> </ul>	a Reduction (WRR) treatment area from rançois Lake. This unit is entirely with n identified as a high priority corridor action (WRR) Tactical Plan. Wildland Urban Interface (WUI) Risk due to the prevalence of High Value unity values along the Keefe's Landin ed stands within the unit as having a F the anticipated head fire intensities ar sities. Initial spread index (ISI) roses g at prevailing winds during the core fir ublic safety by modifying forest fuels properties, residences, and infrastructure ublic safety by modifying fuels adjace prefe's Landing Road network. ritical infrastructure and property by n adjacent to, identified values at risk. ate and effective wildfire risk reduction objectives and tenure obligations. ate and effective wildfire risk reduction intain forest health and site productive dland fire fighters to anchor suppressing or modifying hazardous forest fuels i pur potential.	m 9.4 – 11.8 km on the Keefe's hin the Chinook Community Forest by the British Columbia Wildfire c Class (RC) polygon which has Resources and Assets (HVRAs) g Road. The Provincial Strategic inal Threat Rating (FTR) of high (7) hd spotting impacts for the fuel types generated by the Grassy Plains Hub e season are typically from the within wildland urban interface ure near the Keefe's Landing Road. ent to critical evacuation corridors – hodifying forest fuels adjacent to, or n solutions that give due regard to in solutions that give due regard to ity. on strategies and tactics from during n a way that improves firefighter			



STRATEGIES:	Wildfire risk reduction objectives will be achieved through the application of treatment regimes designed to address site and stand specific conditions. Treatments will reduce fire behaviour potential through the modification or removal of hazardous forest fuels as well as through reductions to surface fuel load contributions from downed woody material and treatment residues. Stand modifications are intended to reduce fire intensities and reduce continuity between forest fuels, and therefore reduce the potential for the propagation and persistence of crown fire as well as the potential for spotting. Treatment intensities increase with the level of hazard identified as well as in response to anticipated operational limitations. The prescribed treatment activities balance WRR objectives with established land use objectives and existing tenure obligations to reduce the risk of wildfire to public safety, promote natural processes and maintain ecosystem function, as well as to reduce open burning requirements through the utilization of biomass.
METHODS:	The proposed operational treatment for this TU 1 of this Prescription area will be a Clearcut with Reserves (CCRES) Silviculture System and TU 2 will be a Clearcut with Dispersed Retention (CCDRET) Silviculture System as both TU's requires significant stand modification to address the hazardous stand conditions. Stand conditions are poor in these areas due to the impacts of historical insect infestations and subsequent wind events. The prescription area will provide moderate to marginal commercial fibre recovery opportunities. Initial stand entries require an overstory removal phase utilizing conventional ground-based harvest (HARV) methods. Final treatment phases require surface fuel load reductions (SFR) to dead and down material and treatment residues by mechanical surface fuel reductions to existing downed woody materials and treatment residues to ensure surface fuel load targets are achieved. Surface fuel reduction targets are intended to reduce surface fire intensities to a level below critical surface fire intensity thresholds (<2000 kW/m) under 90th percentile fire weather conditions as well as to comply with provincial fuel hazard abatement requirements. Prescription area design and specifications have been developed with consideration of the influence of topography. However, fine adjustments to initial spread indexes (ISI) to account for the influence of slope have not been incorporated into treatment specifications.

C. TRE	C. TREATMENT UNIT (TU) SUMMARY						
TU	SU	NET AREA (ha)	GROSS AREA (ha)	LEAVE AREAS (ha)	NP (ha)	NAR (ha)	TREATMENT REGIME (i.e. PRUNE THIN, PILE BURN, BROAD, CHAUL, ETC.)
1	1, 3	21.5	30.3	8.8	0	21.5	CCRES / HARV / SFR / Mechanical Debris Pile & Burn
2	1, 3	7.5	7.5	0	0	7.5	CCDRET / HARV / SFR / Mechanical Debris Pile & Burn
тот	ALS	29.0	37.8	8.8	0	29.0	

D. SITE CI	D. SITE CHARACTERISTICS							
TU	<u>CFFBPS FUEL</u> <u>TYPE</u>	TIMBER TYPE	BGC SUBZONE, VARIANT & SITE ASSOC.	ELEVATION RANGE (m)	SLOPE POSITION	SLOPE RANGE (%)	ASPECT	
1	C2	MATURE Coniferous	SBS dk 01	950 - 980	Middle	5 - 16	Southeast	
2	C2	MATURE Coniferous	SBS mc2 01	995 – 1060	Middle	7 – 20	South	
FUEL TYPE	DETERMINATION	TU1: C2 is the ft TU 2: C2 is the f spruce and hybrid	iel type is used fo uel type used, bas d spruce stands th	r representing r ed upon observ roughout the pi	nountain pine b ved fire behavio rovince.	beetle (MPB) affected bur, for mid-elevation	stands.	



E. SOIL CHARACTERISTICS								
	DUFF	DUFF			SOIL HARZARD RATING			
TU	TEXTURE	DEPTH (cm)	COARSE FRAGMENTS (%)	LIMIT (%)	Compaction	Erosion	Displacement	
1	SL	2	45 - 55	10	Μ	М	L	
2	SL	1-2	45 - 55	10	М	М	L	

F. VALUES – FOREST AND RANG	E PRACT	ICES AG	СТ			
RIPARIAN & LAKESHORE AREAS - For section 6, Forest and Range Practice	orest Plar s Act (FR	ining an PA) sect	nd Practio tions 180	ces Regulation (FPPR) division 3, Government Action Regulation (GAR) ) and 181		
Is the proposed cutting, modification or removal of trees, or site preparation, in an area that contains streams, lakes or wetlands?	Yes No [		Riparian (CFA) t approve otherwi of the F	Riparian features that occur within the Chinook Community Forest Agreement (CFA) tenure area have been managed in accordance with section 6.5.2 of the approved Chinook CFA Forest Stewardship Plan (FSP) 2016 and are otherwise compliant with the requirements of section 47 to 51, 52(2), and 53 of the FPPR.		
RIPARIAN MANAGEMENT AREAS (R	RMAs) - F	PPR sec	tions 51	and 52		
STREAM, LAKE, WETLAND ID	CLASS	RRZ (m)	RMZ (m)	SPECIFICATIONS FOR RIPAIRAN OR LAKESHORE MANAGEMENT AREAS		
Stream #5	<b>S</b> 6	0	20	The block is located greater than 20 m away from the S6 Stream.		
Stream #6	<b>S</b> 6	0	20	The block is located greater than 20 m away from the S6 Stream.		
Wetland #3	W1	10	40	The block is located greater than 10 m away from the W1 Wetland, yet overlaps into the RMZ by 10m in two locations.		
TEMPERATURE SENSITIVE STREAMS	<b>5</b> - FPPR s	ection 5	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 🗆 I	No 🖂	Treatment activities have not been prescribed in areas that contain, are adjacent to, or are a direct tributary to an identified temperature sensitive stream.			
ROAD CONSTRUCTION IN RIPARIAN		EMENT	<b>AREAS</b>	- FPPR section 50		
Is road construction proposed in riparian management areas within the treatment area or an associated road permit (RP)?	Yes 🗆 I	No 🖂	Road construction activities have not been proposed within the RMA of any identified riparian feature.			
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 🗌 I	No 🖂	There a	re no riparian crossings associated with this prescription.		



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 🖂	Treatment activitie or S6 stream that is the basal area reten channel stability pr	s have not been p a direct tributary tion requirements ovided by section	rescribed within the RMZ of an S4, S5, 7 to an S1, S2, or S3 stream, and therefore 8 for maintaining stream bank and 1 52 of the FPPR do not apply.	
DOMESTIC WATER LICENCES (inside	e or outside of co	mmunity watershee	d) - FPPR section	59	
Does the proposed treatment area contain water sources that are diverted for human consumption by a licensed waterworks?	Yes 🗌 No 🛛	The treatment area consumption by a l	does not include icensed waterwor	water sources that are diverted for human rks.	
LICENCED WATER WORKS (inside or	r outside of a cor	nmunity watershed	) - FPPR section 6	0	
Does the proposed treatment include areas that are within 100m of a licensed waterworks?	Yes 🗌 No 🖂	Treatment and road m of a licensed wa	l construction act terworks that is w	ivities have not been proposed within 100 vithin a community watershed.	
FISHERIES SENSITIVE WATERSHED -	GAR section 14,	FPPR section 8.1			
Are any activities proposed within a fisheries sensitive watershed?	Yes 🗌 No 🛛	Treatment activitie watershed.	s have not been p	proposed within a fisheries sensitive	
COMMUNITY WATERSHED - GAR se	ection 8, FPPR see	ction 8.2, 61, 62 and	l 84		
Does the proposed treatment area include areas that are within a community watershed?	Yes 🗌 No 🖂 🛛	Treatment activitie	s have not been p	roposed within a community watershed.	
Will this project require road construction or deactivation within a community watershed?	Yes 🗌 No 🖂	Treatment and road community waters	l construction act ned.	ivities have not been proposed within a	
WATERSHED ASSESSMENT CONSID	ERATIONS - FRPA	A section 180 areas	with "significant	watershed sensitivity"	
Does the proposed treatment area include areas that have watershed assessment considerations?	Yes 🗌 No 🛛	Treatment activities have not been proposed in areas identified as having significant watershed sensitivity or other watershed assessment considerations.			
SOIL DISTURBANCE AND PERMANE	NT ACCESS STRU	CTURES - FPPR sect	ions 35 and 36		
Treatment Unit (TU)	Proposed Max. Allowable Soil Disturbance (5% or 10%) 10%	Proposed Max. Soil Disturbance for Roadside Work Areas 25%	Proposed Max. Permanent Access Structures 5%	Comments Proposed permanent access structures calculated at 2.8%, and they will be planted once all treatment activities are complete.	
Do the proposed Permanent Access Structures exceed 7% of the total area?	Yes 🗌 No 🖂	Permanent access structures will not exceed 7%.			
LANDSLIDES AND TERRAIN STABILI	<b>TY</b> - FPPR section	37			
Does the proposed treatment area include areas where terrain stability is a concern?	Yes 🗌 No 🖂	Indicators of slope treatment area.	instability or land	dslides were not noted within the	



SUITABLE SECONDARY STRUCTURE	- FPPR section 4	3.1
Does the proposed treatment area include a "targeted pine leading stand"?	Yes 🗆 No 🖂	Treatment activities have not been proposed in a "targeted pine leading stand" as defined by section 1 of the FPPR. Additionally, the treatment activities proposed will occur entirely within a community forest agreement (CFA) license for the purpose of wildfire risk reduction and therefore, as per section 43.1(4) and 43.1(2) of the FPPR, the secondary stand structure retention specifications set out by section 43.1(1) of the FPPR do not apply.
UNGULATE WINTER RANGE - GAR se	ection 12, FRPA s	ections 180 and 181, FPPR section 69
Does the proposed treatment area include areas within an Ungulate Winter Range?	Yes 🛛 No 🗌	An agement activities overlap by about 80% into a Special Resource Management Sub-Zone 4 with identified M2 ungulate winter habitat for Moose. Prior to the commencement of treatment activities the Agreement Holder will ensure that the habitat requirements for the winter survival of ungulate species specified by s.6.4.2 of the FSP are maintained.
WILDLIFE HABITAT AREA - GAR sect	ion 10, FRPA sec	tions 180 and 181, FPPR section 69
Does the proposed treatment area include any wildlife habitat areas (WHA)?	Yes 🗌 No 🖂	The treatment area does not overlap any mapped or otherwise identified wildlife habitat areas.
MIGRATORY BIRD CONVENTION AC	<b>T</b> – 1994	
Does the proposed treatment have the potential to impact migratory bird habitat?	Yes 🗌 No 🛛	The nest density ranking for this Prescription area is 2 and therefore is not likely to impact Migratory Bird Habitat.
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 🗆	A legal order establishing objectives set by government for wildlife has not been enacted in the Lakes district and objectives are not specified in the Lakes LRMP or the Lakes South SRMP. Two notices, enabled under section 7(2) of the FPPR, specifying indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species as well as for the survival of species at risk exist for the Lakes and Nadina districts, respectively.
<b>OBJECTIVES SET BY GOVERNMENT</b>	FOR BIODIVERSI	TY OBJECTIVES (Landscape Level) - FPPR Part 4 Division 5
Does the proposed treatment area include areas to which objectives for landscape level biodiversity under FPPR section 9 apply?	Yes 🛛 No 🗆	The design of the proposed Wildfire Risk Reduction areas will resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.
OBJECTIVES SET BY GOVERNMENT	FOR BIODIVERSI	TY OBJECTIVES (Stand Level) - FPPR Part 4 Division 5
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 🛛 No 🗆	Three external and two internal Wildlife Tree Patch areas amounting to 8.8 ha (23.3%) have been identified with this plan.



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 of significant recreation value and are designated a resource feature?	Yes 🗌 No 🛛	The treatment area does not contain known interpretive sites, recreation trails, recreation sites, recreation facilities that are considered to be of significant recreation value and are designated a resource feature.				
VISUAL QUALITY OBJECTIVES - GAR	section 7, FRPA	sections 180 and 181, FPPR section 9.2				
Is the proposed treatment within a scenic area?	Yes 🗌 No 🖂	WRR-15 is not within a Scenic Area nor a VQO – Retention polygon.				
ARCHAEOLOGICAL RESOURCES/CU	LTURAL HERITAG	SE RESOURCES - FPPR section 10				
Are there any known archaeological sites or cultural heritage resources that are important to First Nations within the proposed area? No Referral to Land Manager is required if proposed TU is on the applicant's own First Nation Land.	Yes 🗆 No 🖂	WRR-15 overlaps with a CHR High Archaeological polygon by 6% and two potential Post 1846 Culturally Modified Trees (CMT) were located in this overlap areas. No archaeological sites or other cultural heritage resources (CHR) were identified with the proposed treatment areas. In the event that additional CHR features are identified or otherwise made known during First Nation information sharing and consultation, measures to protect the CHR or address First Nation concerns must be communicated by an addendum to, or an amendment of this prescription. In the event that previously unidentified CHR features are encountered while carrying out treatment activities, work in the area must stop, and an authorized treatment supervisor must be notified. The Agreement Holder will complete a cultural heritage resource evaluation (CHR) and provide management direction to protect or otherwise manage for the identified feature(s).				
INVASIVE PLANTS - FRPA section 47	and FPPR sectio	n 17				
Is the introduction and spread of invasive plants likely as a result of the proposed treatment?	Yes 🛛 No 🗆	Review of the Invasive Alien Plant Program (IAPP) database indicated the presence of invasive plant species adjacent to the FTU along the Keefe's Landing Road. IAPP sites include Orange Hawkweed (OH), Meadow Buttercup (MB), Oxeye Daisy (OD), Scentless Chamomile (SH), Common Tansy (TC), and Yellow Hawkweed (YH).				
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 🛛	A fenceline exist along the block side of Keefe's Landing Road. In the event that fencelines are damaged, they will be repaired to the pre-damaged condition.				
SPECIES AT RISK – FPPA section 7						
Are there species at risk present within the boundaries of the prescribed treatment area?	Yes 🗌 No 🖂	No known occurrences of a species at risk were noted during field assessments or through review of BC Conservation Data Centre spatial data.				
LAND USE OBJECTIVES (Higher Leve	l Plans and object	ctives set by Government under the <i>Land Act</i> )				
Are there land use objectives (higher level plans or objectives under the <i>Land Act</i> ) that apply to the proposed treatment area or a Road Permit necessary to provide access to the treatment area?	Yes 🗌 No 🖂	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.				



LAND USE OBJECTIVES (Higher Level Plans and objectives set by Government under the Land Act) Cont'd					
Do the proposed activities conflict with land use objectives (higher level plans or objectives under the	Yes 🗌 No 🛛	Prescribed activities are not expected to conflict with other land use objectives not specifically addressed by this prescription.			
Land Act)?					
Known and potential species at	Yes 🗌 No 🖂	Treatment activities have not been proposed in an old growth management			
risk, windthrow hazard, and old		area (OGMA) established by the Lakes South SRMP.			
growth management areas?					
Do the proposed activities conflict	Yes 🛛 No 🗌	Proposed harvest area WRR-15 overlaps into the newly designated PROV.			
with Provincial Priority Deferral		DEF by 20%. The Agreement Holder has an exemption from the Nadina			
Areas (PROV. DEF) identified by the		Resource District to allow for the overlap between the PROV. DEF areas and			
Old Growth Strategic Review?		all Wildfire Risk Reduction proposed areas.			

G. OTHER CONSIDERATIONS AND	REQUIREMENTS							
<b>CONSULTATION</b> – FIRST NATIONS: In WRR IS1 and is dated July 04, 2022	fo-share was initiated on April 2	2, 2022 and Adequacy Letter is called: 10455-50/22 K4R						
FIRST NATION	CONCERN	CONCERNS IDENTIFIED AND MEASURES TO ADDRESS						
Nee Tahi Buhn Band	No concerns brought for	ward.						
Skin Tyee Nation	No concerns brought for	ward.						
Stellat'en First Nation	No concerns brought for	ward.						
Wet'suwet'en First Nation	No concerns brought for	No concerns brought forward.						
Office of the Wet'sewet'en	No concerns brought for	ward.						
First Nations consultation complete	e?	Yes 🗵 No 🗆						
<b>CONSULTATION</b> – GENERAL, EXISTING	G TENURE HOLDERS (Forest, Ran	ge, Guide Outfitters, Trappers): Info-share was initiated for						
Tenure Holder	Concerns?	Measures proposed to address licensee's concerns						
Range: George Amendt	Yes 🗌 No 🗵	No concerns brought forward.						
Range: Carl Doglione	Yes 🗌 No 🗵	No concerns brought forward.						
Range: Sharon Robertson	Yes 🗌 No 🗵	No concerns brought forward.						
Range: Ootsa Lake Cattle Company	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Victor Bateson	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Jonathan Solecki	Yes 🗆 No 🖂	No concerns brought forward.						
Range: Jack Burt	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Clint Lambert	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Elizabeth McEntire	Yes 🗆 No 🗵	No concerns brought forward.						
Range: Harold Moroski	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T014	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T017	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T018	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T019	Yes 🗆 No 🗵	No concerns brought forward.						
Trapline: TR0604T020	Yes 🗆 No 🗵	No concerns brought forward.						
Guide Outfitter: James Lancaster	Yes 🗌 No 🗵	No concerns brought forward.						
Guide Outfitter: Brett Hall	Yes 🗆 No 🗵	No concerns brought forward.						
Guide Outfitter: Gary Blackwell	Yes 🗌 No 🗵	No concerns brought forward.						



PRIVATE PROPERTY		
Does private property border the proposed treatment area?	Yes 🗆 No 🛛	There is no private land immediately adjacent to proposed WRR-15.
SMOKE MANAGEMENT		
Does a smoke management plan beyond OBSCR exist for the proposed treatment area?	Yes 🗌 No 🔀	The treatment area is within a Medium Smoke Sensitivity Zone and therefore the <i>August 2021</i> <i>Community Wildfire Risk Reduction Open Burning</i> <i>Smoke Control Regulations</i> will be followed for the burning of debris piles.
SAFETY		
Have any specific safety concerns been identified in or adjacent to the proposed treatment area?	Yes 🛛 No 🗌	The level of blowdown within these proposed treatment areas are very high. Cattle within this range tenure area are no longer able to use portions of this area as they are completely impassable.
UTILITIES		
Are utilities located in or adjacent to the proposed treatment area? i.e. power lines, gas lines, etc.	Yes 🛛 No 🗆	The proposed shape is adjacent to utility lines which are along the Keefe's Landing Road.
ACCESS CONTROL		
Are there any foreseen issues with access and access control during and post treatment?	Yes 🗆 No 🗵	There are no foreseen access issues for access to any of the proposed Wildfire Risk Reduction shapes in this Prescription.
TRAFFIC CONTROL		
Is traffic control required at any point during operations?	Yes 🗌 No 🛛	There is no need for traffic control on this shape because timber will be felled into the blocks, and there is a minimum of a tree length previously cleared between the blocks and the Keefe's Landing Road.
OTHER (E.g Public Notification	)	
Notification of commencement of har	rvesting activities should be posted o	on Chinook Community Forest's Facebook Page.

## H. STAND AND STOCK TABLE

Is merchantable timber cutting prescribed? If yes, please provide details below.

🛛 Yes 🗆 No

About 65.5% percent of the treatment unit contains merchantable timber. The intent of this project is to recover as much fibre as possible from these proposed areas. The appropriate tenure authorization method will be applied for once timber purchase agreements have been arranged.

Are there any challenges to utilizing merchantable material? If yes, please provide details below.

🛛 Yes 🔼 No

There is extensive blowdown, dead standing and ladder fuels throughout the Prescription area. Much of the volume that is down on the ground and overlapping has be dead and down for many years now. The hope is that the merchantable stems can be separated out efficiently and effectively from the stems that cannot to aid in a seamless flow of merchantable timber from the Prescription area. The plan would then be for the non-merch material to also potentially be shipped to a biomass facility, or potentially that a grinding unit would arrive on site to process the debris. Alternatively, debris may be left on site for a small period of time so that community members may come and load the material for firewood.



u u m	Dews rule munugement rescription ver. 2022
TREATMEN	IT SPECIFICATIONS SUMMARY
TU 1	TREE REMOVAL/RETENTION STRATEGY BY SIZE/SPECIES (Summarize specifications identified in table above)
1	<i>Silviculture Systems:</i> Clearcut with Reserve (CCRES) <i>Treatment Regimes:</i> Conventional Harvest or Forwarder (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)
2	Silviculture Systems: Clearcut with Dispersed Retention (CCDRET) Treatment Regimes: Conventional or Forwarder Harvest (HARV), Hazard Tree Removal (HTR), Surface Fuel Reduction (SFR), Mechanical Pile (MPILE) and potential for Burning (PILE BURN)
<b>TU 1</b> - TRE	ATMENT SPECIFICATION RATIONALE
Treatment treatment is spruce and will requir manual tre manual/me affected sta To reduce - Reta - Ren obje - Red - Red	activities will utilize a Clearcut with Reserve silviculture system which primarily requires the use of mechanical nethods. Initial treatment phases will remove remnant hazardous overstory fuels consisting of 140.1 m3/ha hybrid lodgepole pine – approximately 63.5% of this volume is dead potential lodgepole pine. Secondary treatment phases e surface fuel reductions to the specified targets by means of mainly mechanical methods, (with the potential for atment methods). Final treatment phases will require surface fuel reductions to the specified targets by means of chanical piling. Treatment activities are expected to transition stands from a C-2 fuel type (Boreal Spruce *with MPB unds) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly. predicted fire behaviour the following treatment specifications have been applied: in all live deciduous trees except where their removal is necessary to address a safety concern. How all live and dead overstory and understory coniferous trees unless the tree is to be retained to achieve biodiversity ctives or the tree has been identified as a wildlife habitat or cultural heritage feature. Luce <7.0 cm surface fuel loads to $0.5 \text{ kg/m}^2$ (+/- $0.25 \text{ kg/m}^2$ ).
<b>TU 2</b> - TRE	ATMENT SPECIFICATION RATIONALE
Treatment mechanica live overst and residue vertical an specified ta type (Bore	activities will utilize a clearcut with Dispersed Retention silviculture system to be carried out using primarily I treatment methods. Initial treatment phases will remove dead or otherwise hazardous overstory trees. The removal of ory and understory trees will reduce continuity between fuel strata and accommodate the recovery of treatment fibre es. Secondary treatment phases will mechanically (and potential manual methods), thin understory trees to reduce d horizontal continuity to overstory retention. Final treatment phases will require surface fuel reductions to the urgets by means of manual/mechanical piling. Treatment activities are expected to transition stands from a C-2 fuel al Spruce *with MPB affected stands) to a C-6 (Conifer Plantation) and reduce surface fire intensities significantly.
- Ren	hove all dead overstory and understory trees except where the tree is to be retained to achieve biodiversity objectives or

- the tree has been identified as a wildlife habitat or cultural heritage feature.
- Retain all live deciduous trees except where their removal is necessary to address a safety concern.
- Retain 350 sph ( $\pm 100$  sph) of live L1 coniferous trees.
- Retain up to 250 sph ( $\pm$ 50 sph) of live L2 coniferous trees.
- Recruitment between L1 and L2 conifers stocking is acceptable to a maximum total target conifer stocking of 600 sph (±100 sph).
- Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.
- Substitution of deciduous stems (where they exist) for coniferous stocking is acceptable.
- Remove all L3 and L4 understory trees, (where they exist).
- Reduce <7.0 cm surface fuel loads to 0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m<sup>2</sup>).
- Reduce >7.0 cm surface fuel loads to 2.5 kg/m2 (+/- 0.5 kg/m2).



# TU 1: STAND AND STOCK TABLE DATA

TU 1: STAND AND STOCK TA	BLE DATA	1	1			1			1	
Species and Diameter Class <sup>1</sup>	Crown Base Height	Average Tree Height	STEMS	5 PER HEC (sph)	CTARE	VOLUME PER HECTARE (m <sup>3</sup> /ha) <sup>2</sup>			Basal Area (m²)	
	Range (m)	(m)	Existing	Cut	Leave	Existing	Cut	Leave	Existing	
Layer 1 (≥ 22.5 cm - 27.5 cm dbh)										
Pl	-	25	232	232	0	86.8	86.8	0	15.3	
Sx	3.2	21	63	63	0	12.5	12.5	0	2.0	
B1	2.8	18	97	97	0	33.3	33.3	0	5.2	
Total Dead Potential			235	235	0	80.0	80.0	0	14.4	
Total Live			157	157	0	52.6	52.6	0	8.1	
Total All Species		22	392	392	0	132.6	132.6	0	22.5	
Total Conifers		22	392	392	0	132.6	132.6	0	22.5	
Layer 1 (≥ 17.5cm - 22.5 cm db	h)							•		
Pl	-	18	241	241	0	37.6	37.6	0	7.0	
Sx	3.3	18	33	33	0	4.6	4.6	0	0.9	
Bl	2.7	17	57	57	0	6.0	6.0	0	1.5	
Total Dead Potential			215	215	0	31.2	31.2	0	6.1	
Total Live			116	116	0	17	17	0	3.3	
Total All Species		18	331	331	0	48.2	48.2	0	9.4	
Total Conifers		18	331	331	0	48.2	48.2	0	9.4	
Layer 1 (≥ 12.5 cm - 17.5 cm -	dbh)									
Pl	5.6	17	549	549	0	39.8	39.8	0	10.1	
Total Dead Potential			427	427	0	29	29	0	7.8	
Total Live			122	122	0	10.8	10.8	0	2.3	
Total All Species		17	549	549	0	39.8	39.8	0	10.1	
Total Conifers		17	549	549	0	39.8	39.8	0	10.1	
TOTALS: Layer 1										
Total Layer 1 - All Species (Conifers Only	3.5	20	1,272	1,272	0	220.6	220.6	0	42.0	
TU 1: SURFACE FUEL LOAI	DING (kg/m <sup>2</sup> )									
									Method-	

Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing Distribution	Target (kg/m²)	Target Distribution	Method- ology Used
Fine Woody Debris ( =7cm)</td <td>0.83</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of <math>\pm 0.25</math> kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	0.83	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m <sup>2</sup> (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of $\pm 0.25$ kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method
Large Diameter Woody Debris (>7cm – 20cm)	4.34	Continuous distribution of lodgepole pine damaged by mountain pine beetle as well as some hybrid spruce damaged	2.5 kg/m <sup>2</sup> (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m2. Ensure poor continuity between retained pieces and avoid	Wethod
Coarse Woody Debris (CWD) (>20cm)	7.82	class of 2.		creating aggregations.	
Crown Closure (%	6): <u>2</u> 2	Existing Total: 12.99 kg/m <sup>2</sup>	Target:	3.0 kg/m2 (+/- 0.75 kg/m2)	

<sup>&</sup>lt;sup>1</sup> Modify diameter classes as required to suite treatment.

 $<sup>^{\</sup>rm 2}$  A professional estimate is required for any merchantable cutting



# TU 2: STAND AND STOCK TABLE DATA

Existing           1022         96           154         877           395         1,272           1,272         1,272           265         200           0         465           465         465           465         255	Cut 877 0 877 0 877 0 877 0 200 0 200 0 0 255	Leave 145 96 154 0 395 395 395 265 265 265 265 265	Existing           164.2           17.1           39.3           140.2           80.4           220.6           220.6           4.6           3.2           0           7.8           7.8           7.8           7.8	Cut 140.9 0 140.2 0 140.2 140.2 140.2 0.0 3.2 0 3.2 3.2 3.2	Leave           23.3           17.1           39.3           0           80.4           80.4           80.4           0           4.6           0           4.6           0           4.6           0           4.6           4.6	Existing 32.4 2.9 10.1 28.3 13.7 42.0 42.0 2.7 2.0 0 4.7 4.7 4.7
1022         96         154         877         395         1,272         1,272         265         200         0         465         465         465         255	877 0 877 0 877 877 0 200 0 200 0 0 0 0 0	145         96         154         0         395         395         395         265         0         265         265         265         265         265         265         265         265         265         265         265	164.2         17.1         39.3         140.2         80.4         220.6         220.6         4.6         3.2         0         7.8         7.8         7.8         7.8	140.9 0 0 140.2 0 140.2 140.2 140.2 0.0 3.2 0 3.2 3.2 3.2 3.2	23.3 17.1 39.3 0 80.4 80.4 80.4 80.4 80.4 80.4 80.4 80	32.4 2.9 10.1 28.3 13.7 42.0 42.0 42.0 2.7 2.0 0 4.7 4.7 4.7
1022         96         154         877         395         1,272         1,272         1,272         265         200         0         465         465         465         255	877 0 877 0 877 877 0 200 0 200 0 200 0 255	145 96 154 0 395 395 <b>395</b> <b>395</b> <b>2</b> 65 <b>2</b> 65 <b>2</b> 65 <b>2</b> 65 <b>2</b> 65	164.2         17.1         39.3         140.2         80.4         220.6         220.6         4.6         3.2         0         7.8         7.8         7.8         7.8	140.9 0 140.2 0 140.2 140.2 140.2 0.0 3.2 0 3.2 3.2 3.2	23.3 17.1 39.3 0 80.4 80.4 80.4 80.4 80.4 80.4 80.4 80	32.4 2.9 10.1 28.3 13.7 42.0 42.0 2.7 2.0 0 4.7 4.7 4.7
96         154         877         395         1,272         1,272         265         200         0         465         465         255	0 0 877 0 877 877 0 200 0 200 0 0 0 0 200	96 154 0 395 395 395 265 265 265 265 265	17.1 39.3 140.2 80.4 220.6 220.6 220.6 3.2 0 7.8 7.8 7.8 7.8	0 0 140.2 0 140.2 140.2 0.0 3.2 0 3.2 3.2 3.2	17.1 39.3 0 80.4 80.4 80.4 80.4 80.4 80.4 0 0 4.6 4.6 4.6 4.6	2.9 10.1 28.3 13.7 42.0 42.0 42.0 2.7 2.0 0 4.7 4.7 4.7
154         877         395         1,272         1,272         1,272         265         200         0         465         465         465         255	0 877 0 877 877 0 200 0 200 0 200 0 200	154 0 395 395 <b>395</b> <b>2</b> 65 265 265 <b>2</b> 65 <b>2</b> 65	39.3         140.2         80.4         220.6         220.6         4.6         3.2         0         7.8         7.8         7.8         7.8	0 140.2 0 140.2 140.2 140.2 0.0 3.2 0 3.2 3.2 3.2 3.2	39.3         0         80.4         80.4         80.4         80.4         0         4.6         0         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6	10.1         28.3         13.7         42.0         42.0         2.7         2.0         0         4.7         4.7         4.7
877           395           1,272           1,272           265           200           0           465           465           465           255	877 0 877 877 0 200 0 200 0 0 0 0 255	0 395 395 <b>395</b> 265 0 0 265 265 <b>265</b>	140.2         80.4         220.6         220.6         4.6         3.2         0         7.8         7.8         7.8	140.2         0         140.2         140.2         0.0         3.2         0         3.2         3.2         3.2         3.2	0 80.4 80.4 80.4 4.6 0 0 4.6 4.6 4.6 4.6	28.3 13.7 42.0 42.0 2.7 2.0 0 4.7 4.7 4.7
395           1,272           1,272           1,272           265           200           0           465           465           465           255	0 877 877 0 200 0 200 0 200 0 0 0	395 395 <b>395</b> 265 0 0 265 265 <b>265</b> <b>265</b>	80.4           220.6           220.6           4.6           3.2           0           7.8           7.8           7.8           7.8	0 140.2 140.2 0.0 3.2 0 3.2 3.2 3.2 3.2	80.4           90.4           90.6           90.6           90.6           90.6           90.6           90.6           90.7           90.7           90.7           90.7           90.7           90.7           90.7           90.7           90.7           90.7           90.7           90.7	13.7         42.0         42.0         2.7         2.0         0         4.7         4.7         4.7
1,272         1,272         265         200         0         465         465         465         255	877 877 0 200 0 200 0 0 0 255	395 395 265 0 0 265 265 265 265	220.6 220.6 4.6 3.2 0 7.8 7.8 7.8 7.8	140.2 140.2 0.0 3.2 0 3.2 3.2 3.2 3.2	80.4         80.4         80.4         80.4         90.4         90         90         4.6         90         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6	42.0 42.0 2.7 2.0 0 4.7 4.7 4.7
1,272 265 200 0 465 465 465 255	877 0 200 0 200 0 0 0	395         265         0         265         265         265         265         265	220.6       4.6       3.2       0       7.8       7.8       7.8	140.2 0.0 3.2 0 3.2 3.2 3.2 3.2	80.4           4.6           0           4.6           4.6           4.6           4.6	42.0 2.7 2.0 0 4.7 4.7 4.7
265 200 0 465 465 465 255	0 200 0 200 0 0	265 0 265 265 265 265	4.6 3.2 0 7.8 7.8 7.8 7.8	0.0 3.2 0 3.2 3.2 3.2 3.2	4.6 0 4.6 4.6 4.6 4.6	2.7 2.0 0 4.7 4.7 4.7
265 200 0 465 465 465 255	0 200 0 200 0 0	265 0 265 265 265 265	4.6 3.2 0 7.8 7.8 7.8 7.8	0.0 3.2 0 3.2 3.2 3.2 3.2	4.6 0 4.6 4.6 4.6	2.7 2.0 0 4.7 4.7 4.7
200 0 465 465 465 255	200 0 200 0 0	0 0 265 265 265 265	3.2       0       7.8       7.8       7.8	3.2 0 3.2 3.2 3.2 3.2	0 0 4.6 4.6 4.6	2.0 0 4.7 4.7 4.7
0 465 465 465 255	0 200 0 0	0 265 265 265	0 7.8 7.8 7.8 7.8	0 3.2 3.2 3.2 3.2	0 4.6 4.6 4.6	0 4.7 4.7 4.7
465 465 465 255	200 0 0	265 265 <b>265</b>	7.8 7.8 7.8	3.2 3.2 3.2	4.6 4.6 4.6	4.7 4.7 4.7
465 465 255	0 0 0 255	265 265	7.8 7.8	3.2 3.2	4.6 4.6	4.7 4.7
465 255	0	265	7.8	3.2	4.6	4.7
255	255					
255	255					
	235	0	-	-	-	-
50	50	0	-	-	-	-
0	0	0	-	-	-	-
305	305	0	-	-	-	-
270	270	0	-	-	-	-
270	270	0	-	-	-	-
			•	1		
200	220	0	-	-	-	-
135	135	0	-	-	-	-
335	335	0	-	-	-	-
335	335	0	-	-	-	-
	270 270 200 135 335 335 335	270       270         270       270         270       270         200       220         135       135         335       335         335       335	270       270       0         270       270       0         200       220       0         135       135       0         335       335       0         335       335       0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

<sup>&</sup>lt;sup>3</sup> Modify diameter classes as required to suite treatment.

<sup>&</sup>lt;sup>4</sup> A professional estimate is required for any merchantable cutting



TU 2: SURFACE FUEL LOADING (kg/m <sup>2</sup> )									
Size Class (cm)	Existing (kg/m <sup>2</sup> )	Existing Distribution	Target (kg/m <sup>2</sup> )	Target Distribution	Method- ology Used				
Fine Woody Debris ( =7cm)</td <td>1.19</td> <td>Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.</td> <td>0.5 kg/m<sup>2</sup> (+/- 0.25 kg/m2)</td> <td>Reduce to target levels with an acceptable range of <math>\pm 0.25</math> kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.</td> <td>Line Intersect Sampling Method</td>	1.19	Moderately continuous distribution with accumulations associated with suspended and jackpotted lodgepole pine.	0.5 kg/m <sup>2</sup> (+/- 0.25 kg/m2)	Reduce to target levels with an acceptable range of $\pm 0.25$ kg/m2. Maintain poor continuity between residual pieces and avoid creating aggregations.	Line Intersect Sampling Method				
Large Diameter Woody Debris (>7cm – 20cm) Coarse Woody Debris (CWD) (>20cm)	4.20 4.65	Moderately continuous distribution of lodgepole pine damaged by mountain pine beetle as well as some hybrid spruce damaged by wind. Pieces	2.5 kg/m <sup>2</sup> (+/- 0.5 kg/m2)	Reduce below target levels with an acceptable range of $\pm 0.5$ kg/m <sup>2</sup> . Ensure poor continuity between retained pieces and avoid creating aggregations.					
Crown Closure (%	6 <b>):</b> 24	Existing Total: 10.04 kg/m <sup>2</sup>	Target:	3.0 kg/m2 (+/- 0.75 kg/m2)	<u> </u>				

BIODIVERSITY AND FOREST HEALTH CONSIDERA	TIONS AND TARGETS
COARSE WOODY DEBRIS (CWD) RETENTION TARGET – Distribution	Using the May 2022 Chief Forester's Guidance on Coarse Woody Debris Management on Wildfire Mitigation Treatments, the recommendation is to leave 5 CWD pieces per hectare in the SBS dk and 6 CWD pieces per hectare in the SBS mc2.
WILDLIFE TREE RETENTION TARGET	Retain up to 10 sph of large diameter (>30 cm dbh) dead potential stems as wildlife snags. Retain one (1) patch (20 x 20 m) of suitable secondary stand structure per hectare for wildlife habitat. Retention patches must be allocated so as to maintain discontinuity to adjacent stands, be anchored around deciduous and dead potential tree retention where practicable, and contain 400-600 sph of healthy poles and/or saplings (where they exist) with good form and vigour. Retain three (3) to five (5) high stumps (>1.0 m) per hectare adjacent to retention patches to ensure they do not incur damage as a result of skidding/yarding activities.
FOREST HEALTH- Should include sections such as agent, affected species, incidence rating, mortality, and targets	<ul> <li>Stands have been assessed to be in poor condition due to the impacts of forest health factors.</li> <li>Lodgepole pine overstory trees exhibited high mortality (63.5%) as a result of historical mountain pine beetle infestation. Significant wind damage (37%) has occurred where dead lodgepole pine have succumb to wind and snow loads and have transitioned to the forest floor. Additionally, windthrow contributions from residual stand components are anticipated to increase as stand condition continues to decline and stand density decreases. Evidence of emerging mountain pine beetle infestation was not noted.</li> <li>WINDTHROW RISK EVALUATION</li> <li>Windthrow assessments indicate the proposed treatment activities will result in a moderate potential for future windthrow risk due to topographic location due to prevailing wind directions. Wind damage is common in stands that have been impacted insect occurrences mainly from historical mountain pine beetle infestations.</li> </ul>



## I. TREATMENT DESCRIPTION

#### MERCHANTABLE TIMBER CUTTING

#### ROADS, LANDINGS AND TRAILS:

Access to the units will be gained via Keefe's Landing Road and existing block roads. Proposed access associated with the treatment areas will include three (3) road permit sections and three (3) on-block spur roads.

All additional access structures required to accommodate the prescribed treatment activities, or otherwise necessitated by site conditions or to address a safety concern, must be approved by an authorized treatment supervisor.

FELLING:

Felling activities will employ mechanical falling equipment (i.e. feller-bunchers, harvesters).

If or where any hand felling activities are used, they must be carried out by Fallers certified to the BC Faller Training Standard (BCFTS) with the skills and experience to achieve the treatment specifications without damaging residual stand components.

## YARDING/SKIDDING:

Conventional ground-based primary transport equipment (i.e. rubber-tired skidders, forwarders, etc.) will be utilized to carry out skidding/yarding activities. If rubber-tired skidders are utilized, retain high stumps (<1.0 m in height) adjacent to retained trees to prevent retention from incurring damage as a result of yarding and skidding activities.

#### LOADING AND HAULING:

Loading activities will be carried out within the right of way of proposed access structures and any required landings. Hauling activities will be carried out using an appropriate logging truck configuration for the harvest systems employed and processing facility requirements.

#### SLASH DISPOSAL:

Treatment residues and existing downed woody material in excess of prescribed >7.0 cm targets will be brought to road right of ways to facilitate biomass utilization where practicable. Material should be marketed to local processing facilities where a biomass fibre recovery opportunity exists. Where a biomass recovery opportunity does not exist alternative markets/users should be explored, or the material should be piled and burned on site.

The quantity and distribution of biomass resulting from initial mechanical treatment phases will vary with the harvest systems used. Roadside processing may improve biomass recovery opportunities relative to processing at the stump, especially where selection systems have been proposed. Processing at the stump, while improving other objectives, will result in increased dispersed fuel loads and increase the requirement for fire hazard abatement activities.

STRATEGIES TO IMPROVE BIOMASS UTILIZATION:

- Aggregate treatment residues, unutilized dead and down material, and bucking waste within utilization requirements for biomass facilities within road right of ways.
- Avoid incorporating mineral soil and other contaminants into piles.

#### STAND MODIFICATION TREATMENTS

BRUSHING: Manual brushing treatments have not been prescribed.

PRUNING: Pruning treatments have not been prescribed.

THINNING: Thinning from below to a height of 4.5 m is only required on residual coniferous trees where contiguous crown ratio of >50% coverage exists.

#### **DEBRIS PILING:**

Un-utilized biomass – including treatment residues and residual downed woody material – in excess of prescribed surface fuel load reduction targets outside of right of ways will be aggregated into debris piles. Debris piles must be a minimum of  $\frac{1}{2}$  the height of the pile's base width with taller piles being preferred. Surface fuels with a decay class of 4 or 5 do not contribute to surface fuel load calculations and may be retained on site.

#### STRATEGIES FOR DEBRIS PILING:

- Carry out debris piling activities in snow free conditions.
- Construct piles in locations that prevent retention from incurring heat damage and crown scorching during pile burning activities (i.e. within natural openings).
- Ensure piles contain a mix of material sizes and decay classes to facilitate effective ignition and complete combustion.
- Avoid incorporating mineral soil and other non-combustible debris into piles.

CHONOOK

## **BCWS Fuel Management Prescription Ver. 2022**

## PILE BURNING:

Burning activities must be carried out in compliance with the Wildfire Act and its Regulation as well as the Environmental Management Act (EMA); namely the Open Burning and Smoke Control Regulation (OBSCR).

The treatment area is within a Medium Smoke Sensitivity Zone (SSZ) as indicated by Smoke Sensitivity Zone map #38 – Nechako River (93F). All open burning activities within the Keefe's Landing WRR area are subject to the requirements of section 9, 10, 11, 13, 14, and 15 of OBSCR. However, the FTU falls under a plan for community wildfire risk reduction – the Nadina South Side Wildfire Risk Reduction Tactical Plan – and therefore may be carried out in accordance with section 23 of OBSCR where open burning activities are anticipated to last less than one (1) day, or under the conditions outlined in an approval issued under section 15 of the EMA.

No Private residences or business buildings have been identified <150 m of the treatment area

If pile burning activities will be carried out in a manner that meets the definition of a Category 3 Open Fire, as defined by the Wildfire Regulation, a Burn Registration Number (BRN) will be required. A BRN can be obtained from BCWS by calling 1-888-797-1717 or emailing hpr.1800@gov.bc.ca.

STRATEGIES FOR PILE BURNING:

- Ensure all piled debris is dry and seasoned as per the definition provided by the OBSCR.
- Obtain custom venting forecasts to identify optimal burning opportunities.
- Consider the utilization of an Air Curtain Burner.

MULCHING: Mulching treatments have not been prescribed.

MASTICATION: Mastication treatments have not been prescribed.

#### GRINDING:

In the event that debris can sold to a biomass facility, it is likely that a grinding unit will come directly to the site to prepare the debris into the exact specifications to be shipped via a chip transport truck. If this phase is planned to occur, ensure that road access is maintained to all debris piles locations.

PRESCRIBED FIRE: Prescribe Fire treatments have not been prescribed.

#### PLANTING:

Fire Management Stocking Standards are not provided in the Agreement Holders current approved FSP and therefore an amendment to the Chinook CFA FSP 2016 stocking standards is being proposed. It is recommended that the Wildfire Risk Reduction stocking standard be requested for all Chinook CFA Wildfire Risk Reduction project areas as these standards are in line with the *BCWS Fuel Management Prescription Guidance 2022*.

OTHER: N/A

AUTHORIZATION AND TIMBER TENURE

FRPA Section 52(1)(b):

The Agreement Holder (CFA:K4R) maintains the timber rights for all merchantable timber harvested as a result of treatment implementation unless relinquished by the CFA holder and authorized by FPRA Section 52 (1) (b).

Forestry License to Cut (FLTC): Not anticipated.

Park Use Permit: N/A

Road Permit or Road Use Permit: Three new Sections for R21201 will be applied for with this Prescription area.

Other (i.e. local government, utilities, etc.): N/A



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## J. POST TREATMENT

### EXPECTED VEGETATION RESPONSE:

Treatment activities are anticipated to result in a moderate vegetative response. Increases to shrub and herbaceous cover and the ingress of various grasses is expected throughout the treatment areas. The establishment of coniferous regeneration is expected to be variable, although site disturbance associated with treatment activities has the potential to promote root suckering where trembling aspen stand components exist.

#### ADDITIONAL TREATMENTS OR MAINTENANCE:

Where clearcut systems have been employed, carry out stand monitoring at an interval that aligns with the required silvicultural assessments. The results of silviculture assessments will inform the mid to long term requirement for maintenance.

SILVICULTURE OBLIGATIONS: Do silvicultural obligations apply to the treatment area? Yes 🛛 No 🗖

PLANTING: Is planting a treatment identified in this prescription or required as a legislative obligation? Yes  $\boxtimes$  No  $\square$  In SU 1 (both TU 1 and TU 2) an even-aged stocking standard has been applied as is shown in the table below.

#### STOCKING STANDARDS:

APPLICABLE EVEN-AGED STOCKING STANDARDS for all variations of Clearcut Silviculture Systems:

						Well-Space	ed Stem/ł	าล	Min	imum Hoi	abt(m)		_
		Stocking	Species	Species		MS	S		IVIIII	intuiti Heij	giit (iii)	Regen	Free Growing
ΤU	SU	Standard ID	(Pref.)	(Accep.)	TSS	Pref. &	Pref.	MITD	Pl	Others	RTH	Delay	(years)
						Acc.					(%)		
1/2	1	TBD	PLI SX FDI LW AT EP AC	-	1200	700	600	2.0	2.0	1.0	-	4	20



## K. Outstanding Works

- 1.) Obtain the appropriate authorizations for the FRPA Section 52(1)(b) and for the three new sections required to R21201 road permit.
- 2.) Obtain District Manager approval for the proposed alternative stocking standards, or upon the approval of the Chinook CFA:K4R FSP adopt the applicable fire management stocking standards if appropriate.
- 3.) If required, obtain the appropriate approval(s) under section 15 of the EMA to exempt pile burning activities from the requirements of sections 9, 10, 11, 13, 14 and 15 and Part 3 of OBSCR.
- 4.) Obtain the appropriate authorizations or exemptions for those portions of the treatment area that are within a Priority Deferral Area identified by the Old Growth Strategic Review and the Old Growth Technical Advisory Panel.

#### L. ADMINISTRATION PREPARATION FOREST PROFESSIONAL NAME (Printed): FOREST PROFESSIONAL SIGNATURE: Jennifer Hill, RPF JELMIFER TIA HIL ERITISH DATE: MEMBER NUMBER: 3889 2023-02-06 **M. ATTACHMENTS** MAPS: FIELD DATA CARDS: Yes 🛛 No 🗖 Yes 🛛 No 🗖 WUI WTA Plots and Photos: Yes 🛛 No 🗖 CRUISE DATA: Yes 🛛 No 🗖 **AIR PHOTOS/IMAGERY: BURN PLAN:** Yes 🔀 No 🗖 Yes 🗖 No 🖂 MODELING/DATA ANALYSIS: Yes 🛛 No 🗖 **OTHER:** Migratory Bird Nest Ranking Yes 🛛 No 🗖 Spreadsheet Yes 🔀 No 🗖 **OTHER: WTA Worksheets** SURFACE FUEL LOADING DATA: Yes 🛛 No 🗖 TERRAIN STABILITY ASSESSMENT VISUAL IMPACT ASSESSMENT Yes 🗆 No 🖂 Yes 🗆 No 🖂 Completed By: Completed By: Date: Date: ARCHAEOLOGY IMPACT ASSESSMENT Yes 🗌 No 🖂 BIOLOGIST ASSESSMENT Yes □ No 🖂 Completed By: Completed By: Date: Date: ADDITIONAL COMMENTS: MAPS: The following maps have been provided to support the prescribed activities: • Prescription Map • Ortho Treatment Map Location Map



nent Path: Z:\GIS\K4R Chinook Comfor\FESBC\2022-23 Fire Salvage Shapes\Final Maps\K4R WWR Map7 Prescription











