# THE CORPORATION OF THE COUNTY OF LANARK BY-LAW NO. 2018-23

#### BEING A BY-LAW TO AUTHORIZE THE ADOPTION OF THE LANARK COUNTY COMMUNITY FOREST FIVE (5) YEAR OPERATING PLAN 2018-2022

**WHEREAS,** in accordance with Section 5 Subsection 3 of the Municipal Act, S.O. 2001 c.25 municipal powers shall be exercised by by-law;

**AND WHEREAS,** Sections 8 and 9 of the Municipal Act 2001 S.O. Chapter 25 provide municipalities with the authority to govern their affairs as they consider appropriate and to enhance their ability to respond to municipal issues;

**AND WHEREAS,** Council of the Corporation of the County of Lanark deems it expedient to adopt a Community Forest Operating Plan to ensure a consistent approach to the operations of the community forest over the next five years attached hereto as Schedule "A";

**NOW THEREFORE BE IT RESOLVED THAT,** the Council of the Corporation of the County of Lanark enacts as follows;

#### **1. GENERAL REGULATIONS**

**THAT,** the Lanark County Community Forest 5 Year Operating Plan attached as Schedule "A" be adopted.

#### 2. ULTRA VIRES

Should any sections of this by-law, including any section or part of any schedules attached hereto be declared by a court of competent jurisdiction to be ultra vires, the remaining sections shall nevertheless remain valid and binding.

#### 3. BY-LAWS TO BE REPEALED

By-Law 2012-27 is hereby repealed.

#### 4. EFFECTIVE DATE

This By-Law will come into effect on the day of its passing.

# THE CORPORATION OF THE COUNTY OF LANARK BY-LAW NO. 2018-23

This By-Law read a first and second time this 27<sup>th</sup> day of June, 2018

This By-Law read a third time and finally passed this 27<sup>th</sup> day of June, 2018

Leslie Drynan, Clerk/Deputy CAO

John Fenik, Warden

11 -

Lanark County Community Forest

*Forest Operating Plan* 2018 - 2022



**Approved By:** 

Lanark County: (Community Forest Owner)

Mississippi Valley Conservation Authority: (Forest Manager) John Fenik Warden, Lanark County

Paul Lehman General Manager

Date:

April 5, 2018

# LANARK COUNTY COMMUNITY FOREST FOREST OPERATING PLAN

# **Preparation**

This 2018-2022 Forest Operating Plan has been prepared for Mississippi Valley Conservation Authority as part of a Memorandum of Understanding for forest management services with Lanark County by:

Upper Canada Forestry Service, Martin Streit R.P.F.

The forest resource inventory maps were prepared by:

Dorothy Hamilton, R.P.F (ret).

This 2018-2022 Forest Operating Plan has been reviewed by the Community Forest Sub-Committee and is recommended to the Community Development Committee for consideration:

Councillor John Hall Councillor Richard Kidd Jonathan Allen, Lanark County Facilities Coordinator Andy Kerr-Wilson, Lanark Stewardship Council Murray Miller, Mazinaw-Lanark Forest Inc. Steve Miller, Mississippi Valley Field Naturalists Dave Coleman, Ontario Ministry of Natural Resources and Forestry Brian Anderson, Mississippi Valley Conservation Authority, Forest Manager

# LANARK COUNTY COMMUNITY FOREST FOREST OPERATING PLAN TABLE OF CONTENTS

<b>SECTION</b>		PAGE				
1.0 Introducti	on	4				
1.1 Fo	1.1 Forest Certification and Operating Standards					
1.2 Review of Accomplishments of Memorandum of Understanding						
with N	Aississippi Valley Conservation	5				
2.0 Report of	2.0 Report of Past Operations 2013 - 2017					
2.1 H	arvesting Summary	7				
2.2 Fi	nancial Summary	8				
2.3 Pr	operty Inspections and Inventory	10				
3.0 Five Year	Operating Plan	12				
3.1 Tł	ninning and Harvest Schedules	12				
	3.1.1 Red Pine Plantations	13				
	3.1.2 Natural Forests	14				
3.2 Fi	ve Year Harvest Operations 2018-2022	15				
3.3 Disease and Insect Mortality						
4.0 Forest Operations						
4.1 Harvest Plans (Prescriptions) and Tree Marking						
4.2 N	atural Heritage and Cultural Values	17				
4.3 Si	lviculture	17				
4.4 Ro	bads and Forest Operations	18				
5.0 Administ	ration	18				
5.1 Pr	5.1 Property Inspections and Inventory					
5.2 Ai	nnual Work Plans and Reporting	19				
Appendix 1:	Environmental Management System Documents					
Appendix 2: Maps: Harvest Areas 2013-2017						
Appendix 3:	20 Year Harvest Schedule: Red Pine					
Appendix 4:	25 Year Harvest Schedule: Natural Forests					

Appendix 5: Maps: Harvest Areas 2018-2022

# LANARK COUNTY COMMUNITY FOREST: FOREST OPERATING PLAN 2018 - 2022

#### **1.0 INTRODUCTION**

The Lanark County Community Forest consists of 40 properties comprising 4,583 hectares (11,319 acres) owned by the corporation of Lanark County. The properties were purchased by Lanark County between the years of 1938 and 1987 and consist of tracts of natural forest, treed plantations established in previous farmland, lakes and wetlands. Strategic direction for the Community Forest is described in the Community Forests Vision Statement and Guiding Principles (2010). The Community Forest is managed in accordance with this long-term direction to accommodate a wide variety of values and uses.

The environmental management system (EMS) for the Community Forest is contained in a series of documents which are summarized in Appendix 1. The EMS provides a framework for the sustainable management of the Community Forest and the ongoing assessment of the health and ecological integrity of forest ecosystems and natural heritage values. Five-Year Forest Operating Plans are one of the planning documents defined in the EMS. The EMS is described in detail in the 2011-2030 Forest Management Plan.

This 2018 – 2022 Forest Operating Plan reports on the past activities carried out by the Forest Manager, Mississippi Valley Conservation Authority (MVC) during the 2013-2017 Forest Operating Plan and provides a detailed five-year schedule of activities for the 2018-2022 period. To ensure long-term forest and financial sustainability for the Community Forest, a 20-year forecast of thinning and harvesting activities (2018-2037) is also provided. This forecast is reviewed and extended for a further five years in each Operating Plan.

The Five-Year Forest Operating Plan is the key document to ensure that forestry and property administration activities are carried out in an organized fashion.

## **1.1 Forest Certification and Operating Standards**

As a participant in the Eastern Ontario Model Forest (EOMF) Certification Program, Lanark County follows a management system which is compliant with the standards of the Forest Certification Council (FSC). The management system provides standards for forest owners regarding protection of natural values, planning, implementation and monitoring of forest management activities, public consultation, indigenous peoples' rights and qualifications of forest managers and forest operators. Forest certification provides an independent verification of forest sustainability for the citizens of Lanark County. Activities on the Community Forest are subject to the annual EOMF - FSC independent forest audit, and were most recently part of a successful FSC audit in 2016.

The certification system is described in the Eastern Ontario Model Forest Information Report # 51 v.3, Forest Certification Program Policy and Procedures Manual (2014).

# **1.2: Review of Accomplishments of Memorandum of Understanding with Mississippi Valley Conservation**

In 2006 A two-year pilot project was initiated between the County of Lanark and Mississipppi Valley Conservation to provide forest management services. The arrangement has subsequently been renewed through two Memorandums of Understanding (MoU). The current five year MoU covers the period from 2013 to 2018. The purposes of the MoU are:

- To establish a long term partnership between the County of Lanark and Mississippi Valley Conservation Authority to work together to sustainably manage the Lanark County Community Forest for a variety of uses; and
- 2. To establish roles and opportunities for partners to contribute to the ongoing management of the Community Forest.

Over the course of this partnership the Community Forest has been managed in a sustainable and cost-effective manner consistent with the goals of the MoU. The net revenue for the 2013-2017 Operating Plan period is \$45,412.11 or \$9,082.42 per year.

MVC developed and implemented the environmental management system (EMS) which supports Lanark County's participation in FSC forest certification. As part of the EMS, MVC developed and presented a 20-Year Forest Management Plan that was endorsed by Lanark County Council in 2011. The 2011-2030 Forest Management Plan incorporated a new digitized inventory including maps and aerial photos. This inventory is maintained by the Forest Manager as the basis for planning projects, including this Operating Plan.

Revenues generated from forest management support the diverse objectives of Community Forest management. For example, MVC and the Lanark Stewardship Council partnered to expand the Baird property forest management trail, including the construction of a new boardwalk. The identification and protection of ecological values is another critical objective: life science studies were commissioned on Dalhousie 11 (Thorne) and Darling 14 (Gamble). MVC staff identified a healthy butternut tree during tree marking of the Gamble property and worked with the MNRF to establish a research plot to monitor its long-term health. Butternuts are an endangered species due to butternut canker, and trees which appear resistant to the disease are rare. MVC and Lanark County worked with representatives of the Algonquin First Nation to harvest birch bark from the Community Forest for canoe making.

MVC representatives provide professional expertise to Lanark County Council, Community Development Committee, Community Forest Working Group, and the Lanark County Trails Corporation. For example, MVC supported Lanark County to develop a Forest Conservation By-law. MVC participates on behalf of Lanark County on external working groups including EOMF Certification, Eastern Ontario First Nations, and Eastern Ontario Community Forest Managers. The partnership also brings other resources of the Conservation Authority to the table including knowledge and expertise in forest health, fish and wildlife management, water crossing construction, and information management.

#### 2.0 REPORT OF PAST OPERATIONS 2013 - 2017

#### **2.1: Harvesting Summary**

Table 1 summarizes the timber sales that have been issued on the Lanark County Community Forest from 2013-2017. Maps showing the tendered compartments are included as Appendix 2. All activities are described in MVC's State of the Forest reports.

Red pine markets remained solid, providing a stable source of revenue for Lanark County. Red pine is primarily utilized by two Renfrew County sawmills: Laverne Heideman and Sons and Ben Hokum and Sons Lumber Company. Many of the red pine plantations include a small volume of white spruce and other species. Red pine harvest tenders typically include several properties which are in close proximity for logistical purposes.

The Wheelers were the successful bidders for the hardwood thinning and maple tapping at Dalhousie 11 (Thorne), which is directly south of their existing maple syrup operation. Marked trees were primarily firewood, with a small amount of hardwood sawlogs and pulpwood. Prior to tendering, Lanark County commissioned an ecological inventory of the property which identified significant values: these values were protected by no-cut buffer zones. An infestation of the invasive beech bark disease (BBD) was discovered during tree marking. The disease is usually fatal to beech trees and will result in a significant decline of the beech component in this property and throughout Lanark County in the future.

The shaded areas of table 1 represent the red pine tendered in 2017 at Lanark Compartments 2, 3, 4, 5/6. Harvesting is to be completed by March 31, 2019. The tender has been awarded to Laverne Heideman and Sons Ltd, with an estimated revenue of \$66,029.70. Two hardwood areas at the Lavant Main and Darling 14 (Gamble) properties have been marked. Tenders will be issued in 2018.

Lanark County is blessed to have a diversity of timber products to offer for sale because lumber markets can be highly cyclical. Products which are not desirable for a period of time can quickly become in vogue, and vice versa. Maintaining a balance of hardwood and softwood timber sales is the best means Lanark County has to stabilize its long-term revenues and to maintain local employment opportunities.

Tuble 1. Summary of Hurvest Tenders 2015 2017						
Compartment	Plantation			Natural Forest		YEAR
						ISSUED
	Area	Est.	Area	Est.	Est.	
	(Ha)	Volume	(Ha)	Sawlogs	Fuelwood	
		(GMT)		(fbm)	(Cords)	
Pr 1) S Sher 3, Lavant Main,	35.2	3002.9				2014
Darling 3, 4/5, and 6.		(Actual)				
Hd 1) Dalhousie 11			30.6	83,700	341.9	2015
Pr 2) Lanark 2, 3, 4 and 5/6 *	51.1	2723.5				2017
Totals	84.5	5726.4	30.6	83,700	341.9	

Table 1: Summary of Harvest Tenders 2013-2017

\* Tender awarded in 2017, but not completed in current operating plan period

## **2.2 Financial Summary**

Table 2 summarizes the costs and revenues of the 2013 – 2017 Operating Plan. Lanark County received a net five-year income after expenses of \$45,412.11 or \$9,082.42 per year, an increase from the average annual revenue from 2006-2012 which was \$6,224.27. MVC Operating Expenses include all costs associated with managing the forest including management planning, tree marking, timber sales, monitoring of forest operations, life science surveys, property inspections and general administration.

Timber revenues include the stumpage collected by Lanark County from 2013 - 2017. Revenues for areas sold in 2017 will be reported in the 2018 – 2022 Forest Operating Plan. Timber harvesting is focused on the removal of low quality trees with the objective of increasing forest growth and quality and future revenues for Lanark County. Even so, revenues substantially exceeded expenses because of ongoing demand for red pine timber, and despite challenging hardwood markets that have limited natural forest timber sales. Although an increase in revenue is anticipated after 2023 once all plantation first thinnings are completed, timber markets are highly variable and future revenues may vary accordingly. Forest certification costs are mitigated by participation in the group certification program with other local community forests through the EOMF.

	2013	2014	2015	2016	2017	2013-2017
Management Expenses						
MVC Operating Expenses	-\$ 7,950.50	-\$11,438.84	-\$ 13,651.22	-\$ 14,229.73	-\$ 13,134.22	-\$ 60,404.51
Forest Certification	-\$ 4,000.00	-\$ 4,200.00	-\$ 4,200.00	-\$ 4,263.00	-\$ 4,335.47	-\$ 20,998.47
All Expe	nses -\$ 11,950.50	-\$15,638.84	-\$ 17,851.22	-\$ 18,492.73	-\$ 17,469.69	-\$ 81,402.98
REVENUES						
Timber Sales						
Red Pine: Darling 1/2 and 3	\$ 30,628.60					\$ 30,628.60
Red Pine: Darling 4/5, 6, S Sher 3, Lav Main				\$ 74,116.81		\$ 74,116.81
Dalhousie 11 (Firewood and Maple Tapping)				\$ 14,798.08		\$ 14,798.08
Dalhousie 11 (Firewood and Maple Tapping)					\$ 7,271.60	\$ 7,271.60
Red Pine: Lanark 2, 3, 4 and 5/6						\$-
All Reve	nues \$30,628.60	\$-	\$-	\$ 88,914.89	\$ 7,271.60	\$ 126,815.09
Bala	ance \$18,678.10	-\$15,638.84	-\$ 17,851.22	\$ 70,422.16	-\$ 10,198.09	\$ 45,412.11
* Tender marked and sold in 2017 but to be harvested in	n 2018 - 2022 oper	ating period				

# 2.3 Property Inspections and Inventory (2013-2017)

MVC carries out regular property inspections to ensure that the properties are in good condition for recreation users, to address uses that are inconsistent with the policies of Lanark County, and to cooperate with neighbouring landowners on issues of joint interest and concern. Property inspections were carried out as per the schedule of annual property inspections in the 2013-2017 Operating Plan, as a result of a complaint or request, or as part of the ongoing forest management and property administration activities.

PROPERTY	EXPLANATION
Annual Property Inspections	
Darling 4/5	Bowes Property road and creek access point
Darling 6	Pioneer cemetery, gravel pit
Lanark 1	Abandoned gravel pit
Lanark 2	Baird Property recreation trail
Lavant Main	Dixon Lake road and access point, gravel pit
Montague 1	Frequent noise and garbage complaints
Property Administration	
Dalhousie 4	Community Forest sign cut down
Dalhousie 8	MVFN Trail location
Darling 6	Property boundary verification
Darling 14	
Lanark 2	Baird property trail construction
Lanark 7	Hunt camp request for access, inspection of
	boundaries with neighbor.
Lanark 8-9	Water crossing, garbage dumping
Lavant 26, 27	Access restriction
Montague 1	Access control lock cut, garbage
Management Planning	
Dalhousie 1, 5, 9, 10	Update 20 Year Harvest Schedule
Darling 1-2, 8-9-10	
Lanark 7, 8-9	
Forest and Natural Heritage Inventories	1
Dalhousie 11	Pre-harvest Life Science Inventory
Darling 14	
Dalhousie 11	Forest operations prescriptions/ Tree
Darling 1-2, 3, 4-5, 6, 14	marking/ Harvest inspections
Lanark 2, 3, 4, 5/6, 7, 8/9	
Lavant Main	
South Sherbrooke 3	

 Table 3: Summary of Property Inspections and Inventories 2013-2017

General Inspections 2013	
Lanark 5-6, 8-9	No concerns
South Sherbrooke 3, 4	
General Inspections 2014	
Lanark 3, 4, 5-6	No concerns
General Inspections 2015	
Lanark 3, 4	No concerns
General Inspections 2016	
Pakenham 1	No concerns
General Inspections 2017	
Lavant Main	Bottle Lake Access Road washed out,
	repaired by Township/ private landowner.

#### **3.0 FIVE YEAR OPERATING PLAN**

#### 3.1 Thinning and Harvest Schedules

Sustainable timber harvesting provides substantial economic benefits to the community while allowing for cost-effective management of the Community Forest. Investments in forest management will increase the long-term revenues for Lanark County through improved timber quality and growth. Section 4 (following) summarizes the forest operations on the Community Forest.

To verify that harvest levels can be sustained over the longer term, twenty (20) year schedules of red pine thinning and twenty-five (25) year schedules of natural forest harvesting have been prepared (appendices 3 and 4). These periods correspond to the cutting cycles (time period between thinning or harvest operations) of red pine and natural forest, respectively. They are based upon local knowledge and forest inspections by the Forest Manager. The schedules are reviewed and updated every five years to maintain currency. A twenty-year summary of planned harvest is provided in table 4.

PERIOD	<b>RED PINE</b>		NATUR	AL FOREST	ANNUAL
	AREA	<b>REVENUE</b>	AREA	<b>REVENUE</b>	<b>REVENUE</b>
2018-2022	77.9	\$118,000	148.1	\$63,865	\$36,373
2023-2027	74.8	\$127,050	126.6	\$60,040	\$37,418
2028-2032	83.8	\$124,440	117.2	\$56,765	\$36,241
2033-2037	73.6	\$125,190	135.0	\$60,750	\$37,188

 Table 4: Summary of Harvest Area and Projected Revenue for 2018 - 2037

Markets for forest products are cyclical. Sustaining a balance of red pine and natural forest harvest enhances the stability of Lanark County revenues. It also provides local economic opportunities for forest operators with traditional harvesting equipment (chainsaw and skidder) and for those with mechanized harvesters.

Harvest levels on the Community Forest are of extremely low intensity and impact. Thinning and harvest cuts focus on the removal of poor quality and diseased trees, and typically retain 70 % crown cover after harvest. The <u>annual</u> harvest level recommended in this 2018-2022 Operating Plan of 45.2 hectares represents <u>1.1%</u> of the forested area.

### 3.1.1 Red Pine Plantations

Appendix 3 provides a twenty-year schedule and estimate of revenue for the thinning of red plantations, and includes the operations carried out since 2006. Appendix 3 includes the operable red pine plantations which comprise 310.1 hectares, or 85% of the 366 hectares of red pine plantations identified in the 2011-2030 Forest Management Plan. It does not include stands which are inaccessible, or poorly stocked stands which cannot support a commercial harvest operation.

The plantations are generally growing on two ecosite types: stands growing on sandy loam soils suited to long-term succession to maple and other hardwood tree species, and stands growing on sand and gravel soils more suited to regeneration of white pine forests.

Plantations have been allocated for thinning based on the following principles:

- 1) Ensure regular thinning to maintain stocking for optimal growth,
- 2) Commence timely first thinning in young plantations,
- 3) Minimum annual revenue of \$20,000,
- 4) Balanced harvest area to provide stable harvest opportunities for loggers, and to facilitate tree marking workload and regeneration efforts, and
- 5) Group properties which are close together into single tenders.

The sustainable harvest level for the twenty-year period from 2018 - 2037 is 15.5 hectares per year. This harvest level will ensure that the plantations continue to grow to produce high value products, and to be managed for long term succession to either tolerant hardwood or white pine forests. Annual stumpage revenues for this period are projected at \$24,734, reflecting the fact that red pine markets continue to be both stable and profitable. Revenues from plantation thinning are projected to increase with time as the size and quality of trees in well- managed plantations increases, resulting in more sawlog and pole products. Unless new properties are acquired, first thinnings will be completed by 2022.

### 3.1.2 Natural Forests

Appendix 4 provides a twenty-five (25) year schedule for the future harvest of natural forests, and includes the operations carried out since 2006. Appendix 4 only includes currently operable natural forest stands on the Community Forest which comprise 709 hectares. This represents only 20% of the total 3564.5 hectares of natural forests. Many forests are not currently available for commercial harvest because of a variety of conditions:

- 1) Forests that are of previous agricultural origin, and have a history of disturbance including fuelwood and sawlog harvest, grazing and land clearing,
- 2) Oak and pine forests growing on shallow rocky soils,
- 3) Cedar forests growing on low, wet soils,
- 4) Forests with access restrictions due to swamps and rocky soils,
- 5) Small forest stands that occur in isolated portions of the compartments, and
- 6) Properties designated by Lanark County for primarily recreational use.

Over time and with good forest management, the heavily disturbed post-agriculture stands will recover, and the operable area of natural forests will increase. These forests will benefit from an improvement cut to remove the poor quality trees and release the better quality growing stock. Substantial areas of forest (e.g. shallow or wet soils, inaccessible areas) will continue to have limited use for forestry operations in the long-term. However, they will continue to provide important benefits for recreation and wildlife habitat.

Natural forests have been allocated for harvest based on the following principles:

- 1) Stands with sufficient merchantable volume to justify commercial harvesting,
- 2) Minimum annual revenue of \$10,000 for the twenty five year period, and
- Balanced harvest area to provide stable harvest opportunities for loggers, and to facilitate tree marking workload and regeneration efforts.

The sustainable harvest level for the 25-year period from 2018-2042 is 25.6 hectares per year. Annual stumpage revenues for this period are projected at \$12,035. No future

increase in revenue is projected despite the improvement in timber quality that will occur in managed stands. The closure of hardwood pulp mills in Cornwall and Portage du Fort and many small sawmills throughout eastern Ontario continues to make hardwood markets challenging and to warrant conservative future revenue projections.

## 3.2 Five Year Harvest Operations 2018-2022

Table 5 identifies the compartments scheduled for harvest in this 2018-2022 Operating Plan. Maps of the harvest areas are included in Appendix 5. The properties will be grouped to sell three red pine tenders and three hardwood tenders. The variety in block size provides opportunities for logging contractors of different capacity.

Stands are not scheduled for individual years to permit flexibility to adapt to markets and timber demand and to meet the revenue objectives of Lanark County. Harvest areas will be scheduled in the Annual Work Plans to be submitted to the Community Forest Working Group each year for approval. The 20 Year Harvest Schedule provides flexibility to amend the Forest Operating Plan as required by switching harvest areas of similar size and forest type as conditions warrant. Operational harvest boundaries (eg trails, rocky or wet areas, creeks) will be determined when the harvest operations are laid out on the ground.

<b>COMPARTMENT</b>	<b>RED PINE (HA)</b>	NATURAL FOREST (HA)
Dalhousie 1	16.6	
Dalhousie 5	17.8	
Dalhousie 9	14.4	
Dalhousie 10	5.3	
Darling 1-2		13.9
Darling 8-9-10		18.2
Lanark 7	8.8	
Lanark 8-9	15.0	
Lavant Main		50
Lavant 29		66.0
Tota	1 77.9	148.1

 Table 5: Summary of Harvest Operations 2018-2022

### **3.3 Disease and Insect Mortality**

Beech bark disease and emerald ash borer are non-native forest health threats to the forests of Lanark County. Beech bark disease is an insect/ disease complex that infects and kills beech trees. It has recently been identified in Lavant and Dalhousie geographic townships. Emerald ash borer is an insect which has caused significant mortality of ash trees in southern Lanark County. Both pests will inevitably spread throughout Lanark County.

Beech and ash trees are common minor species in many of the Community Forests. When present in higher quantities the infestation and rapid death of many stems creates large canopy gaps and affects the forests' species composition, wildlife habitat and overall health for many years. A harvest prior to significant mortality can reduce the percentage of these susceptible tree species and reduce the overall impact on the forest. During this Operating Plan, natural forests containing 20% or more beech and/or white ash will be assessed for possible infestation and to determine whether a harvest cut would be beneficial. Table 6 is a preliminary list of stands in the Forest Resource Inventory which meet these criteria.

Geographic Township	Compartment	Stand	Hectares	Species Composition
DALHOUSIE	4	DAL00527	5.5	MH 6BE 3BD 1
DALHOUSIE	11	DAL05336	3.0	BE 2BW 2MH 2BD 1BY 1IW 1PO 1
DARLING	1/2	DAR02245	9.0	BE 3MH 3BD 1BW 1OR 1PO 1
DARLING	1/2	DAR02526	1.7	MH 5BE 2CE 1PO 1SW 1
DARLING	1/2	DAR02648	8.6	MH 5BE 2CE 1PO 1SW 1
DARLING	8/9/10	DAR04040	10.1	MH 3OR 3BE 2BD 1PW 1
DARLING	11/12	DAR03497	3.0	PW 4BE 3MH 2BD 1
DARLING	11/12	DAR03587	6.2	OR 4 MH3 BE2 BD1
DARLING	11/12	DAR03639	13.8	OR 4 MH3 BE2 BD1
LANARK	2	LAN03255	2.4	MH 7BE 2HE 1
LANARK	2	LAN03258	0.9	HE 3MH 3BE 2CE 1PW 1
LANARK	2	LAN03310	4.5	MH 6BE 2BD 1HE 1
LANARK	5/6	LAN01929	1.2	BE 4MH 4HE 2
LANARK	7	LAN02105	3.0	MH 6BE 3HE 1
LAVANT	26/27	LAV05109	5.5	MH 5BE 2CE 1OR 1PW 1
LAVANT	26/27	LAV05289	1.8	OR5 BE2 MR2 MH1
LAVANT	29	LAV03861	0.9	MH 7BE 2BD 1
LAVANT	29	LAV03956	5.2	MH 6BE 3BD 1
NORTH SHERBROOKE	1	NSH01101	13.8	MH 5BE 2BF 1BD 1PW 1
NORTH SHERBROOKE	1	NSH01158	2.3	OR 4 MH3 BE2 IW1
PAKENHAM	1	PAK01598	7.6	MH 6 AW2 BD1 OR1
Total Area			110.1	

Table 6: Forest Stands with at least 20% Beech and/ or White Ash

#### **4.0 Forest Operations**

#### 4.1 Harvest Plans (Prescriptions) and Tree Marking

Consistent with the requirements of the EOMF Certification Program, the Forest Manager ensures that all activities are carried out by fully trained and certified individuals. For each harvest area, a site-specific harvest plan is prepared by a member of the Ontario Professional Foresters Association. This harvest plan outlines the forest operations prescription, access requirements, harvest and property boundaries and prescriptions for protecting natural and cultural heritage values. Prior to harvest, trees to be cut are marked with paint by tree markers certified by the MNRF.

### 4.2 Natural Heritage and Cultural Values

Natural heritage and cultural values are an important part of the Community Forest's legacy and are given special consideration for protection when planning and implementing forestry operations. Section 10 of the 2011-2030 Forest Management Plan provides a detailed description of this process.

#### 4.3 Silviculture

The 2011-2030 Forest Management Plan for the Lanark County Community Forest outlines options for silviculture treatments such as tree planting and tending, thinning, stand improvement, and pruning. Most harvest operations on the Community Forest result in abundant natural regeneration of hardwood species such as sugar maple, beech, and basswood without any additional treatments. However, where forest operations prescriptions call for regeneration of red oak or white pine, regeneration treatments may be required. When a prescription identifies the need for these treatments, it will be included and budgeted for in the Annual Work Plan and budget for the Community Forest. Table 7 lists the forest areas that <u>may</u> require regeneration treatments in the coming five years.

<u>COMPARTMENT</u>	<u>AREA</u>	CURRENT FOREST	PLANNED FOREST	<u>TREATMENT</u>
Dalhousie 1	16.6	Red Pine	White Pine	Tree planting and tending
Lavant Main	50	Red Oak	Red Oak	Prescribed burn <u>or</u> tree planting and tending
Total	66.6			

 Table 7: Schedule of Planned Regeneration Treatments 2018-2022

## **4.4 Roads and Forest Operations**

The Standard Operating Procedures in the EOMF Policy and Procedures Manual and the 2011-2030 Forest Management Plan describe best management practices for building and maintaining roads and water crossings, logging, skidding and trucking operations. Harvest operations which are carried out according to these guidelines result in minimal impacts to the forest ecosystem. All operations carried out on the Community Forest are monitored regularly by the Forest Manager and assessed according to the detailed standards provided in the EOMF Manual.

#### 5.0 Administration

### **5.1 Property Inspections and Inventory**

Ongoing property inspections are required to ensure that the properties, roads and sites of cultural and recreational significance are maintained in good condition, to address uses of the properties that are inconsistent with the policies of Lanark County, and to cooperate with neighbouring landowners on issues of joint interest. The property inspection program is described in Section 11.0 of the 2011-2030 Forest Management Plan.

Table 8 lists six properties where annual inspections are currently required due to the occurrence of sites of recreational or cultural significance, roads and gravel pits, or past noise and garbage complaints.

PROPERTY	REASON
Darling 4/5	Bowes Property road and creek access point
Darling 6	Pioneer cemetery, gravel pit
Lanark 1	Abandoned gravel pit
Lanark 2	Baird Property recreation trail
Lavant Main	Dixon Lake road and access point, gravel pit
Montague 1	Frequent noise and garbage complaints

**Table 8: Annual Property Inspection Schedule** 

Forest inventories are carried out for all harvest and thinning areas to develop forest operations prescriptions. Prior to harvesting of natural forests Lanark County also commissions a life science inventory of natural heritage features.

### **5.2 Annual Work Plans and Reporting**

The Forest Manager provides an Annual Work Plan and budget to Lanark County for review by the Community Forest Working Group. This Annual Work Plan outlines forestry operations such as boundary layout, tree marking, thinning and harvesting, and provides a schedule of property inspections planned for the year. The Annual Work Plan also identifies (where available) opportunities for cooperation with partners on Community Forest projects such as trail enhancements.

The Forest Manager submits an annual State of the Forest Report to Lanark County to document the activities which have been carried out on the Community Forest each year and report on financial results. These reports are summarized to report on past operations in each Five-Year Operating Plan.

# APPENDICES

Lanark County Community Forest

Forest Operating Plan (2018 - 2022)

# <u>Appendix 1</u> <u>Environmental Management System Documents</u> <u>Lanark County Community Forest</u>

DOCUMENT	CONTENTS SUMMARY	KEY REFERENCES
	Strategic Documents	
Community Forests. Vision Statement and Guiding Principles. (July 20, 2010)	Vision statement, guiding principles, and objectives for the Community Forest. Community Forest Working Group management structure	Lanark County. 2006. Business Plan for the Lanark County Community Forests 2006 to 2010.
Recreational Use Policy (Aug 25 2009)	Objectives, recommendations and permitted uses for recreation on the Community Forest	
	Community Forest Planning Docume	nts
Forest Management Plan (FMP) (January 1, 2011 to December 31, 2030)	Community Forest History and Description Forest Type Description and Silviculture Natural Heritage and Cultural Values Description Guidelines for Areas of Concern for Protection of Natural Heritage and Cultural Values Monitoring and Assessment Forest Resource Inventory Maps	-OMNR 1998a: A Silvicultural Guide For the Tolerant Hardwood Forest in Ontario, -OMNR 1998b: A Silvicultural Guide For the Great-Lakes-St. Lawrence Conifer Forest in Ontario -OMNR 2000: A Silvicultural Guide To Managing Southern Ontario Forests -OMNR 2010: Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales. -OMNRF 2015: Forest Management Guide to Silviculture in the Great-Lakes St Lawrence
Five-Year Forest Operating Plan (January 1, 2018 to December 31, 2022)	Report on Past OperationsAssessment of levels of sustainable harvest, thinning and revenueFive year harvest and thinning allocationsOperating StandardsProperty Inspections	In the Great-Lakes St Lawrence and Boreal Forests of Ontario. Eastern Ontario Model Forest. 2014. Forest Certification Policies and Procedures Manual (Information Report 51 Version 3).

Ir		
EOMF Forest	Policies for certified forest owners	
Certification Program		
Policy and Procedures	Specific qualification requirements for	
Manual (Information	activities (eg certified tree markers)	
Report 51 Version 3		
2014)	Standard operating procedures for forest	
	operations including tree marking, road	
	construction, water crossings, and	
	harvesting.	
Annual Work Plan	Proposed operations and budget to be carried	
and Budget	out by the Forest Manager on the	
	Community Forest	
	Planning function under the Five Year	
	Operating Plan	
Annual State of the	Annual summary of operations completed by	
Forest Reports	the Forest Manager on the Community	
	Forest	
	Reporting function under the Five Year	
	Operating Plan	
	Operating I lan	
Site Specific Planning and Implementation Documents		
Harvest plans/	Forest and site specific silviculture	-OPFA 2010: Practice Bulletin 10:
prescriptions	prescription and map	Minimum Content For
preseriptions		Prescriptions For Partial
	Directions for tree marking, logging and	Harvesting on Private Land in
	establishment of areas of concern.	Ontario.
	establishment of areas of concern.	-OMNR 2004: Ontario Tree
		Marking Guide. Version 1.1.
Stumpage Sale	Requirements for wood measurement and	Marking Guide. Version 1.1.
Agreements	payment, contractor qualifications and forest	
Agreements	operating standards.	
	operating standards.	
Forest Operations	Documentation of assessments of harvest	
Inspection Reports	operations carried out by Forest Manager to	
mspection Reports	ensure compliance with standards.	
	ensure compliance with standards.	
Community Forest	Documentation of findings and	
Inspection Form	recommendations of property inspections	
mspoorion ronn	carried out by Forest Manager.	
	carried out by rolest Manager.	

Maps: Harvest Areas 2013 - 2017

20 Year Harvest Schedule: Red Pine

25 Year Harvest Schedule: Natural Forests

Maps: Harvest Areas 2018-2022