

THE FOLLOWING INFORMATION IS ATTACHED FOR INFORMATION ONLY AND DOES NOT FORM PART OF THE SITE PLAN

SUPPORT DOCUMENT

LICENCE #	LOCATION	OPERATING PLAN #	BLOCK #	BLOCK PRE #	ROAD
TA0904	Doctor Creek Fire	21-2	1	K10-1327	CRR23526 sec 1
			2	K10-1328	CRR23526 sec 2 seg01
			3	K10-1325	CRR23526 sec 2 seg02
					CRR23526 sec 3 seg01
					CRR23526 sec 3 seg02
					CRR23526 sec4
					CRR23526 sec 5
					CRR23526 sec 6
					CRR23526 sec 7
					CRR23526 sec 8
					CRR23526 sec9
					CRR23526 sec10
					CRR23526 sec11
					CRR23526 sec12
					CRR23526 sec13
					CRR23526 sec14
					CRR23526 sec15
					CRR23526 sec16 seg 1 and seg 2
					CRR23526 sec17 seg 1
					CRR2356 sec 18 (out of block trail)
					CRR2356sec19
					CRR2356sec20

1. ASSESSMENT INFORMATION

1(a). VISUAL IMPACT ASSESSMENT
Blocks and road sections forming this TSL are not subject to Visual Quality Objectives (VQO's). A visual impact assessment is not required.

1(b). PEST INCIDENCE SURVEY
Pest Specific Comments:
A small number of MPB grey attack was observed in the TSL. No new attack was observed.
Forest Health Comments:
Forest stands in this TSL have been damaged by wildfire. Damage severity is variable across the TSL with damage ranging from minor bark scorching at the base of trees to scorching for several meters up. Crown fire has impacted some areas of the TSL.
The majority of trees are expected to either be dead or will succumb to mortality as most have bark scorching at the root collar. Most susceptible are thin barked species such as spruce and pine. It is anticipated that 90-95% of trees of these species included in harvest areas are either dead or will die even where fire was limited to light to moderate intensity surface fires.
Where fire intensity was low, it is anticipated that thick barked western larch and Douglas-Fir will survive. In these stands, dispersed retention of lightly damaged individuals with intact root systems will be prescribed. The trees will maintain some structural diversity onsite and will provide a seed source for natural regeneration.

No other forest health issues were observed or known to be an issue onsite.

1(c). FIRST NATIONS STRENGTH OF CLAIM ASSESSMENT

The Rocky Mountain Forest District follows the Strategic Engagement Agreement.

1(d). CULTURAL HERITAGE ASSESSMENT

This TSL was referred to First Nations through operating plan # 21-2. All blocks and road sections are within Forest Development Units described in the BCTS Kootenay Business area 2017-2022 Forest Stewardship Plan. No new information regarding cultural heritage resources was received.

1(e). ARCHAEOLOGICAL OVERVIEW / IMPACT ASSESSMENT

TA0904 Blk 2 overlaps AOA polygon I12-27. An Archaeological Impact assessment was originally completed in 2009 for AOA polygon I12-27 overlapping A86822-1 and now overlapping a small portion of TA0904-2. The overlapping portion is to be a landing location.

Findings of the AIA produced negative results with no archaeological materials or sites observed, recorded, or otherwise suspected within the defined harvest boundaries of A86822-1. It was recommended that no further archaeological work was necessary so long as disturbance did not extend past established harvest boundaries.

As TA0904-2 was outside of these boundaries, a follow up was conducted by Pete Vandenberg RPF of BCTS with the signing archaeologist. As per his email to Chris Lovesey RPF dated Dec 12, 2020, Pete stated that the archaeologist did not feel that any other assessments are necessary.

A copy of the AIA report and email are filed with the site plan package.

1(f). TERRAIN STABILITY / AVALANCHE ASSESSMENT

A terrain stability assessment was completed on specified areas and road sections of the TSL by Sitkum Consulting Ltd during May 2021.

Findings of the assessment resulted in no recommended changes to the proposed harvest boundaries or proposed road alignments.

Recommendations for additional drainage structures were provided and have been incorporated into the road site plan.

A copy of the preliminary findings are provided in the TA0904-1 site plan package.

1(g). RIPARIAN ASSESSMENT

TA0904-1

Identified Reaches:

S1R1-S6	S3R1-S6
S2R1-S6	S5R1-S6
S2R2- S6	S6R1-S6
S2R3-S6	S7R1-S6

All reaches in TA0904-1 were determined to be non-fish bearing. Determinations were made through previous fish inventories (Masse Environmental, 2013), and field assessment and location of topographic barriers to upstream fish passage (slope gradients >20%). All stream reaches in this block were determined to be perennial with low to moderate flow at time of assessment. For all identified reaches, average width was <3 m with continuous channels >100 m in length. As such all reaches have been identified as S6.

All reaches are managed with a min 5-7m machine-free zone. MFZs may be wider at specific locations where seepages and branching NCD's occur. In all cases, the Riparian Management Zones (RMZ's) of the identified reaches have been damaged by wildfire and are at high risk of windthrow, posing a hazard to workers. As such minimal retention of overstory trees is prescribed within the RMZs to mitigate risk to workers and to minimize windthrow. Where possible, green-topped Lw/Fd that are structurally sound and have >50% of the root system left intact are to be retained if occurring within 20m of an identified S6. Trees with roots embedded into the stream channel should be stubbed where safe to do so and where stubbing will not compromise the integrity of the stream channel.

Reserves have been flagged along reaches, where larger areas of seepage have been identified.

Area of Concern (Severe Windfall Within TA0904-1): An area of concern has been identified on the SP/HP map where severe windthrow has occurred. It expected that there may be S6 stream reaches within this area however field crews were unable to verify as it was unsafe to traverse this area. The area has been left within the NAR so an attempt at salvaging windthrown timber can be made. Operators must carefully monitor for presence of water and use extreme caution that possible channels are not damaged, blocked, or altered.

TA0904-2

Identified Reaches:

- | | |
|---------|-------|
| R1- S6 | R5-S6 |
| R2- S6 | R6-S6 |
| R3- S6 | |
| R4- NCD | |

All reaches in TA0904-2 have been assessed to be non-fish bearing. A long, steep slope directly downslope of the block acts as a gradient barrier to upstream fish passage. Average gradients of all reaches were 20% or higher. All reaches other than 4 were classified as S6 streams as they were <3 m in average channel width and continuous for >100m.

Reach 4 is classified as a NCD as result of a discontinuous channel and absence of alluvial deposition.

As with TA0904-1, all reaches are managed with a 5+m MFZ. Minimal retention is to be left within the RMZ’s due to fire damage and associated windthrow hazard. Where possible, green-topped Lw/Fd that are structurally sound and have >50% of the root system left intact are to be retained if occurring within 20m of an identified S6. Trees with roots embedded into the stream channel should be stubbed where safe to do so and where stubbing will not compromise the integrity of the stream channel.

TA0904-3

Identified Reaches:

- | | |
|---------|---------|
| R1- S6 | R6- NCD |
| R2- NCD | R7- NCD |
| R3- NCD | R8a- S4 |
| R4- NCD | R8b- S6 |
| R5- S6 | R9- S4 |

All reaches in TA0904-3 have been assessed as non-fish bearing other than reaches R8a and R9.

Non Fish bearing reaches have been either classified as S6 or NCD. Key factors include channels <3meters width, average gradients >20%, and in the cases of NCD’s, discontinuous channels with minimal scour and/or alluvial disposition. These reaches have been managed with 5+m MFZs. In the case of reaches classified as S6, minimal retention in the RMZs will be left due to fire damage and associated windthrow hazard. Where possible, green-topped Lw/Fd that are structurally sound and have >50% of the root system left intact are to be retained if occurring within 20m of an identified S6. Trees with roots embedded into the stream channel should be stubbed where safe to do so and where stubbing will not compromise the integrity of the stream channel.

Reaches 8 and 9 have been classified by default as fish bearing due to the absence of a readily identifiable barrier to fish passage and lack of gradients >20%. As per the FSP, a 30m RMZ is required with a min retention of 10% of the preharvest stems. Both reaches have been placed in a 30+m reserve with 100% retention.

Designated Crossings

In all cases, the crossing of streams are to be only at designated locations as marked on the SP/HP map. Harvesting supervisors are to verify that mapped crossing locations remain suitable at time of harvest and if not, choose an alternative suitable location. The number of crossing locations is to be minimized with random crossing locations prohibited. Skid crossings acceptable to BCTS must be used at all designated crossing locations.

Drainage Structures

Culverts of the sizes indicated in the Road site plan are to be installed at specified locations to ensure maintenance of drainage patterns. Additional cross drains are to be installed where necessary following guidance provided in the FLNRO Engineering manual.

Culverts installed on any temporary road or permanent road prescribed for deactivation after completion of operations are to be removed and cross ditches installed to ensure maintenance of natural drainage patterns. Prior to any road deactivation taking place, a deactivation plan must be prepared by a qualified professional.

Trail Management

All bladed skid trails are to be rehabilitated at completion of operations where soil conditions permit. To mitigate possible erosion, roughing of the soil surface and mixing of organic debris with soil is desirable to assist in water infiltration and faster reestablishment of natural vegetation. **All rehabbed trails must be grass seeded as per requirements described in the site plans in effort to mitigate erosion.**

Stream Clean-out

Slash and debris introduced to streams must be removed from all stream channels concurrent with harvesting. The

following requirements will be in place consistent with the 2017-2022 FSP:

1. Remove all introduced debris (tree stems, branches and other woody debris) greater than 1 meter in length from stream channels.
2. In addition to the above debris, remove all introduced segments of tree stems/logs or log ends of any length resulting from landing and timber processing activities from stream channels.
3. Conduct stream channel clean-out concurrent with logging. Complete cleanout prior to spring freshet or demobilization of equipment, whichever is earlier.
4. Place removed debris where it will not enter the stream as a result of downslope movement or stream peak flows.
5. Do not remove pre-harvest embedded or natural large woody debris.
6. Hand clean to remove fine debris and do not use heavy machinery where streambanks or natural large woody debris will be disturbed.

1(h). SOIL ASSESSMENT								
HAZARD RATINGS					SOIL CHARACTERISTICS			
Block #	SU	Soil Comp.	Soil Ero.	Soil Disp.	Depth to Unfavourable Subsoil		Type of Unfavourable Subsoil	Sediment Delivery Risk (Community Watersheds)
					Min. (cm.)	Max. (cm.)		
1	1	H	H	M	Not available	Not available	Not available	Not in community watershed
1	2	H	H	M	Not available	Not available	Not available	Not in community watershed
1	3	H	H	M	Not available	Not available	Not available	Not in community watershed
2	1	H	H	M	Not available	Not available	Not available	Not in community watershed
2	2	H	H	VH	Not available	Not available	Not available	Not in community watershed
3	1	H	H	M	Not available	Not available	Not available	Not in community watershed
3	2	H	H	M	Not available	Not available	Not available	Not in community watershed
Comments:								
As result of safety concerns, soils information was not gathered for blocks within this TSL, however inferences were made using information from adjacent blocks from previous timber sales and visual observations.								
As result of soil hazard determinations, all SU's have a maximum allowable soil disturbance limit of 10% of the net-area-to-be-reforested (NAR), other than SU 2 of TA904-2 that has a maximum allowable soil disturbance limit of 5% as result of a very high risk of soil displacement.								

1(i). WINDTHROW ASSESSMENT
<p>This TSL has been impacted by wildfire of varying severity. In areas of greater fire severity, root systems have been burnt out resulting in highly unstable trees prone to windthrow. Windthrow has been observed within all three blocks of this TSL as direct result of fire damage.</p> <p>Due to wildfire damage, windthrow risk is high for all blocks within this TSL.</p> <p>For SU's where dispersed retention is prescribed, retention is to focus strictly to windfirm species (Lw and Fd) with minimal structural damage and ≥50% intact root systems.</p>

1(j). WATERSHED / HYDROLOGICAL ASSESSMENT
<p>This TSL is not within a community watershed or domestic watershed. No hydrological assessment is required.</p>

1(k). WILDLIFE ASSESSMENT
<p>WHAs: No blocks or road sections within this TSL overlap any established wildlife habitat areas (WHA).</p> <p>Wildlife Habitat Features: No wildlife habitat features designated under Ministerial Order M213 “Wildlife Habitat Features in the Kootenay Boundary Region” were observed within the TSL at time of layout.</p> <p>Caribou: Blocks and road sections forming this TSL are within area designated as provincial Caribou “Matrix” habitat. The document “Interim Guidance for Operating in Southern Caribou Core and Matrix Habitat- BCTS Kootenay Business Area” provides guidance for when working in matrix habitat. Suggested practices include block aggregation, creating larger blocks, and increasing the frequency of larger patches. As this TSL is to salvage timber damaged by wildfire, larger blocks are planned creating large areas of early seral habitat with reduced cover for elk, moose, and deer consistent with these guidelines. No specific management practices in addition to what is stated in this site plan</p>

are required.

Grizzly Bear: This TSL is outside of any WHA or specified area for grizzly bear. No specific measures apply. Despite this, for the entirety of the TSL, where possible hedging of green vegetation such as alder and advanced regeneration ≥ 1.3m tall is to be left along permanent road sections to provide visual screening into harvested areas. The exception is on landing locations. Roadside decking is to be avoided where such vegetation exists.

Course woody debris is to be left in all SU's to provide habitat for insects and possible foraging for grizzly bears and to meet FSP requirements for CWD. Operators are to leave large diameter (>20cm dbh at one end and 2m min length) non-merchantable logs onsite (min 4 pieces/ha).

Fish Species: Fish are present downstream of the TSL. Operations must be monitored for the presence/occurrence of sedimentation resulting from road construction and if necessary corrective actions taken to ensure that sediment is not transported downstream to fish bearing waters.

Ungulate Winter Range: No blocks or road sections within this TSL are within designated ungulate winter range as established by UWR Order U-4-008.

Migratory Birds

GIS mapping of the risk of nesting by migratory birds developed for the East Kootenay ranks the blocks in this TSL as follows:

- Block 1- Rank 5 (High)
- Block 2- Rank 4 (Moderately High)
- Block 3- Rank 5 (High)

Rankings are consistent with the Density Matrix and onsite field stand conditions.

As per the developed Migratory Bird Strategy, rankings do not apply to wildfire damaged areas. Consistent with the strategy, where appropriate patches of lightly damaged timber will be retained through WTRAs and dispersed retention of lightly damaged windfirm single trees or groups prescribed.

If a stick nest of a migratory bird is encountered during operations within the regional nesting period (mid-April to Mid - August) or the nest is active outside of the regional nesting period, operations in vicinity of the nest **must stop** and a work around must occur with guidance from BCTS staff or a professional biologist. Also **work must stop** and BCTS contacted if any nest considered a wildlife habitat feature is encountered. This includes nests of:

- A bald eagle
- An osprey
- Flammulated Owl
- Western Screech Owl
- Great Blue Heron
- Lewis's woodpecker
- Williamson Sapsucker

Nests considered wildlife habitat features by Ministerial Order M213 **must not** be rendered "ineffective" as result of forestry operations.

1(l). FISHERIES ASSESSMENT

This TSL does not overlap a fisheries sensitive watershed. No assessment is required.

1(m). SPECIES AT RISK ASSESSMENT

No species at risk or their habitat are known to be present within this TSL. No species at risk were observed during layout.

Mapping by the BC Conservation Data Center does not indicate any overlap of the TSL with the habitat of provincial species at risk or of concern. There is no overlap with federally listed critical habitat.

No species of management concern nor their habitat were observed.

In the event that a known species of risk or of management concern is observed or encountered at time of operations, the following notification process is to be followed:

Notify BCTS Project Supervisor ASAP upon sighting or discovery of nest, den, or other wildlife habitat feature.

- For all observations note:
 - Provide location of the observation (GPS coordinates)
 - Date of observation
 - Species or detail on the feature observed
 - If specific animal, the number of individuals seen or heard
- If possible also provide:
 - Name and contact info of observer

- Habitat (plant or special features of observation location)
- Land status of observation (Crown, private)
- Adjacent landscape (disturbance, roads)
- Condition of habitat
- Health of the species observed (live, dead, injured/sick). Take a picture if possible.
- Forward all info to BCTS supervisor.
- BCTS project supervisor and staff will recommend appropriate site level measures which will normally involve engaging a qualified professional to indicate appropriate course of action.

1(n). OTHER ASSESSMENTS
<p>No other assessments are required for this TSL.</p>

2. RESERVE / RETENTION INFORMATION and PAS / TAS SUMMARY

2(a). WTRAs (Inside or attributed to the block)				
Block	I.D.#	Area	Inventory Label	Description
1	1	0.85ha	Lw6PI4	Reserve consists of a lightly damaged stand that underwent low-intensity surface fire. Older Lw likely to survive providing ongoing forest cover and seed source. PI expected to die, however will leave temporary vertical structure and ongoing input of coarse woody debris (CWD).
1	2	1.26ha	Sx7BI3	Consists of a burnt stand subject to crown fire. All trees dead or dying. Patched out due to presence of several NCD's. Ground too wet to harvest. High windthrow risk due to fire damage.
1	3	0.36ha	PI8Lw2	This reserve has undergone crown fire. 100% mortality anticipated. This reserve encompasses a steep slope extending down to an S6 stream at the toe. Operationally difficult for harvest. High windthrow risk due to fire damage.
1	4	1.23ha	Sx3BI3PI3Lw3	Consists of a lightly burned mixed stand. 65% crown closure. High windthrow risk especially at edges. Reserve contains a small unclassified wetland.
1	5	0.34ha	BI5Sx3At2	Encompasses a small section of Stream 2 Reach 1 (s6) as well as several NCDs. Too wet for machinery. Overstory trees have been subject to crown fire so mortality expected. Trees may be windthrown providing ongoing CWD inputs.
1	6	17.7ha	BI8Sx2	BI lead stand with minimal fire damage. CC>40%. The stand is a receiving site with saturated soils and numerous NCDs. Several streams also flow through this stand. Fire damage mostly limited to light bark scorching at base of trees. Often only one side scorched. Many trees may survive. A small portion of the reserve encompasses burned, dead BI. Included as some standing water was observed and due to snowpack unsure if wetter soils occur throughout this stand type.
1	7	1.23ha	Sx lead	Encompasses a fire damaged stand with variable damage severity. Heavy windthrow at time of layout. A stream flows through this stand.
2	1	0.13ha	Sx5BI5	Encompasses unburned timber around Reach 1 (S6) at possible reach break.
2	2	0.45ha	Sx8BI4(Lw)	Encompasses an unburned patch around Reach 2 with braided ncds throughout.
2	3	0.57ha	Sx6BI3(Lw)	Encompasses inoperable terrain on opposite side of reach 6. Stand has been destroyed by fire. Provides limited cover and ongoing CWD inputs. Windthrow anticipated. Some surviving ground vegetation in wetter areas.
2	4	0.73ha	PI5Sx2Lw2(BIFd)	Encompasses slope on opposite side of reach 6. Stand approximately 70% damaged by fire. Protects segment of S6 reach.
2	5	2.52ha	Lw(SxPI)	Timbered patch on steep slope. Trees 30+m tall. Partially damaged by fire. Trees will provide vertical structure and possible snags for wildlife. Added via LIDAR.
3	1	0.46ha	SxLwBIFd	Reserve has undergone light intensity surface fire. High windthrow hazard to workers. Mature Lw will likely survive. WTRA established to protect Reach1.
3	2	3.16ha	SxLwBIFd	WTRA has been impacted by wildfire. Sx and BI dead or dying. Mature Lw may survive. This WTRA contains multiple large boulders that would be a hazard to machinery. Multiple watercourses also come into this WTRA.

3	3	7.49ha	PIlwSx(BI)	WTRA has been impacted by wildfire. Crown fire. Heavy mortality. This WTRA encompasses a dry slope with rocky soils and large boulders unsuitable for machinery and reforestation. Will provide limited cover and ongoing CWD inputs. Representative of pre-harvest stand conditions.
3	4	7.69ha	SxBILwFd(PI)	Encompasses a burnt stand subjected to crown fire. Heavy mortality. Windthrow expected. WTRA protects Reach9 (S4) and Reach 8.

Reserve Other (Does not contribute to WTRA requirements)

Block	ID	Area	Inventory Label	Description
1	RES1	0.54ha	PI100	Consists of a burnt stand (crown fire) with heavy rock and talus outcrops. 100% mortality. Trees will provide ongoing temporary cover and CWD inputs. Area not suited to reforestation due to high amount of rock and low moisture. High windthrow risk due to fire damage. This reserve also encompasses a small unclassified wetland used by ungulates and other wildlife.
1	RES2	1.75ha	PI100	Consists of a small stand of small diameter PI unsuitable for harvest as sawlogs or pulp. This stand has undergone crown fire so all trees are dead. This stand will provide limited cover for wildlife and ongoing CWD inputs. High windthrow risk due to fire damage.
2	RES1	0.22ha	Sx5BI5(Lw)	Encompasses a patch of unburned timber above the road.
2	RES2	0.50ha	PI8Lw2(SxBI)	Encompasses a burned PI stand on steep slopes. Contains large boulders. 100% mortality providing limited forest cover and ongoing CWD Inputs.
2	RES3	0.19ha	PIlwSx(BI)	Encompasses inoperable terrain opposite Reach 6. Stand subjected to crown fire. 100% mortality. Will provide limited cover and ongoing CWD inputs.
3	RES1	2.56ha	PI9Lw1	Fire-damaged PI leading stand with heavy boulder coverage.
3	RES2	0.69ha	PI8SxLw(BI)	Encompasses steep slope with heavy boulder coverage. Boulders render the slope inoperable to machinery and pose a hazard.

2(b). Group WTRA Calculations and PAS / TAS Summary (To be retained on the first block of the licence only)									
(Double-click on Excel spreadsheet below to enter data)									
Block #	Gross Area ¹ (TAUP)	Total Block Area ² (Ha.)	Total NAR Area ³ (Ha.)	Total WTRA Area ⁴ (Ha.)	WTRA %	Total PAS Area ⁵ (Ha.)	PAS %	Total TAS Area ⁶ (Ha.)	TAS %
1	226.2	226.2	194.2	23.0	10.2%	6.6	2.9%	1.1	0.6%
2	56.6	56.6	47.6	4.4	7.8%	3.8	6.7%	1.2	2.5%
3	71.2	71.2	47.8	18.9	26.5%	1.4	2.0%	0.0	0.1%
TOTAL: (all Blocks)	354.0	354.0	289.6	46.3	13.1%	11.8	3.3%	2.3	0.8%
Green Cells Auto-Calculate									
Notes: <ol style="list-style-type: none"> Gross Area (Total Area Under The Plan) = NAR + PAS + NP + WTRA + Reserves + Other. Total Block Area (Used for Calculating WTRA %) = NAR + PAS. Total NAR Area = Total Net Area to Reforest in the Block <u>including</u> TAS Area. Total WTRA Area = Total area in mapped patches + individual trees or clumps or patches (not mappable) converted to area on the basis of basal area retained as a proportion of the total basal area of the forest type. Total PAS Area = Total area of all Permanent Access Structures (e.g., roads, landings) within the Gross Area of the cutblock boundary. Total TAS Area = Total area of all Temporary Access Structures that will be rehabilitated post-harvest and reforested (part of the NAR). 									
Comments: (e.g., How dispersed retention contributes to WTRA%, if applicable, etc.)									
WTRA requirements will be met through spatially identified group reserves. For all blocks in this TSL, the cut-block level WTRA retention requirement of 3.5% has been exceeded. The required TSL-level WTRA percentage of 7% has also been exceeded.									

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3. ACCESS SUMMARY

3(a). PERMANENT ACCESS STRUCTURES (Double-click on Excel spreadsheet below to enter data)														
Permanent Access Calculations (Green Cells Auto-Calculate)														
		Roads				Trails				Landings			Totals	
Block #	Gross Block Area	Rd. Name	Length (m.)	Width (m)	Area (Ha.)	Trail Name / #	Length (m.)	Width (m)	Area (Ha.)	# Landings	Size (Ha.)	Area (Ha.)	Total Area	% of Total Blk Area
1	226.2	Bear West	1657	10	1.66		0	0	0.00	0	0	0.00	1.66	0.7%
		Bear Main	380	10	0.38		0	0	0.00	0	0	0.00	0.38	0.0%
		Hornet	410	10	0.41		0	0	0.00	0	0	0.00	0.41	0.2%
		CR0108.13 Den	1120	10	1.12		0	0	0.00	0	0	0.00	1.12	0.5%
		CR0108.13 Den	420	20	0.84		0	0	0.00	0	0	0.00	0.84	0.0%
		CRR23536sec16seg01	158	10	0.16		0	0	0.00	0	0	0.00	0.16	0.0%
		landings					0	0	0.00	14	0.15	2.10	2.10	0.0%
TOTALS:													6.67	1.4%
Block #	Gross Block Area	Rd. Name	Length (m.)	Width (m)	Area (Ha.)	Trail Name / #	Length (m.)	Width (m)	Area (Ha.)	# Landings	Size (Ha.)	Area (Ha.)	Total Area	% of Total Blk Area
2	54.2	Bear West	916	10	0.92		0	0	0.00	0	0	0.00	0.92	1.7%
		Bear West	660	5	0.33		0	0	0.00	0	0	0.00	0.33	0.0%
		CRR23526sec03seg01	614	10	0.61		0	0	0.00	0	0	0.00	0.61	1.1%
		CRR23526sec02seg01	386	10	0.39		0	0	0.00	0	0	0.00	0.39	0.0%
		CR0108.10 Mule	463	10	0.46		0	0	0.00	0	0	0.00	0.46	0.9%
		landings	0	0	0.00		0	0	0.00	7	0.15	1.05	1.05	1.9%
TOTALS:													3.76	5.6%
Block #	Gross Block Area (TAUP) (Ha.)	Rd. Name	Length (m.)	Width (m)	Area (Ha.)	Trail Name / #	Length (m.)	Width (m)	Area (Ha.)	# Landings	Size (Ha.)	Area (Ha.)	Total Area	% of Total Blk Area
3	71.2	CRR23526sec03seg02	760	10	0.76		0	0	0.00	0	0	0.00	0.76	1.1%
		landings			0.00		0	0	0.00	3	0.15	0.45	0.45	0.6%
TOTALS:													1.21	1.7%
Comments:														
PAS is within the permissible limit of 7% of the gross block area for all blocks within this TSL. All landings are to be treated as permanent access structures														

4. OTHER SUPPORTING INFORMATION

4(a). HLP / FSP CONSIDERATIONS
Range Comments:
Development of this TSL will not have any adverse impact on any known natural range boundaries.
No range infrastructure (fences, corrals, cattleguards) are present within the area of the TSL.
Several active range tenures overlap the TSL: RAN073763 RAN077979 RAN074601
Recreation Comments:
Development of this TSL will not have adverse impact on any authorized recreation resource. No recreation features are present in the TSL.
Invasive Species Comments:
As the TSL has been impacted by wildfire, it is highly susceptible to colonization by invasive plant species. Efforts must be made to limit introduction and spread.
The following measures to prevent spread of invasive plants will apply to agreement holders carrying out harvesting and road building activities:
1. Vehicles, mechanized equipment; and new infrastructure brought onto site such as culverts, bridges, and cattleguards must be inspected for the presence of soil and plant material, including documentation on inspection forms, prior to being transported to or from worksites. If present, soil and plant materials are to be removed.
2. In order to reduce seedbeds available for invasive plants, grass seed exposed mineral soils on: cut and fill slopes of new roads; new trails and landings; and deactivated or rehabilitated areas; during the first available spring or fall and not more than 12 months following mineral soil exposure. This is also required to mitigate erosion as soil erosion hazard is high.
3. Where grass seeding is undertaken, utilize high quality seed (a mix recommended by a MFLNRO range specialist, if available; otherwise Canada Common #1 Forage mix or better grade) to ensure that the introduction of invasive plant seed is minimized.
4. Personnel completing post-harvest surveys will be required to identify and report all new observed infestations.
Guide Outfitters / Trappers Comments
Guide Certificate: 400900
Trapper: TR0426T012
Other Resources Comments
No other resources are known to be present within the area covered by this TSL.

4(b). ADDITIONAL COMMENTS

5. ADMINISTRATION

☒ ORIGINAL	☐ AMENDMENT#	
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RPF PRINTED NAME	RPF SIGNATURE and SEAL
Chris Lovesey	 
DATE SIGNED	
June 24, 2021	
"I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the work"	