

Chapter 1: Introduction to the Plan

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Appendix 1: Forest Management Plan - Terms of Reference July 29, 2019

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1. INTRODUCTION

Chapter 1 of this Forest Management Plan provides an overview of the entire Forest Management Plan for the area of Forest Management Licence #3.

1.1 FOREST MANAGEMENT PLAN CHAPTERS

An overview of all Forest Management Plan (FMP) chapters are described in Table 1.1. Appendices (if any) are listed under each chapter.

Table 1.1 Overview of the Forest Management Plan chapters and Appendices.

Chapter Number	Chapter Title	Description
Ch. 1	Introduction APP 1: Forest Management Plan Terms of Reference	This chapter is an introduction and overview of the Forest Management Plan. Signed Terms of Reference) is the blueprint (specifics) for developing the 20-Year Forest Management Plan for Forest Management Licence #3.
Ch. 2	Past Forest Management Activities APP 1: MAP - Roads and Water Crossings in Forest Management Licence #3 APP 2: MAP -Area Harvested in Forest Management Licence #3 (2006 to 2019) APP 3: MAP -Renewal Activities in Forest Management Licence #3 (2006 to 2019)	(2006 to 2019) roads, crossings, harvest, renewal, research, and monitoring APP1 1 to APP 3: 150,000 scale maps D-size (24" X 36")
Ch. 3	Current Forest Conditions	Ecological – Biophysical descriptions Socio-Economic profile Land Use overview
Ch. 4	Information Sharing & Engagement APP 1: Letters sent to all communities APP 2: Values survey	Communication Plan Summary of communications by community Record of Communications
Ch. 5	Scenario Planning APP 1: MAP - Baseline Scenario - Spatial Harvest Schedule maps– planning period 1 (1 to 10 years) and planning period 2 (11 to 20 years) APP 2: MAP - Bird Species-at-Risk Habitat Map – Canada warbler – all scenarios	Creation and sustainability evaluation of the Baseline and Moose Emphasis scenarios. Choice of 'Preferred Management Scenario' Appendices 1 to 8 are digital maps D-size (24" X 36").

Chapter Number	Chapter Title	Description
	APP 3: MAP - Indicator Bird maps – all Scenarios APP 4: MAP - Baseline Scenario – Winter moose habitat maps APP 5: MAP - Baseline Scenario – Summer moose habitat maps APP 6: MAP - Moose Emphasis Scenario - Spatial Harvest Schedule – planning period 1 (1 to 10 years) and planning period 2 (11 to 20 years) APP 7: MAP - Moose Emphasis Scenario – Winter moose habitat maps APP 8: MAP - Moose Emphasis Scenario – Summer moose habitat maps APP 9: Objectives mutually chosen to rank the two scenarios	Appendix 9 is letter size (8.5" X 11")
Ch. 6	FMP Implementation APP 1. MAP - Harvest operating areas – Spatial Harvest Schedule - Moose Emphasis Scenario (D-size Map (24" X 36")) APP 2. Planning Standard Operating Guidelines APP 3. Biodiversity Standard Operating Guidelines APP 4. Forest Roads and Crossings Standard Operating Guidelines APP 5. Forest Operations Standard Operating Guidelines APP 6. Silviculture Standard Operating Guidelines APP 7. Softwood Silviculture Standard Operating Procedures	How the strategic plan (Moose Emphasis scenario) will be implemented on the ground.
Ch. 7	Monitoring Framework APP 1: Permanent Sample Plot Procedures Manual APP 2: Pre-Harvest Survey Manual APP 3: Harvesting and Roads Monitoring/Inspection form APP 4: Water Crossing Checklist form APP 5: Road decommissioning table APP 6: SFI Certification audit summary	Future monitoring and joint research efforts APP 1 to 6 are all documentation of monitoring related manuals, reports, or forms.

1.2 FOREST MANAGEMENT PLAN - TERMS OF REFERENCE

The Forest Management Plan 'Terms of Reference' is described in this section. The Plan proponent (Louisiana-Pacific Canada Ltd.) is the holder of Forest Management Licence #3. The 20-Year Forest Management Plan (FMP) will be guided by input received from Indigenous communities, stakeholders, environmental groups and the public.

The FMP Terms of Reference (ToR) was the blueprint for developing the 20-Year Forest Management Plan (FMP) for Forest Management Licence #3. The new 20-Year FMP included ecosystem values and was designed with a community-supported strategy to ensure the long-term conservation of moose populations. The benefits to moose management resulting from FMP development was discussed with the Provincial Wildlife and Fisheries Branch, Indigenous communities, and stakeholders.

The 20-Year FMP is for Forest Management Licence #3 (FML #3), which includes the Duck Mountain Provincial Forest and surrounding area. FML #3 is located mostly within the Boreal Plain ecozone with a small portion located in the Prairie ecozone.

The FMP Terms of Reference (ToR) began on Nov. 21st, 2014 with the creation of the FMP planning Team. The FMP planning team worked exclusively on the FMP Terms of Reference. The ToR was signed in Nov. 2017, after mutually agreeing to:

- ecological yield (volume) curves
- silviculture post-harvest transitions based on regeneration survey data
- reintegrating harvested areas in the productive land base (from Potentially Productive)

The FMP Terms of Reference were amended in June and July 2019 to specify wildlife species and wildlife activities within the FMP. The revised ToR was signed by Wildlife and Fisheries Branch, Forest and Peatlands Branch, and Louisiana-Pacific Canada Ltd. on July 29th, 2019. The final Terms of Reference (July 29th, 2019) is in Appendix 1.

1.3 FOREST MANAGEMENT PLAN - KEY CONCEPTS

Key concepts used in the development of this Forest Management Plan are described in the following sub-sections.

1.3.1. Sustainable Forest Management

Sustainable Forest Management (SFM) refers to management that maintains and enhances the long-term health of forest ecosystems for the benefit of all living things while providing environmental, economic, social and cultural opportunities and goods and services for present and future generations. Examples of SFM elements include: wetlands filtering water, carbon storage and sequestration in both uplands and wetlands, wildlife habitat, and biodiversity.

Sustainability in this Forest Management Plan refers to both sustainability over the term of the 20-year plan (2020 to 2040) as well as sustainability over two softwood rotations, which is 200 years. All modeling runs are projected over 200 years.

1.3.2. Ecosystem-Based Management

Ecosystem-Based Management (EBM) is an integrated, science-based approach to the management of natural resources that aims to sustain the health, resilience and diversity of ecosystems, while allowing for sustainable use by humans of the goods and services they provide (Kappel, 1994)

The working definition of EBM as defined under the Canadian Boreal Forest Agreement (Van Damme *et. al.* 2014) is as follows:

“A management system that attempts to emulate ecological patterns and processes, with the goal of maintaining and/or restoring natural levels of ecosystem composition, structure and function within stands and across the landscape.”

Focusing on individual pieces often compromises the whole ecosystem. By looking at whole ecosystems, we can better manage all values such as wildlife, water, recreation, and timber.

The concept of Ecosystem-Based Management can be applied to sustainable forest management in timber-producing forests, in some cases to address values that are like those held for protected areas. Ecosystem-based Management is already used by Parks Canada. Canada's national parks are explicitly mandated to engage in an ecosystem-based management approach. Parks Canada staff engage with land managers, owners, stakeholders and interest groups (public and private) outside park boundaries to coordinate management activities.

1.3.3. Climate Change – Adaptation

A climate change vulnerability assessment for Forest Management Licence #3 aims to evaluate the risks and opportunities, which a changing climate may impose on sustainably managing the forest currently and in the future. It will also forestry related risks from climate variability and extreme events.

Climate change adaptation efforts provide information that will allow climate change associated risks and opportunities, adaptation and/or mitigation measures to be mainstreamed into all aspects of the existing Sustainable Forest Management system. Best practices are in progress to assist with adapting to increasing climate variability and uncertainty.

1.3.4. Natural Range of Variability

The Natural Range of Variability (NRV) attempts to describe what the forest would look like without human influence. Wild fire, insects, wind throw, and disease are the natural disturbance agents in the forest. These natural stand-replacing events maintained young and old forest areas on the landscape.

In the boreal forest, wild fire and other disturbances have historically maintained ecosystems and their associated species. Therefore, NRV can be a historical tool that guides forest management. Natural Range of Variation (NRV) was a main ecological driver used to model and maintain the amount of mature and old seral stages on the landscape over time.

1.3.5. Species at Risk - Birds

There are listed species-at-risk birds in the FML #3 area. One bird (CAWA – Canada Warbler) has enough observations to create a new habitat model that didn't exist prior. LP is contributing to the management and hopeful recovery of the Canada Warbler, by maintaining a continuous supply of habitat over time.

1.3.6. Indicator Birds

Indicator bird species represent different niches of the forest ecosystems. Some birds' habitat requirements are indicative of certain conditions (*e.g.* old conifer forest, young hardwood). A suite of indicator birds was chosen to represent the entire range of forest ecosystems by age class, cover type, and interspersion.

1.4 FOREST ADMINISTRATION

Forest Management Licence Agreement #3 came into effect on September 21, 1994. The Forest Management Licence (FML) was allocated to the Company to ensure a long-term fiber supply for the operation of the Oriented Strand Board (OSB) mill located near Minitonas in the Swan River Valley. The FML Agreement can be extended and the licence renewed, subject to the faithful performance by the Company during the preceding period.

Forest renewal is an integral part of LP's commitment to responsible forest stewardship and forest management. Louisiana-Pacific has been assigned all obligations and responsibility with respect to forest renewal within FML #3. The FML Agreement states:

"The Company acknowledges its primary forest management and renewal responsibility by ensuring that all harvested areas within FML 3 are regenerated to approved Provincial Standards".

The newly-formed Mountain Forest Section Renewal Company has assumed the obligations and responsibilities for softwood renewal within FML #3, as of Jan. 1st, 2007. LP continued the hardwood renewal efforts within FML #3.

Louisiana-Pacific was issued an Environment Act Licence (No. 2191) dated May 27, 1996 to carry out forest management activities within the geographical boundaries of FML 3. The appeals process resulted in changes to the Environment Act License No. 2191, and Licence No. 2191E was issued and became effective on December 11, 1996. This licence expired January 1st, 2006.

A two-year extension (January 1st, 2006 until January 1st, 2008) was later granted, followed by annual extensions to the Environment Act Licence while Forestry Branch was reviewing the June 1st, 2006 submission of the 20 Year Plan for FML #3.

Louisiana-Pacific and approximately 35 Quota Holders harvest hardwood and softwood trees within FML #3. All forest management activities proposed within FML #3 described in this 20-Year Sustainable Forest Management Plan (SFMP) apply to both LP and the Quota Holders. Forest management activities include harvesting, road construction, access development, and reforestation. The Quota Holders are collectively organized as the Mountain Quota Holders Association which is managed by the single largest Quota Holder – Spruce Products Ltd.

1.5 CORPORATE OVERVIEW

Headquartered in Nashville, Tennessee, LP produces building products that are manufactured at facilities throughout the United States, Canada, Brazil and Chile. Louisiana-Pacific (LP) is a publicly traded multi-national company. It was founded in 1973 and is one of the leading manufacturers and distributors of premium building products in North America.

Louisiana-Pacific Corporation manufactures a wide variety of commodity and value-added specialty building products for retail, wholesale and homebuilding use. These building products include siding, orientated strand board (OSB) and engineered wood products.

LP is partnered with the Sustainable Forestry Initiative. The Sustainable Forestry Initiative (SFI) is an independent, nonprofit organization dedicated to promoting sustainable forest management. SFI's strategy is to provide solutions-oriented forest-based conservation and community initiatives through deep collaboration and continual learning.

More than 300 million acres of forestland across the U.S. and Canada, and over 100 companies responsible for fiber production, are certified to SFI standards. The SFI label is widely recognized in the marketplace – for example, SFI certified products are accepted by the U.S. Green Building Council for wood products in its Leadership in Energy and Environmental Design (LEED) rating system, which enables LP certified products to be eligible for LEED credits.

A critical component of the work of SFI is ongoing forest conservation research and continual improvement in forest management practices. Since 1995, SFI program participants have directly invested nearly \$1.6 billion in forest research.

LP's goal is to be a respected, profitable and growing manufacturer of building products that is the supplier of choice because of our quality products and reliable services, and the employer of choice because we are a safe, ethical, fun, challenging and rewarding place to work.

The corporate structure flows down from the CEO to general manager siding to siding VP of manufacturing to director of manufacturing regional operations to Minitonas mill plant manager (Kevin Betcher) to Area Forest Manager for Swan Valley (Todd Yakielashek). The Swan Valley Forest Resources Division (FRD) has 10 employees working in the Swan River office managing forestry operations for LP.

LP's mandate is a focus on engineered wood products which demonstrates our commitment to builders. It also drives our ability to meet the needs and demands of builders with products that perform—reducing construction costs, minimizing waste, increasing energy efficiency, fostering safe home environments, and creating flexible architectural and design possibilities.

From our company to our products and programs, LP performs for builders—as well as for the architects, specifying engineers, dealers and distributors who support them—making it possible to build better homes.

Safety is a core value at LP, and we believe no one should get injured while at work. Our innovative safety and health processes are at the forefront of everything we do. We start every meeting, every mill tour, and every morning with a message about safety. Employee, contractor and guest safety is our top priority every day.

At LP, we strive to manage the environmental footprint of all our operations, and we take all of our environmental responsibilities seriously. All relevant policies, management systems and compliance efforts are overseen by the LP Environmental, Quality and Compliance Committee of the Board. The Committee receives quarterly written reports directly from functional leaders responsible for LP's environmental programs.

We have a company-wide Policy on Environmental Stewardship which is available publicly and outlines our commitment to meet the strictest standards in natural resource management and conservation, and to seek continual improvement in our environmental programs and employee awareness.

1.6 FACILITY DESCRIPTIONS

The Spruce Products Ltd. sawmill has been operating in Manitoba since 1942, and is a producer of softwood dimensional lumber, wood chips, wood shavings, and softwood pellets for the heating market. Their mill is north-west of the town of Swan River and is the largest softwood sawmill operating in Manitoba.

The mill east of Minitonas has been in operation since 1996. The mill produced Orientated Strand Board (OSB) until 2015. In 2015 the mill was converted to produce sheet siding, a value-added product, which uses OSB as the base. The mill has added several additional products, such as Weather Logic and fence board blanks, since the conversion. In late 2018 the mill did another conversion to allow production of OSB as well as siding. This gives the mill the ability to meet demands for OSB and operate when siding orders slow. Markets for the products produced are variable and change from month to month.

1.7 LITERATURE CITED

- Kappel, C.V. 1994.** EBM definition Oct. 3rd, 2006 The Encyclopedia of Earth website https://editors.eol.org/eoearth/wiki/Ecosystem-based_management [accessed Nov. 14, 2019]
- Manitoba Conservation. 2007.** Manitoba's Submission Guidelines for Twenty Year Forest Management Plans. Manitoba Conservation. Edited by Forestry Branch. 200 Saulteaux Crescent, Winnipeg, MB. 24 pp.
- Van Damme, L., Burkhardt, R., Plante, L. and Saunders, K. 2014.** Status Report on Ecosystem-based Management (EBM): Policy Barriers and Opportunities for EBM in Canada. Prepared for the Canadian Boreal Forest Agreement. KBM Resources Group, Thunder Bay, ON. 99 pp.

1.8 APPENDICES

Appendix 1: Forest Management Plan - Terms of Reference signed July 29, 2019