

Slave Lake Pulp Corporation

2000 Detailed Forest Management Plan

Appendix H - Timber Supply

The process used to assess the sustainable harvest level for the FMA is described in this section. The determination of the net landbase, development of growth and yield estimates and harvest simulation analyses are summarized. Portions of this appendix are taken from a series of forest inventory reports prepared by Silvacom Ltd.

H.1 Net Landbase Determination

H.1.1 Inventory - Original Slave Lake Pulp FMA Area (FMU'S S1S {2 TWPS}, S2S & S6S)

H.1.1.1 AVI Inventory

Slave Lake Pulp's original FMA inventory was derived from medium scale (1:20,000) black and white aerial photography acquired in 1991. The inventory was consistent with Alberta Vegetation Inventory (AVI) version 2.1 standards. Existing small scale (1:60,000) black and white photography flown in 1982 and 1983 by LFD, was acquired for the development of orthophotos used in the inventory process. This inventory was audited and accepted by LFD.

H.1.1.2 Inventory Updates

Aerial photographs at a scale of 1:60,000 were acquired in 1997 and used in the creation of new digital orthophotos. The orthophotos were used to completely update all cutblocks and landuse activities throughout the original FMA area.

Cutblock update boundaries from all stakeholders were acquired to reflect recent harvesting activities in the area.

Boundaries of recent fires (post-inventory) were also acquired from the Alberta government and used to update the inventory. The 2001 Chisholm fire was updated with a government class E fire coverage.

H.1.2 Inventory - Slave Lake Pulp FMA Expansion (FMU S1S)

H.1.2.1 AVI Inventory

The inventory for the FMA expansion area (and non-FMA portion of S1) was derived from medium scale (1:15,000) black and white aerial photography acquired in 1997 and 1998. Small scale (1:60,000) black and white photography was flown in 1997 for the development of digital orthophotos used in the inventory process. This inventory was audited and accepted by LFD in accordance with AVI standards version 2.1 on July 20, 2001.

H.1.2.2 Inventory Updates

Cutblock update boundaries from all stakeholders were acquired to reflect recent harvesting activities in the area.

Boundaries of recent fires (post-inventory) were also acquired from the Alberta government and used to update the inventory.

Slave Lake Pulp Corporation 2000 Detailed Forest Management Plan

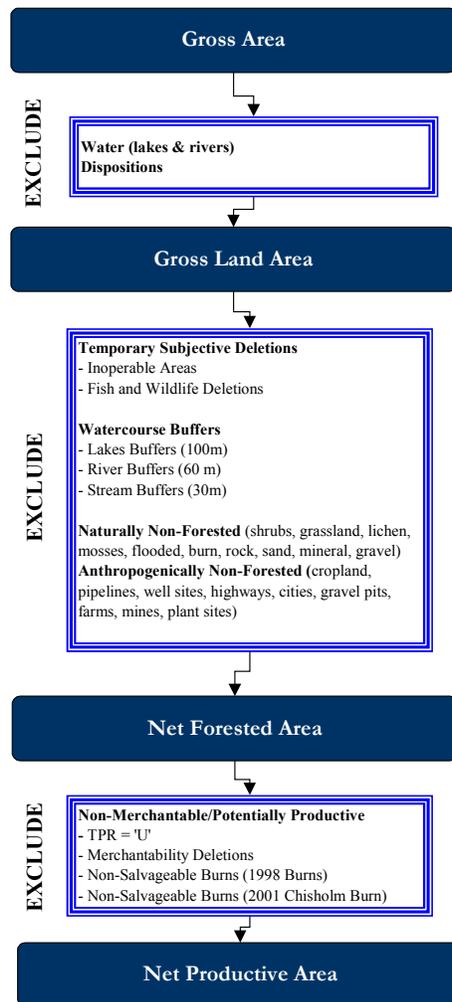
H.1.3 Non-FMA Quota Areas (FMU'S S2 & S6) – Phase 3 Inventory

In cases where AVI data was unavailable, for portions of FMU's S2 or S6, Phase 3 inventory data was used in the landbase determination process.

H.1.4 Gross Landbase

The extent of the landbase under consideration includes the FMU's within the Slave Lake Pulp Forest Management Area (S6S, S2S and S1S) as well as the non-FMA portions of FMU's S2 and S6 (MITSUE). AVI was available for all FMU's except portions of S2 and S6 for which Phase 3 data was used. The following flow chart outlines the approach taken in assessing the net landbase.

Figure H-1: Net Landbase Flow Chart



Slave Lake Pulp Corporation

2000 Detailed Forest Management Plan

H.1.5 Net Landbase Estimates

Deductions from the “gross” area were calculated in the sequence shown (i.e. the hierarchy of decision rules produced a cumulative, non-duplicating result). Figure 8-2 illustrates the age class distribution for the residual “net productive landbase”. A map identifying the landbase categories is provided on the page 8-5.

Table H-1: Net Landbase Summary

Landbase Category	Total Area (ha)
Landscape Area	655,789
Protected Areas	12,603
Gross Area (FMA & Quota)	643,186
Water	2,440
Excluded Dispositions	5,269
Gross FMA Land Area	635,477
Temporary Subjective Deletions	
<i>Inoperable Area</i>	29,957
<i>Fish and Wildlife Deletions</i>	4,342
<i>Sub-Total</i>	34,299
Watercourse Buffers	
<i>Lake Buffers (100m)</i>	1,069
<i>River Buffers (60m)</i>	14,597
<i>Stream Buffers (30m)</i>	13,347
<i>Sub-Total</i>	29,013
Non-Forested	
<i>Natural Non-Forested</i>	31,715
<i>Anthropogenic Non-Forested</i>	9,476
Net Forested Area	530,974
Non-Merchantable/Potentially Productive	
<i>Unproductive Timber Productivity Rating</i>	37,096
<i>Merchantable Deletions</i>	13,418
<i>Non-Salvageable Burns (1998, 1999)</i>	27,096
<i>Non-Salvageable Burns (Chisholm)</i>	17,984
<i>Sub-Total</i>	95,594
Net Productive Area	435,380

Slave Lake Pulp Corporation 2000 Detailed Forest Management Plan

Figure H-2: Net Area Age Class Distribution

