

Existing Roads, Rail and Utilities Corridors

Provincial and corporate datasets were used to determine the location and type of existing road and infrastructure features. Many of these linear features have already been captured as polygons in the SFVI inventory. For the remaining features, buffer polygons were created and these areas removed from the forested landbase. The buffer width used for each of these features is summarized in Table 1 below.

Table 1 Existing roads, rails, and utility corridors.

Corridor Type	Class	Total Length (km)	Length not in SFVI (km)	RoW Width (m)*	Gross Area (ha)	Net Area Removed (ha)
Road	Highway	43.5	0.9	40	3.4	
Road	Public - 2 Lane	80.0	25.0	40	100.5	
Road	Public - 1 lane	68.5	47.2	20	94.5	
Road	Industrial Class 2	4.1	4.1	5	2.0	
Road	Industrial Class 3	22.5	22.5	5	11.2	
Powerline	All	51.5	51.5	30	154.6	
Railway	Abandoned	39.6	39.6	5	19.8	
Pipeline	All	22.6	3.0	0	0.0	
Total		332.3	193.8		386.0	

* Only roads not in SFVI are buffered

Seismic Lines and Other Trails

The available dataset for seismic lines and trails is not reliable and significantly overestimates the length of these features that would have an impact on the timber harvesting landbase. Most of these features are old and overgrown and cannot be identified on the ground. Therefore, no landbase reductions have been made for these features.

Steep Slopes

Although areas with steep slopes are technically available for harvest, they present environmental and safety hazards for forestry operations. Therefore, for the purpose of forest modelling, stands with SFVI attribute "TOPO_CLASS" values of S (steep) were classified as inoperable. The gross area classified as inoperable is 3,501.3 hectares.

Isolated Patches (Uneconomic)

The complexities of forest management objectives, operational limitations and geography often create isolated stands that are too small and/or too distant from other stands to be economically or logistically feasible to harvest. The threshold at which a stand becomes isolated is variable by location and over time. The criteria used to identify isolated stands was contiguous patches of productive forest less than 5 hectares in size, and greater than 100 metres from other contributing forest. These isolated patches were removed from the net landbase, but were retained in the MFLB as they contribute to other forest objectives.

Riparian Buffers (Lakes, rivers, streams)

Although many of the lakes, rivers and streams within and adjacent to the MLOSB TSL are spatially catalogued, classification data for these riparian features is limited. To ensure a reasonable approximation of the area required for riparian buffers, MLOSB staff reviewed the spatial data and assigned buffer widths of 90, 30, and 15 metres based on their knowledge of the area. Table 2 summarizes these assignments.

Table 2 Riparian Buffers

Buffer Width (m)	Makwa/Bronson Parcel	Green Lake/Sled Lake Parcel	Total Area (ha)	Effective Netdown Area (ha)
90	Berry Lake, Little Berry Lake, Muckingham Lake, Bronson Lake, Sidney Lake, Hewett Lake, Exner Lake, Horsehead Creek	Sled Lake, Dore Lake, Name unknown Lakes (2), Green River, Beaver River, Waterhen River, Sled River	2295.4	
30	Bronson Creek, Pipestone Creek, Name unknown creek between Ministkwan and Hewett Lakes, various connecting streams	All other lakes without a 90 metre buffer, All streams	3068.8	
15	All other streams without a 90 or 30 metre buffer		957.3	
0	All other lakes without a 90 metre buffer			
Totals			6,321.5	

Abiotic Disturbances

- Windthrow old : 92.5 ha (gross), 75.9 ha (forested)
- Windthrow new: 125.4 ha (gross), 91.1 ha (forested)
- Flood_old: 105.8 ha (gross), 72.1 ha (forested)
- Flood_new: 393.8 ha (gross), 212.7 ha (forested)

Ignore

Reforestation

- Confirm use of previous stand type
- Density class "C" for reforested stands

1995 Fire Update – inventory mistyping

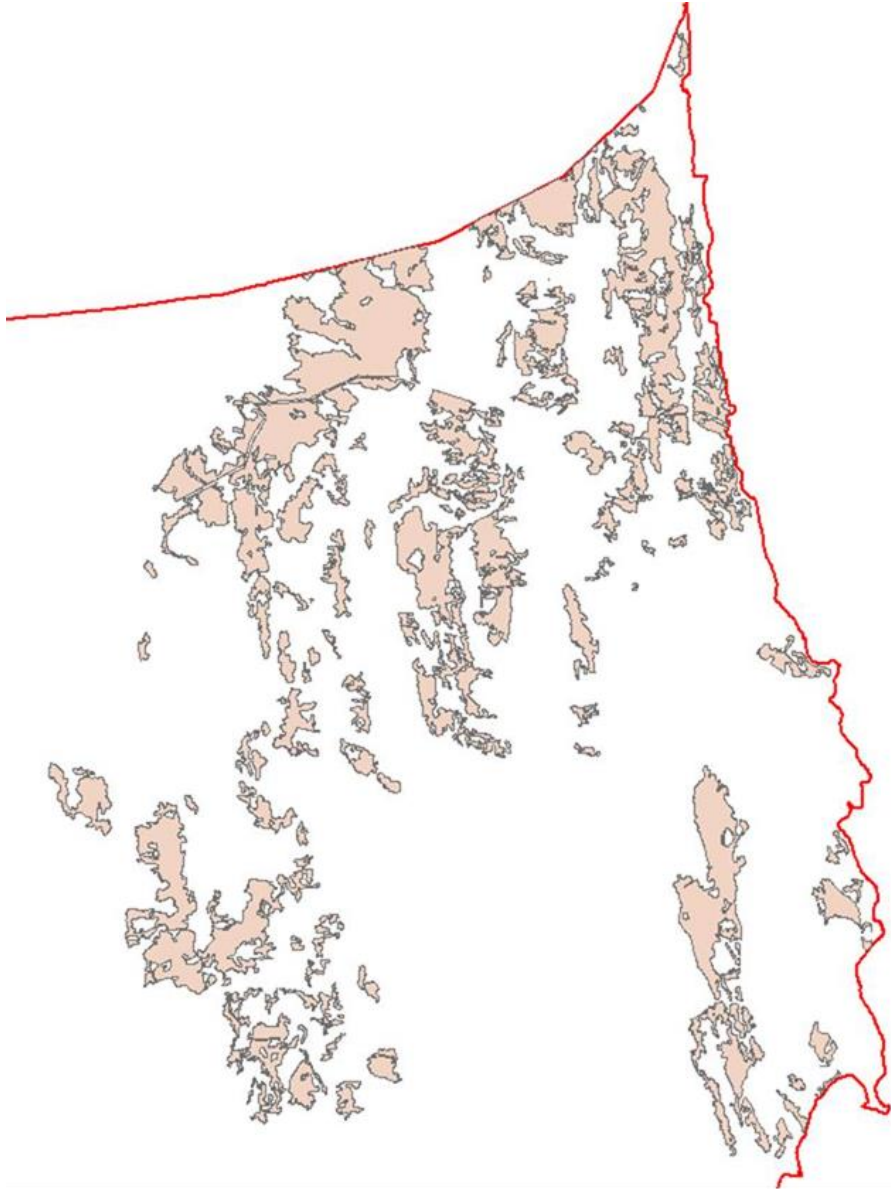
- SFVI classified 6,444 ha as non-forest polygons (BSH, GRS, OTH, OMS, TMS), where previous UTM inventory classified as forested
- Tolko has observed that these non-forested areas are growing trees
- GIS exercise to visually eliminate obvious slivers

Summary by Species

Previous UTM Species	Candidate Area (ha)	Accepted Area (ha)	% Accepted
Blank	612.0	597.6	97.6%
BS	3844.9	3447.5	89.7%
JP	679.1	655.5	96.5%
TA	855.4	820.7	95.9%
TL	21.0	2.9	13.8%
WB	6.7	6.1	91.0%
WS	424.6	409.1	96.3%
Total	6443.7	5939.4	92.2%

Size Distribution of Accepted Edits

Polygon Size	# of Polygons	% by Number	Area (ha)	% by Area
< 5	63	35.0%	139.9	2.4%
5 - 9.9	38	21.1%	275.8	4.6%
10 - 19.9	27	15.0%	371.0	6.2%
20-49.9	27	15.0%	885.4	14.9%
50 - 99.9	16	8.9%	1172.5	19.7%
100-149.9	2	1.1%	255.4	4.3%
150-199.9	1	0.6%	187.5	3.2%
200-299.9	1	0.6%	206.6	3.5%
300-399.9	1	0.6%	386.0	6.5%
400-499.9	1	0.6%	405.5	6.8%
500-599.9	3	1.7%	1654.0	27.8%
All	180	100.0%	5939.6	100.0%



Non Commercial Stands

- <= 25% crown closure at maturity (minimum harvest age)
- Not capable of reaching 15 m in height or 60 m³/ha within 100 years
- Tamarack leading

Other Project Components

Development Report

- Waiting for final landbase definition to re-run final yield tables

VOITs (70% complete, remainder is mainly associated with outputs from model runs):

- VOITs and SFI evidence package indicators were matched to show how Tolko has already been meeting some of the VOITs through their forestry certification
- Input required from MoE and Planning Team:
 - need the economic multiplier from the Ministry of Economy for employment/m³ of volume harvested? This is tied to Indicator #35, Economic contribution from forest industry associated with MLOSB TSL
 - for objective 1.2.1.1 (wildlife habitat), MoE direction is that at least three species should be chosen and at least one species should meet a Social requirement, one associated with Economics and one for SAR. Examples would be Marten for social (eg., indicator for health of forest), Moose for economic (eg., food source for first nations, source of income for outfitters and adding to local economy with hunters visiting the area), and woodland caribou for SAR. Need to discuss.

SGR's (60% complete, need feedback from Forest Analyst re: Yield Groups):

- We've identified Nine (9) silviculture ground rules for future forest conditions:
 - 1-H-pB
 - 2-H-HW
 - 3-HS-HjP
 - 4-HS-HsP (sP - softwood species)
 - 5-SH-sPH
 - 6-S-jP
 - 7-S-jPbS
 - 8-S-wS
 - 9-S-bS

next items to confirm are vol/ha @ rotation, treatment options, spp, and stocking (Forsite may contact MoE regarding calculation of stocking parameters)