

Date: July 6th, 2023

**P.E.I.
Public Forests**



Woodlot Management Plan

Property Number: 481812

Location: Milo

Table of Contents

Goals and Management Objectives	1
Property Overview	2
Location.....	2
Past Information	2
Property Information	2
Wetland and Watercourses	2
Property Access.....	3
Property Boundaries	3
Fire Protection	3
Planting and Silviculture	3
Proposed Treatments	4
Table 1. Proposed Treatment Summary.....	6
Appendices.....	8
Appendix A. Map of Property with Locator Map.....	9
Appendix B. 1935 Aerial Photography	10
Appendix C. 1968 Aerial Photography	11
Appendix D. 2010 Corporate Land Use Inventory	12
Appendix E. Forest Inventory Codes	13
Appendix F. Stand Tally Sheets from on the Ground Assessment.....	14
Appendix G. Plantation Map with Contour Lines.....	25
Appendix H. Work Completed	26

Goals and Management Objectives

Forest Management on Prince Edward Island (P.E.I.) means different things to different people. Public Forest Lands are managed for a variety of reasons including timber and non- timber values, wildlife enhancement, soil and water preservation, demonstration techniques, training and recreation and aesthetics.

The primary goal for management of P.E.I. Public Forest Land is to enhance the overall forest quality. To accomplish this, it may be necessary to remove some of the lower quality trees on the property and nurture those of higher quality. This will in turn improve genetic quality, species distribution and diversity through careful tree selection and natural regeneration. Allowing acceptable growing stock the chance to thrive and provide a seed source for the surrounding areas will ensure that quality natural regeneration has an opportunity to establish. Enhancement or enrichment planting may be necessary in areas where there is inadequate or unsuitable natural regeneration. Trees native to P.E.I. that are suitable to the site conditions will be chosen for any required reforestation on the property. Prescribing treatments in some stands while leaving others untreated will provide for a range of forest types. Converting stands from a single species to multiple species is desirable. This can be accomplished by retaining some of the natural regeneration in areas that have been previously planted and by planned tree selection in stand improvement treatments. Planted and natural stands on the property will be assessed for health and growth of desired species on an on-going basis. This information will be used to determine when and where future treatments will be carried out. Through time, a favourable healthy mixture of short-lived and long-lived species will provide for an abundance of quality forest products, biodiversity, wildlife, and recreational opportunities as well as a range of ecological goods and services (such as clean air and water).

Property Overview

Location

Property # 481812 is located on the Beaton Road Ext., Route #14, in the community of Milo, P.E.I., (Appendix A). The total area of this property is 79.7 hectares (197 acres) and the midpoint of the property is Latitude N 46.644061 decimal degrees, Longitude W -64.251068 decimal degrees.

Past Information

Local records and previous aerial photography show that approximately 40% (32 Ha) of this property adjacent to the main road was used for agricultural purposes early in the 20th century. To better illustrate this 1935 and 1968 photography can be seen in Appendix B and Appendix C.

Property Information

The information in Appendix D has been taken from the 2010 Corporate Land Use Inventory. An explanation of forestry code meanings can be seen in Appendix E. Any stands that have proposed silvicultural treatment prescriptions are to have on-ground stand assessments completed prior to any work being started. This on-ground assessment information is included in this plan as updated stand tally sheets (Appendix F) and supplements the extrapolated data where applicable. A topographic map of the property shows the general terrain profile, the ranges in elevation and the plantations currently on the property (Appendix G).

Wetland and Watercourses

There are two larger stream/wetland systems running through the property (Appendix A). A 15-meter buffer zone is to be maintained around this wetland. One stream flows in a southerly/westerly

direction and empties into the Little Pierre Jacques River and subsequently into the Northumberland Strait. The second stream flows in a southerly/easterly direction and empties into the Northumberland Strait. This observation can be viewed in Appendix A.

Watershed Group

Trout Unlimited Prince County Chapter Inc. is the local watershed group in this area and prior to hurricane Fiona maintained a trail on the property through the larch plantation. This stand has blown down and the future of the trail will be assessed by the watershed group after the area is harvested.

Property Access

There is an approximate 550 metre woods road that provides access to this property from Rte. 14. Ongoing road maintenance will be required to keep the road in a useable condition. This will include keeping the right-of-way clear of any brush or trees, repairing rutting on the road, repairing any wet areas that restrict access, and any other maintenance required to keep this road usable. The existing road on the property can be seen on Appendix A

Property Boundaries

This property is bounded on the south and east and west by private land. The northern boundary fronts the Beaton Rd. Extension.

Fire Protection

This property is located within the jurisdiction of the O'Leary Fire Department. The amount of personnel and equipment used to fight any forest fires will depend greatly upon the size and severity of the fire. Protection of our woodland from forest fire is the responsibility of the Forests, Fish and Wildlife

Division and our local community fire brigades. In the Western District, there are four-wheel drive forestry fire trucks housed at the Wellington and West Point Fire Departments. These heavy-duty trucks are available to assist the local fire department responsible for this area. Additional forestry fire trucks, off road tracked vehicles, portable pumps and specialized forest fire suppression equipment are available if needed. A stream that flows through the middle of the property would be a suitable site to setup a portable fire pump system.

Planting and Silviculture

There are four plantations on the property. It is recommended that any trees planted on the property be assessed at regular intervals. These assessments will determine if the planted trees require manual maintenance or fill planting as specified in the ECOSYSTEM-BASED FOREST MANAGEMENT STANDARDS MANUAL (“Eco Manual”). A list of all silviculture treatments completed on the property from 1991 to present is shown in Appendix H.

Proposed Treatments

The 2006 Forest Policy “Moving to Restore a Balance in Island Forests” lays out the framework for Public Land Forest management. The Eco-Manual provides details for prescribed treatments. All work completed on this property must comply with that manual. Although all stands were assessed, only specific stands were prescribed treatments to accomplish goal(s) within the next 10 years. Table 1 provides a summary of these proposed treatments. Proposed treatments may be updated in 5 years, when the 10-year period expires, or due to unforeseen events. This table will be updated as required when additional treatments are prescribed. For a better understanding of the treatments prescribed, a more detailed explanation is available in the ECOSYSTEM-BASED FOREST MANAGEMENT STANDARDS MANUAL (“Eco Manual”)

www.princeedwardisland.ca/sites/default/files/publications/2018_eco_manual_technical_version_-_final.pdf . Any additional information may be obtained by contacting a Provincial Forest

representative at the District Forestry Office in Wellington.

Table 1. Proposed Treatment Summary.

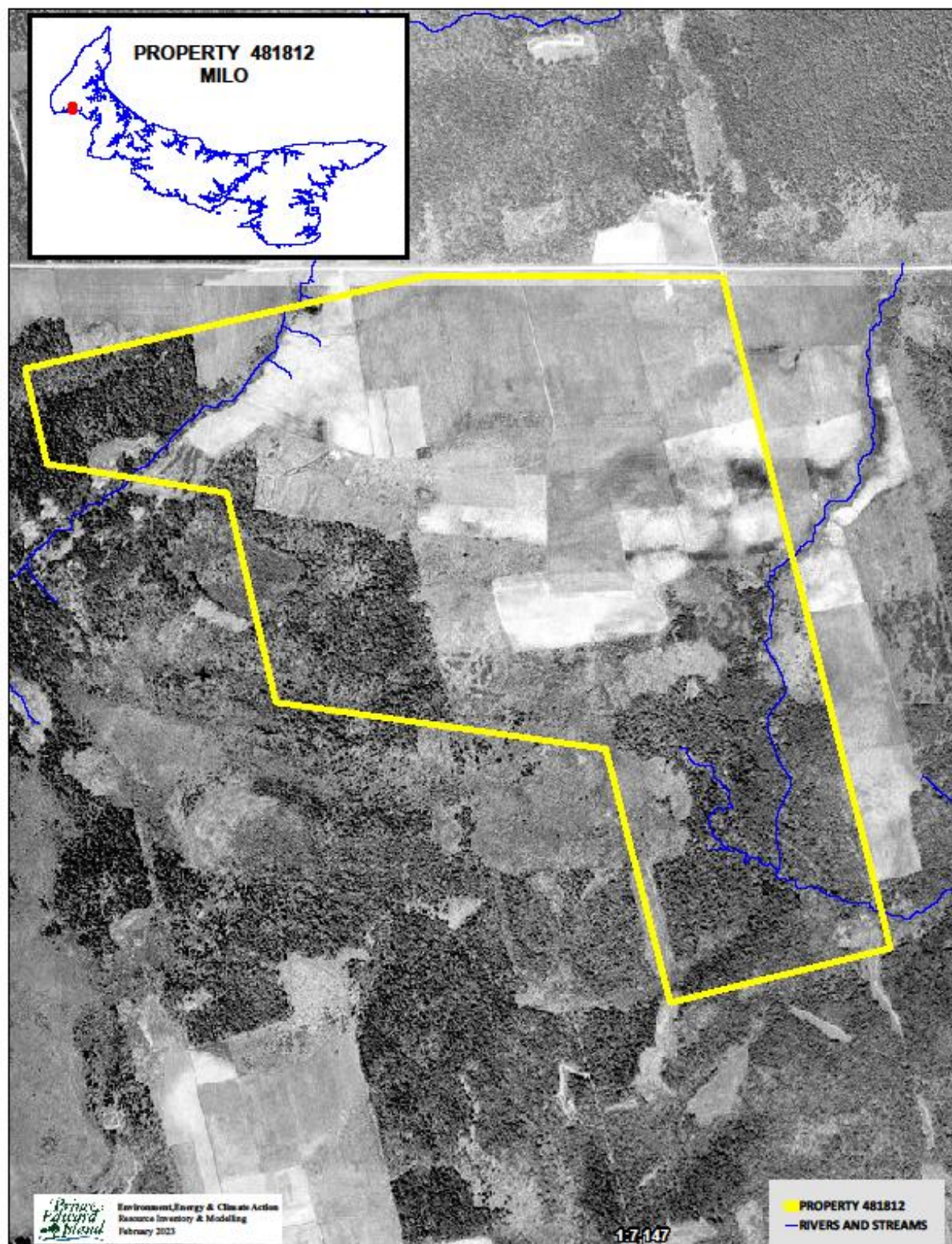
Stand Number and Plantation Number	Treatment Type	Treatment Year	Amount Proposed	2018 Eco-Manual Reference	Comments	Goals
13753 PN # 3801501	Block Harvest	2023	6.86	Pg. 30	LA and BS plantation with blowdown to 70% of the stand.	Salvage Blowdown wood.
13263 PN # 3970581	Block Harvest	2023	6.45	Pg. 30	This immature LA plantation has wind damage to at least 50% of the stand.	Salvage Blowdown wood.
13580 PN # 3955031	Block Harvest	2023	1.35	Pg. 30	This immature LA plantation has wind damage to at least 50% of the stand. Leave standing hardwoods for retention.	Salvage Blowdown wood.
13581	Block Harvest	2023	1.36	Pg. 30	This is a mature to over mature WS and BS stand with blowdown from hurricane Fiona. The site is wet and should only be operated on during frozen ground conditions. Leave standing hardwoods as retention for biodiversity of the future stand.	Salvage blowdown wood and harvest mature timber.
131566 PN # 3801501	Block Harvest	2023	6.33	Pg. 30	NS and BS stand with blowdown from hurricane Fiona. The site is wet and should only be operated on during frozen ground conditions.	Salvage blowdown wood and harvest mature timber.
13753 PN # 3801501	Manual Site Preparation and Reforestation	2024	6.86	Pg. 14 & 16	Create microsites for planting and plant with tree species suitable for the site. Could plant with WP, LA, CE, BS or WA.	Regenerate a biodiverse forest suitable for the site.
13263 PN # 3970581	Manual Site Preparation and Reforestation	2024	6.45	Pg. 14 & 16	Create microsites for planting and plant with tree species suitable for the site. Could plant with WP, LA, CE, BS or WA.	Regenerate a biodiverse forest suitable for the site.
13580 PN # 3955031	Manual Site Preparation and Reforestation	2024	1.35	Pg. 14 & 16	Create microsites for planting and plant with tree species suitable for the site.	Regenerate a biodiverse forest suitable for the site.

					Could plant with WP, LA, CE, BS or WA.	
13581	Manual Site Preparation and Reforestation	2024	1.36	Pg. 14 & 16	Create microsites for planting and plant with tree species suitable for the site. Could plant with WP, LA, CE, BS or WA.	Regenerate a biodiverse forest suitable for the site.
131566 PN # 3801501	Manual Site Preparation and Reforestation	2024	6.33	Pg. 14 & 16	Create microsites for planting and plant with tree species suitable for the site. Could plant with WP, LA, CE, BS or WA.	Regenerate a biodiverse forest suitable for the site.
013215, 013579, 013128, 013670, 013066	Patch Harvest	2027	13.08	Pg. 29	Harvest small patches of softwood, particularly if declining, to salvage timber and to create an uneven-aged forest stand	Salvage timber and create an uneven-aged forest for biodiversity.
013215, 013579, 013128, 013670, 013066	Manual Site Preparation and Reforestation	2027	13.08	Pg. 14 & 16	Create microsites for planting and plant with tree species suitable for the site. Could plant with BS, WS, WP, CE, WA or YB.	Regenerate a biodiverse forest suitable for the site.
13753 PN # 3801501	Manual Plantation Maintenance	2027	6.86	Pg. 17	Eliminate undesirable competing vegetation.	Improve growth of crop trees.
13263 PN # 3970581	Manual Plantation Maintenance	2027	6.45	Pg. 17	Eliminate undesirable competing vegetation.	Improve growth of crop trees.
13580 PN # 3955031	Manual Plantation Maintenance	2027	1.35	Pg. 17	Eliminate undesirable competing vegetation.	Improve growth of crop trees.
13581	Manual Plantation Maintenance	2027	1.36	Pg. 17	Eliminate undesirable competing vegetation.	Improve growth of crop trees.
131566 PN # 3801501	Manual Plantation Maintenance	2027	6.33	Pg. 17	Eliminate undesirable competing vegetation.	Improve growth of crop trees.
013215, 013579, 013128, 013670, 013066	Manual Plantation Maintenance	2030	13.08	Pg. 17	Eliminate undesirable competing vegetation.	Improve growth of crop trees.

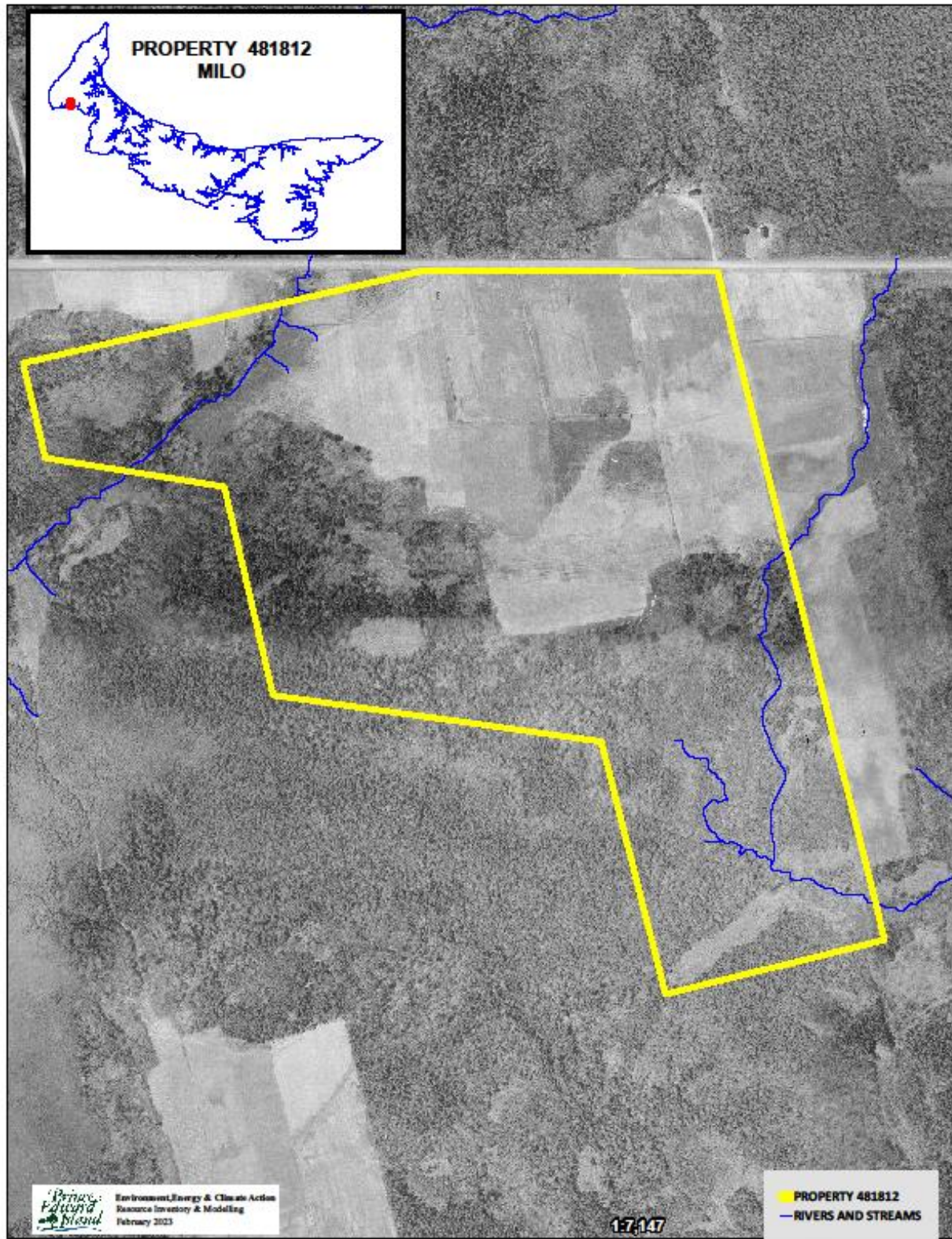
Appendices

[illegible]

Appendix B. 1935 Aerial Photography



Appendix C. 1968 Aerial Photography



Appendix D. 2010 Corporate Land Use Inventory

FIELDID	COVER1	PER1	COVER2	PER2	COVER3	PER3	COVER4	PER4	COVER5	PER5	HEIGHT	CROWN	HECTARES	WOODSTOCK
013572	RM	4.00	BF	2.00	LA	2.00	YB	1.00	BS	1.00	17.00	75.00	2.61	SWTH
013206	BS	4.00	RM	2.00	PO	2.00	LA	1.00	WB	1.00	12.00	75.00	0.61	SWIH
013139	BS	4.00	LA	3.00	PO	2.00	BF	1.00		0.00	14.00	75.00	1.98	SWMX
013235	BF	4.00	RM	3.00	WS	2.00	PO	1.00		0.00	12.00	80.00	1.01	SWIH
013580	LA	7.00	AL	1.00	WB	1.00	RM	1.00		0.00	5.00	85.00	1.35	LAPR
013194	BF	3.00	RM	3.00	BS	2.00	WB	1.00	PO	1.00	14.00	85.00	2.60	SWIH
013233	BS	3.00	RM	3.00	BF	2.00	LA	1.00	WB	1.00	16.00	75.00	1.86	SWIH
013670	BS	8.00	LA	1.00	BF	1.00		0.00		0.00	12.00	80.00	0.30	BSPR
0131566	BS	10.00		0.00		0.00		0.00		0.00	9.00	70.00	6.33	BSPR
013753	LA	10.00		0.00		0.00		0.00		0.00	12.00	85.00	6.86	LAPR
013626	AL	3.00	LA	3.00	BS	3.00	PO	1.00		0.00	6.00	65.00	4.30	SWIH
0131611	WB	4.00	BF	2.00	LA	2.00	GB	1.00	BS	1.00	15.00	80.00	0.58	SWIH
013215	RM	3.00	BS	3.00	PO	2.00	BF	1.00	WB	1.00	19.00	75.00	6.93	IHSW
013173	PO	4.00	RM	3.00	WS	2.00	BF	1.00		0.00	18.00	55.00	1.60	IHMX
013263	AL	5.00	LA	3.00	RM	1.00	WB	1.00		0.00	6.00	85.00	6.45	IHMX
013586	PO	4.00	RM	2.00	BS	2.00	BF	2.00		0.00	19.00	75.00	1.27	IHSW
013577	AL	6.00	BF	1.00	WB	1.00	PO	1.00	RM	1.00	5.00	85.00	1.22	IHMX
013581	RM	4.00	WS	3.00	PO	2.00	LA	1.00		0.00	14.00	75.00	1.36	IHSW
013135	RM	5.00	PO	2.00	BS	1.00	WB	1.00	BF	1.00	14.00	85.00	0.16	IHMX
013579	RM	3.00	BS	2.00	PO	2.00	BF	2.00	WB	1.00	16.00	85.00	3.69	IHSW
013066	RM	4.00	BF	2.00	PO	2.00	WB	1.00	BS	1.00	16.00	85.00	1.74	IHMX
013128	RM	3.00	BS	3.00	WB	2.00	LA	1.00	PO	1.00	15.00	85.00	0.43	IHSW
013573	RM	3.00	PO	3.00	BF	2.00	WB	1.00	WS	1.00	17.00	85.00	2.38	IHMX
013076	RM	3.00	PO	3.00	BF	2.00	WS	1.00	BS	1.00	16.00	75.00	6.14	IHSW
0131510	CC	10.00		0.00		0.00		0.00		0.00	0.00	0.00	0.45	CC
0131587	RM	4.00	PO	3.00	WS	2.00	BF	1.00		0.00	18.00	80.00	3.17	IHMX
0131569	RM	5.00	PO	3.00	BF	1.00	WS	1.00		0.00	16.00	75.00	0.00	IHMX
013633	AL	8.00	LA	1.00	RM	1.00		0.00		0.00	4.00	80.00	0.72	ALPR
013681	AL	8.00	LA	1.00	DT	1.00		0.00		0.00	5.00	95.00	3.99	ALPR
013196	AL	10.00		0.00		0.00		0.00		0.00	3.00	85.00	0.01	ALPR

Appendix E. Forest Inventory Codes

EXPLANATION OF FOREST CODES; SPECIES

WS	White Spruce	JL	Japanese Larch	WB	White Birch
BF	Balsam Fir	EL	European Larch	PO	Poplar
HE	Hemlock	NS	Norway Spruce	RM	Red Maple
WP	White Pine	PC	Pin Cherry	RO	Red Oak
RP	Red Pine	MA	Apple	WA	White Ash
JP	Jack Pine	SP	Scots Pine	EM	Elm
CE	Cedar	AP	Austrian Pine	GB	Gray Birch
LA	Larch	YB	Yellow Birch	AL	Alders
BS	Black Spruce	SM	Sugar Maple	LI	Linden
RS	Red Spruce	BE	Beech		

PERCENT

0	1 - 9%
1	10 - 19%
2	20 - 29%
3	30 - 39%
4	40 - 49%
5	50 - 59%
6	60 - 69%
7	70 - 79%
8	80 - 89%
9	90 - 100%

CROWN CLOSURE

A	91 % - 100%
B	81 % - 90 %
C	71 % - 80 %
D	61 % - 70 %
E	51 % - 60 %
F	41 % - 50 %
G	31 % - 40 %
H	21 % - 30 %
I	11 % - 20 %
J	0 % - 10 %

ORIGIN AND HISTORY

BR	Burn	DI	Disease-Insect
WF	Wind Fall	OF	Old Field
PC	Partial Cut	PN	Plantation
CC	Clear Cut	HR	Hedgerow
TH	Thinning	EP	Excavation Pit

SAMPLE DESCRIPTIONS

FOREST STAND DESCRIPTIONS

75401 – Stand No.

SM5RM4 – Sugar Maple 50%, Red Maple 40%

WS1 12A – White Spruce 10%, Height, Crown Closure

OF – Origin History Old Field

Stand Numbering relates to the position of the stand within a 100 X 100 grid cell overlaid with the minimum values in the southwest corner and the maximum values in the northeast corner.

A stand labeled 75 40 1 would be positioned within easting grid 75 and northing grid 40 and would be the first stand within that grid cell.

NON-FOREST LAND TYPES

BO	Bog	AL	Alders
CL	Clear Land	FL	Flowerage
SO	Swamps – Open	AG	Agricultural Land
EP	Excavation Pit	SD	Sand Dune
PL	Power Line	UR	Urban
C	Cemetery	WW	Water

FOREST GROUND CONDITION

SW	Wet – Swampy
ST	Steep
SY	Sandy

Appendix F. Stand Tally Sheets from on the Ground Assessment

STAND TALLY SHEET															
CRUISER		J. LeClair			STAND #		13753			PLANTATION #		3801501			
PROPERTY #		481812			AREA		6.86 ha			Date		7 / 2 / 2023			
										D		M Y			
SAMPLE TREE INFORMATION															
TREE #	SPP.	AGE	D.B.H.	HEIGHT		TREE #	SPP.	AGE	D.B.H.	HEIGHT					
1	LA	43	22	16		4									
2	BS	43	14	11		5									
3						6									
STAND INFORMATION															
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha		HWSL	
Species and (%)		LA8		%		BS1		%		BF1		%		PO	
Even-aged		X		Uneven-aged										Biomass	
Slope		L		%		Aspect									
Stand Origin:		Old Field		X		Partial Cut				Burn				Unploughed	
		Windfall				Non Forest								Ploughed X	
		Clear Cut				Unknown									
Stand Maturity Class:		Regeneration				Immature		X		Mature				Over-mature	
Stand Stocking:		Understocked				Fully Stocked		X		Overstocked				Patchy	
Density:		SW		1,000		HW		100							
Advanced Regeneration:		Understocked		X		Fully Stocked				Overstocked				Patchy	
Regeneration:		1. Spp. RM				Height 2m				2. Spp. PC				Height 2 m	
		3. Spp.				Height				4. Spp.				Height	
GROUND OBSERVATIONS															
Ground Vegetation Species Present:					Wild raisin, raspberry, mountain ash, alders, sensitive fern, red-osier dogwood.										
Ground Hemlock					Y / N		X								
Invasive Species Present					Y / N		X		If yes then what species:						
Site Indicators					X		Y / N		If yes then what species: Red-osier and sensitive fern - wet site						
ENVIRONMENTAL OBSERVATIONS															
Water Course		Bog		Pond		Stream		Seeps				Beaver Present		Y / N	
Drainage:		Poor		X		Moderate		X		Good		Excellent		Erosion Control Required	
Snag Trees:		Adequate		X		Inadequate									
Coarse Woody Material:		Adequate		X		Inadequate									
Dens				Nests (Raptors, songbirds, etc.)											
Wildlife Observed				None observed.											
Comments															
STAND PRESCRIPTION															
No Treatment				Regeneration Cut				Crop Tree Release				Block Cut		X	
Shelterwood Cut				Selection Cut				Patch Cut				Strip Cut			
Commercial Thinning				Afforestation				Site Preparation		X					
Pre-commercial Thinning				Reforestation		X		Riparian Zone Mgmt							
Pln. Maint.		X		Y / N				Stems/Ha							
Comments:		This PN is variable with wet and low stocking near the Hwy. This stand has significant blowdown from previous wind events and hurricane Fiona, with around 70% of the stand down. Harvest the stand during frozen ground conditions. Could plant with WP, LA, CE, BS, or WA.													

STAND TALLY SHEET															
CRUISER		J. LeClair			STAND #		13263		PLANTATION #		3970581				
PROPERTY #		481812			AREA		6.45 ha		Date		7 / 2 / 2022				
											D M Y				
SAMPLE TREE INFORMATION															
TREE #	SPP.	AGE	D.B.H.	HEIGHT		TREE #	SPP.	AGE	D.B.H.	HEIGHT					
1	LA	26	17	13.5		4									
2	GB	26	13	10		5									
3						6									
STAND INFORMATION															
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha		HWSL	
Species and (%)		LA5		%		AI3		%		GB2		%			
Even-aged X		Uneven-aged										Biomass			
Slope L		%		Aspect											
Stand Origin:		Old Field X		Partial Cut		Burn		Unploughed							
		Windfall		Non Forest				Ploughed X							
		Clear Cut		Unknown											
Stand Maturity Class:		Regeneration		Immature X		Mature		Over-mature							
Stand Stocking:		Understocked		Fully Stocked X		Overstocked		Patchy							
Density:		SW 1,000		HW 2,000											
Advanced Regeneration:		Understocked X		Fully Stocked		Overstocked		Patchy							
Regeneration:		1. Spp. RM		Height 1.5 m		2. Spp. GB		Height 2 m							
		3. Spp.		Height		4. Spp.		Height							
GROUND OBSERVATIONS															
Ground Vegetation Species Present:		Sensitive fern, wild raisin, red-osier dogwood, mountain ash, raspberry, alders.													
Ground Hemlock		Y / N		X											
Invasive Species Present		Y / N		X		If yes then what species:									
Site Indicators		X		Y / N		If yes then what species: wet site - red-osier, alders, sensitive fern									
ENVIRONMENTAL OBSERVATIONS															
Water Course		Bog		Pond		Stream		Seeps		Beaver Present		Y / N			
Drainage:		Poor X		Moderate		Good		Excellent		Erosion Control Required		Y / N			
Snag Trees:		Adequate X		Inadequate											
Coarse Woody Material:		Adequate X		Inadequate											
Dens		Nests (Raptors, songbirds, etc.)													
Wildlife Observed		Northern flicker feeding holes in bark of trees observed.													
Comments															
STAND PRESCRIPTION															
No Treatment		Regeneration Cut		Crop Tree Release		Block Cut X									
Shelterwood Cut		Selection Cut		Patch Cut		Strip Cut									
Commercial Thinning		Afforestation		Site Preparation		X									
Pre-commercial Thinning		Reforestation		X		Riparian Zone Mgmt									
Pln. Maint.		X		Y / N		Stems/Ha									
Comments:		The stand has significant blowdown from hurricane Fiona, with around 50% blowdown. More standing trees were seen along the south edge of the stand. This site should be harvested only under frozen ground conditions due to wetness of the site. Could plant with WP, LA, CE, BS, or WA													

STAND TALLY SHEET													
CRUISER		J. LeClair		STAND #		13580		PLANTATION #		3955031			
PROPERTY #		481812		AREA		1.35 ha		Date		14 / 2 / 2023			
										D M Y			
SAMPLE TREE INFORMATION													
TREE #	SPP.	AGE	D.B.H.	HEIGHT		TREE #	SPP.	AGE	D.B.H.	HEIGHT			
1	LA	28	19	10		4							
2	RM	28	14	10		5							
3	GB	28	14	10		6							
STAND INFORMATION													
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha	
Species and (%)		LA 6 %		RM 1 %		GB 1 %		WB 1 %		Alders 1 %			
Even-aged		X		Uneven-aged								Biomass	
Slope		L %		Aspect									
Stand Origin:		Old Field X		Partial Cut		Burn		Unploughed					
		Windfall		Non Forest				Ploughed X					
		Clear Cut		Unknown									
Stand Maturity Class:		Regeneration		Immature X		Mature		Over-mature					
Stand Stocking:		Understocked		Fully Stocked X		Overstocked		Patchy					
Density:		SW 1,800		HW 200									
Advanced Regeneration:		Understocked X		Fully Stocked		Overstocked		Patchy					
Regeneration:		1. Spp. AL		Height 4 m		2. Spp.		Height					
		3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS													
Ground Vegetation Species Present:		Sensitive fern, alders.											
Ground Hemlock		Y / N X											
Invasive Species Present		Y / N X		If yes then what species:									
Site Indicators		X Y / N		If yes then what species: alders, sensitive fern - wet site									
ENVIRONMENTAL OBSERVATIONS													
Water Course		Bog		Pond		Stream		Seeps		Beaver Present		Y / N	
Drainage:		Poor X		Moderate		Good		Excellent		Erosion Control Required		Y / N	
Snag Trees:		Adequate		Inadequate X									
Coarse Woody Material:		Adequate		Inadequate X									
Dens				Nests (Raptors, songbirds, etc.)									
Wildlife Observed		Snowshoe hare tracks observed.											
Comments													
STAND PRESCRIPTION													
No Treatment				Regeneration Cut				Crop Tree Release				Block Cut X	
Shelterwood Cut				Selection Cut				Patch Cut				Strip Cut	
Commercial Thinning				Afforestation				Site Preparation		X			
Pre-commercial Thinning				Reforestation		X		Riparian Zone Mgmt					
Pln. Maint.		X Y / N		Stems/Ha									
Comments:		The blowdown is heaviest on the south side of the larch plantation. Approximately 50% of trees blown down after hurricane Fiona. Leave standing hardwoods for retention where possible. Could plant the site with WP, LA, CE, BS, or WA.											

STAND TALLY SHEET															
CRUISER		J. LeClair			STAND #		13581		PLANTATION #						
PROPERTY #		481812			AREA		1.36 ha		Date		14 / 2 / 2023				
											D M Y				
SAMPLE TREE INFORMATION															
TREE #	SPP.	AGE	D.B.H.	HEIGHT		TREE #	SPP.	AGE	D.B.H.	HEIGHT					
1	WS	43	39	20		4									
2	BF	43	26	16		5									
3						6									
STAND INFORMATION															
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha		HWSL	
Species and (%)		WS4		%		BF2		%		BS2		%		WB 1	
Even-aged		X		Uneven-aged										Biomass	
Slope		L		%		Aspect									
Stand Origin:		Old Field		X		Partial Cut				Burn				Unploughed	
		Windfall				Non Forest								Ploughed X	
		Clear Cut				Unknown									
Stand Maturity Class:		Regeneration				Immature				Mature		X		Over-mature	
Stand Stocking:		Understocked				Fully Stocked		X		Overstocked				Patchy	
Density:		SW		2,000		HW		100							
Advanced Regeneration:		Understocked				Fully Stocked				Overstocked				Patchy	
Regeneration:		1. Spp. RM				Height 1 m				2. Spp. BF				Height 1-3 m	
		3. Spp. WA				Height 1 m				4. Spp.				Height	
GROUND OBSERVATIONS															
Ground Vegetation Species Present:		Beaked hazelnut, mountain ash													
Ground Hemlock		Y / N		X											
Invasive Species Present		Y / N		X		If yes then what species:									
Site Indicators		Y / N		X		If yes then what species:									
ENVIRONMENTAL OBSERVATIONS															
Water Course		Bog		Pond		Stream		Seeps				Beaver Present		Y / N	
Drainage:		Poor		X		Moderate		Good		Excellent		Erosion Control Required		Y / N	
Snag Trees:		Adequate		X		Inadequate									
Coarse Woody Material:		Adequate		X		Inadequate									
Dens				Nests (Raptors, songbirds, etc.)											
Wildlife Observed		None observed.													
Comments															
STAND PRESCRIPTION															
No Treatment				Regeneration Cut				Crop Tree Release				Block Cut		X	
Shelterwood Cut				Selection Cut				Patch Cut				Strip Cut			
Commercial Thinning				Afforestation				Site Preparation		X					
Pre-commercial Thinning				Reforestation		X		Riparian Zone Mgmt							
Pln. Maint.		X		Y / N		Stems/Ha									
Comments:		<u>Overmature BF present in stand. About 20% of the stand has blown down, more so on the west side.</u> <u>This stand is an old plantation, where site preparation was done in the past (V-plow). Block harvest</u> <u>to salvage blow down. Leave hardwoods for coverpatch and single tree retention. Could plant with</u> <u>WP, LA, CE, BS, or WA.</u>													

STAND TALLY SHEET													
CRUISER		J. LeClair		STAND #		131566		PLANTATION #		3801501			
PROPERTY #		481812		AREA		6.33 ha		Date		14 / 2 / 2023			
										D M Y			
SAMPLE TREE INFORMATION													
TREE #	SPP.	AGE	D.B.H.	HEIGHT		TREE #	SPP.	AGE	D.B.H.	HEIGHT			
1	NS	43	31	17		4							
2	BS	43	24	16		5							
3						6							
STAND INFORMATION													
Stand Basal Area		SW		M ² /Ha	SWSL		M ² /Ha	HW		M ² /Ha	HWSL		M ² /Ha
Species and (%)		BS 6	%	NS 4	%		%						
Even-aged		X	Uneven-aged								Biomass		
Slope		L	%	Aspect									
Stand Origin:		Old Field X		Partial Cut			Burn		Unploughed				
		Windfall		Non Forest					Ploughed X				
		Clear Cut		Unknown									
Stand Maturity Class:		Regeneration			Immature X		Mature X		Over-mature				
Stand Stocking:		Understocked			Fully Stocked X		Overstocked		Patchy				
Density:		SW	1,200	HW									
Advanced Regeneration:		Understocked X		Fully Stocked			Overstocked		Patchy				
Regeneration:		1. Spp. RM		Height 1 m			2. Spp.		Height				
		3. Spp.		Height			4. Spp.		Height				
GROUND OBSERVATIONS													
Ground Vegetation Species Present:				wild raisin, mountain holly, red-osier dogwood, mountain ash									
Ground Hemlock				Y / N	X								
Invasive Species Present				Y / N	X	If yes then what species:							
Site Indicators				X	Y / N	If yes then what species: red-osier dogwood - wet site							
ENVIRONMENTAL OBSERVATIONS													
Water Course		Bog		Pond		Stream		Seeps		Beaver Present		Y / N	
Drainage:		Poor X	Moderate		Good		Excellent		Erosion Control Required		Y / N		
Snag Trees:		Adequate X	Inadequate										
Coarse Woody Material:		Adequate X	Inadequate										
Dens		Nests (Raptors, songbirds, etc.)											
Wildlife Observed		None observed.											
Comments													
STAND PRESCRIPTION													
No Treatment			Regeneration Cut		Crop Tree Release			Block Cut X					
Shelterwood Cut			Selection Cut		Patch Cut			Strip Cut					
Commercial Thinning			Afforestation		Site Preparation		X						
Pre-commercial Thinning			Reforestation	X	Riparian Zone Mgmt								
Pln. Maint.		X	Y / N		Stems/Ha								
Comments:		Some blow down to salvage from hurricane fiona, particularly in the northern section of the stand. Harvest during frozen ground conditions as soils are wet. Could plant with WP, LA, CE, BS, or WA.											

STAND TALLY SHEET													
CRUISER		J. LeClair		STAND #		013215, 013579, 013128, 013670, 013066		PLANTATION #					
PROPERTY #		481812 Milo		AREA		13.08 ha		Date		12 / 6 / 2023			
										D M Y			
SAMPLE TREE INFORMATION													
Tree#		AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%		
1	RM	80+	35	19	50								
2	BF	80+	24	18	50								
3	WB	80+	27	19	60								
STAND INFORMATION													
Stand Basal Area		SW	M ² /Ha		SWSL	M ² /Ha		HW	M ² /Ha		HWSL	M ² /Ha	
Species and (%)		RM20 %	WB20 %	BF20 %	WS10 %	PO20 CE/LA 10							
Even-aged X		Uneven-aged		Biomass									
Slope		%	Aspect										
Stand Origin:		Old Field		Partial Cut		Burn		Unploughed		X			
		Windfall		Non Forest				Ploughed					
		Clear Cut		Unknown									
Stand Maturity Class:		Regeneration		Immature		Mature X		Over-mature X					
Stand Stocking:		Understocked		Fully Stocked X		Overstocked		Patchy					
Density:		SW	600	HW	1,200								
Advanced Regeneration:		Understocked		Fully Stocked X		Overstocked		Patchy					
Regeneration:		1. Spp. PO		Height 2-3 m		2. Spp. RM		Height 1-5 m					
		3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS													
Ground Vegetation Species Present:		horsetails, starflower, bunchberry, dwarf raspberry, alternate leaved dogwood bracken fern, beaked hazelnut											
Ground Hemlock		X	Y / N										
Invasive Species Present			Y / N X	If yes then what species:									
Site Indicators		X	Y / N	If yes then what species: sphagnum moss - wet site									
ENVIRONMENTAL OBSERVATIONS													
Water Course		N	Bog	Pond	Stream	Seeps	Beaver Present		Y / N				
Drainage:		Poor X	Moderate X	Good	Excellent	Erosion Control Required		Y / N					
Snag Trees:		Adequate X	Inadequate										
Coarse Woody Material:		Adequate X	Inadequate										
Dens		Nests (Raptors, songbirds, etc.)											
Wildlife Observed		wood frog seen											
Comments		Broom seen in BF											
STAND PRESCRIPTION													
No Treatment		Regeneration Cut		Crop Tree Release		Block Cut							
Shelterwood Cut		Selection Cut		Patch Cut		X		Strip Cut					
Commercial Thinning		Afforestation		Site Preparation		X							
Pre-commercial Thinning		Reforestation		X		Riparian Zone Mgmt							
Pln. Maint.		X	Y / N	Stems/Ha									
Comments:		PO blowdown is present in the stand. Some pockets of spruce and fir in the stand. Could use patch harvest to target softwood pockets (opening sizes of less than 2 ha). Could plant with BS, WS, WP, CE, WA or YB.											

STAND TALLY SHEET													
CRUISER		J. LeClair		STAND # 013233, 013194				PLANTATION #					
PROPERTY #		481812 Milo		AREA		4.46 ha		Date		12 / 6 / 2023			
										D M Y			
SAMPLE TREE INFORMATION													
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%		
1	CE	80+	30	16	60								
2	BF	40+	14	16	30								
3	PO	80+	72	22	35								
STAND INFORMATION													
Stand Basal Area		SW		M ² /Ha	SWSL		M ² /Ha	HW		M ² /Ha	HWSL		M ² /Ha
Species and (%)		BF40	%	CE20	%	RS20	%	PO10	%	RM10			
Even-aged X		Uneven-aged								Biomass			
Slope		%	Aspect	L									
Stand Origin:		Old Field		Partial Cut		Burn		Unploughed					
		Windfall		Non Forest				Ploughed					
		Clear Cut		Unknown									
Stand Maturity Class:		Regeneration		Immature X		Mature X		Over-mature X					
Stand Stocking:		Understocked		Fully Stocked X		Overstocked		Patchy					
Density:		SW	3,600	HW	200								
Advanced Regeneration:		Understocked X		Fully Stocked		Overstocked		Patchy		X			
Regeneration:		1. Spp. RM		Height 1-2 m		2. Spp. BF		Height 0.5-1 m					
		3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS													
Ground Vegetation Species Present:		bunchberry, mosses, starflower, sarsaparilla, yellow clintonia											
Ground Hemlock		Y / N	X										
Invasive Species Present		Y / N	X	If yes then what species:									
Site Indicators		Y / N	X	If yes then what species:									
ENVIRONMENTAL OBSERVATIONS													
Water Course		N	Bog	Pond	Stream	Seeps	Beaver Present		Y / N				
Drainage:		Poor X	Moderate X	Good	Excellent	Erosion Control Required		Y / N					
Snag Trees:		Adequate X	Inadequate										
Coarse Woody Material:		Adequate X	Inadequate										
Dens		Nests (Raptors, songbirds, etc.)											
Wildlife Observed													
Comments													
STAND PRESCRIPTION													
No Treatment		X	Regeneration Cut		Crop Tree Release		Block Cut						
Shelterwood Cut			Selection Cut		Patch Cut		Strip Cut						
Commercial Thinning			Afforestation		Site Preparation								
Pre-commercial Thinning			Reforestation		Riparian Zone Mgmt								
Pln. Maint.		Y / N	Stems/Ha										
Comments:		PO in stand was overmature, 0.5-1.0 m wide. CE was on the larger side, with BF more immature. The stand was wetter to the West with more sensitive soils. Some blowdown was present in the N side of the stand. This stand could be left for biodiversity and wildlife values, to preserve the larger CE present.											

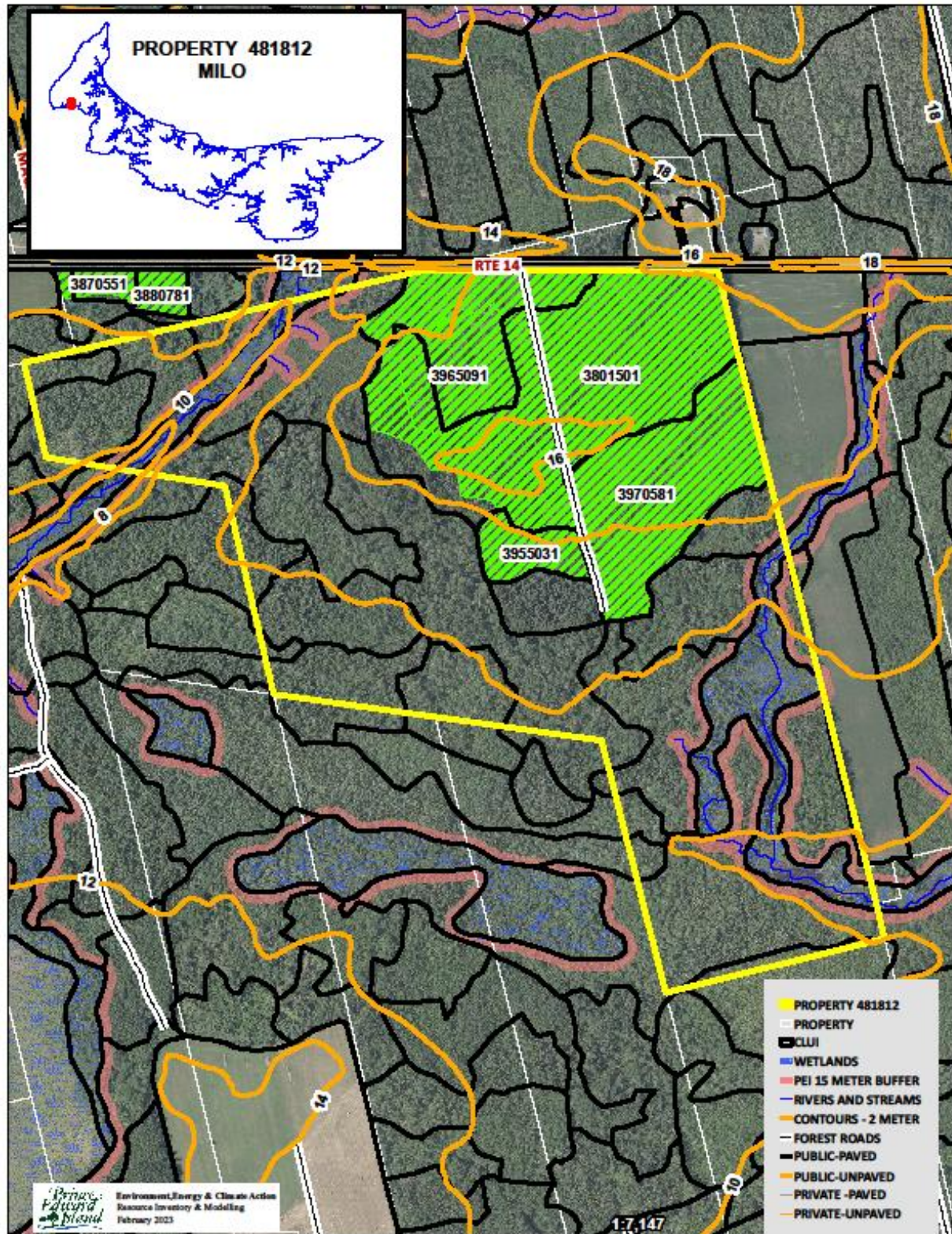
STAND TALLY SHEET															
CRUISER		J. LeClair			STAND #			13572, 013577, 013571, 0131611, 013076, 013573			PLANTATION #				
PROPERTY #		481812			AREA			12.93 ha			Date		14 / 2 / 2023		
											D		M Y		
SAMPLE TREE INFORMATION															
TREE #	SPP.	AGE	D.B.H.	HEIGHT			TREE #	SPP.	AGE	D.B.H.	HEIGHT				
1	CE	80+	24	13			4								
2	BS	80+	25	16			5								
3	RM	80+	22	15			6								
STAND INFORMATION															
Stand Basal Area		SW		M ² /Ha	SWSL		M ² /Ha	HW		M ² /Ha	HWSL		M ² /Ha		
Species and (%)		CE3	%	BS2	%	RM2	%	WB2	%	WA,BF 1 %					
Even-aged		X	Uneven-aged									Biomass			
Slope		L	%	Aspect											
Stand Origin:		Old Field		Partial Cut		Burn		Unploughed							
		Windfall		Non Forest				Ploughed							
		Clear Cut		Unknown											
Stand Maturity Class:		Regeneration		Immature		Mature		X	Over-mature						
Stand Stocking:		Understocked		Fully Stocked		X	Overstocked		Patchy						
Density:		SW	1,400	HW	200										
Advanced Regeneration:		Understocked		X	Fully Stocked		Overstocked		Patchy						
Regeneration:		1. Spp. BF		Height		3 m		2. Spp. CE		Height		1 m			
		3. Spp.		Height				4. Spp.		Height					
GROUND OBSERVATIONS															
Ground Vegetation Species Present:		Snowberry, sensitive fern, wild raisin, common elder.													
Ground Hemlock		Y / N	X												
Invasive Species Present		Y / N	X	If yes then what species:											
Site Indicators		X	Y / N	If yes then what species: sensitive fern, winterberry - wet site											
ENVIRONMENTAL OBSERVATIONS															
Water Course		X	Bog	Pond	Stream	X	Seeps	Beaver Present		Y / N					
Drainage:		Poor	X	Moderate	Good	Excellent	Erosion Control Required		Y / N						
Snag Trees:		Adequate	X	Inadequate											
Coarse Woody Material:		Adequate	X	Inadequate											
Dens		Nests (Raptors, songbirds, etc.)													
Wildlife Observed		Snowshoe hare and coyote tracks observed.													
Comments		Mapped Creek (013571), buffer 15 m at least.													
STAND PRESCRIPTION															
No Treatment		X	Regeneration Cut		Crop Tree Release		Block Cut								
Shelterwood Cut		Selection Cut		Patch Cut		Strip Cut									
Commercial Thinning		Afforestation		Site Preparation											
Pre-commercial Thinning		Reforestation		Riparian Zone Mgmt											
Pln. Maint.		Y / N	Stems/Ha												
Comments:		CE in stand 13572 with wet, sensitive soils. No treatment recommended as these stands have sensitive soils and can be left to enhance the riparian area in stand 013571 and increase wildlife and biodiversity values.													

STAND TALLY SHEET													
CRUISER		J. LeClair		STAND #		13235		PLANTATION #					
PROPERTY #		481812 Milo		AREA		1.01 ha		Date		12 / 6 / 2023			
								D		M		Y	
SAMPLE TREE INFORMATION													
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%		
1	BS	80+	22	20	40	4							
2	BF	80+	20	16	30	5							
3	RM	100+	44	20	50	6							
STAND INFORMATION													
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha	
Species and (%)		BS40 %		BF40 %		LA10 %		RM10 %					
Even-aged X		Uneven-aged								Biomass			
Slope		% Aspect		L									
Stand Origin:		Old Field		Partial Cut		Burn		Unploughed		X			
		Windfall		Non Forest				Ploughed					
		Clear Cut		Unknown									
Stand Maturity Class:		Regeneration		Immature X		Mature X		Over-mature X					
Stand Stocking:		Understocked		Fully Stocked X		Overstocked		Patchy					
Density:		SW 3,000		HW 400									
Advanced Regeneration:		Understocked X		Fully Stocked		Overstocked		Patchy					
Regeneration:		1. Spp. BF		Height 0.5-3 m		2. Spp. RM		Height 5 m					
		3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS													
Ground Vegetation Species Present:		bunchberry, pink lady slipper, yellow clintonia, bracken fern											
Ground Hemlock		Y / N		X									
Invasive Species Present		Y / N		X		If yes then what species:							
Site Indicators		Y / N		X		If yes then what species:							
ENVIRONMENTAL OBSERVATIONS													
Water Course		N		Bog		Pond		Stream		Seeps		Beaver Present Y / N	
Drainage:		Poor		Moderate X		Good		Excellent		Erosion Control Required		Y / N	
Snag Trees:		Adequate X		Inadequate									
Coarse Woody Material:		Adequate X		Inadequate									
Dens		Nests (Raptors, songbirds, etc.)											
Wildlife Observed		Grouse seen											
Comments													
STAND PRESCRIPTION													
No Treatment		X		Regeneration Cut		Crop Tree Release		Block Cut					
Shelterwood Cut				Selection Cut		Patch Cut		Strip Cut					
Commercial Thinning				Afforestation		Site Preparation							
Pre-commercial Thinning				Reforestation		Riparian Zone Mgmt							
Pln. Maint.		Y / N		Stems/Ha									
Comments:		BS immature to mature with no significant blowdown. May be difficult to access as adjacent stand to the East (0131587) has wet ground. No treatment advised due to access issues.											

STAND TALLY SHEET													
CRUISER		J. LeClair		STAND #		13586, 013139, 013206, 013173, 013681, 013253, 0131587		PLANTATION #					
PROPERTY #		481812 Milo		AREA		12.61 ha		Date		12 / 6 / 2023			
								D		M		Y	
SAMPLE TREE INFORMATION													
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%		
1	BS	80+	24	20	35								
2	LA	80+	30	21	40								
3													
STAND INFORMATION													
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha	
Species and (%)		BS50 %		LA20 %		RM20 %				Al/Mtn.Ash/PO 10%			
Even-aged X		Uneven-aged										Biomass	
Slope		% Aspect		L									
Stand Origin:		Old Field		Partial Cut		Burn		Unploughed		X			
		Windfall		Non Forest				Ploughed					
		Clear Cut		Unknown									
Stand Maturity Class:		Regeneration X		Immature		Mature X		Over-mature X					
Stand Stocking:		Understocked		Fully Stocked X		Overstocked		Patchy					
Density:		SW 3,000		HW 200									
Advanced Regeneration:		Understocked		Fully Stocked X		Overstocked X		Patchy					
Regeneration:		1. Spp. BF		Height 2 m		2. Spp. RM		Height 5 m					
		3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS													
Ground Vegetation Species Present:		spaghnum moss											
Ground Hemlock		Y / N		X									
Invasive Species Present		Y / N		X		If yes then what species:							
Site Indicators		X		Y / N		If yes then what species:		spaghnum moss - wet site					
ENVIRONMENTAL OBSERVATIONS													
Water Course		Y		Bog		Pond		Stream		Seeps		Beaver Present	
Drainage:		Poor X		Moderate		Good		Excellent		Erosion Control Required		Y / N	
Snag Trees:		Adequate X		Inadequate									
Coarse Woody Material:		Adequate X		Inadequate									
Dens				Nests (Raptors, songbirds, etc.)									
Wildlife Observed		Hummingbird seen.											
Comments		mapped streams in stands 013253 and 013681, possible stream in 0131587, buffer 15 m											
STAND PRESCRIPTION													
No Treatment		X		Regeneration Cut		Crop Tree Release		Block Cut					
Shelterwood Cut				Selection Cut		Patch Cut		Strip Cut					
Commercial Thinning				Afforestation		Site Preparation							
Pre-commercial Thinning				Reforestation		Riparian Zone Mgmt							
Pln. Maint.		Y / N		Stems/Ha									
Comments:		Thick bf regeneration in stand with about 50% blowdown. Ground is wet and may be inoperable.											
		These stands could be left to enhance the existing riparian area and increase wildlife and biodiversity values.											

STAND TALLY SHEET													
CRUISER		J.LeClair		STAND #		13626		PLANTATION #		3965091/3801501			
PROPERTY #		481812		AREA		4.3 ha		Date		7 / 2 / 2023			
										D M Y			
SAMPLE TREE INFORMATION													
TREE #	SPP.	AGE	D.B.H.	HEIGHT		TREE #	SPP.	AGE	D.B.H.	HEIGHT			
1	LA	43	31	15		4							
2	BS	43	17	10		5							
3	AI		4	4		6							
STAND INFORMATION													
Stand Basal Area		SW		M ² /Ha		SWSL		M ² /Ha		HW		M ² /Ha	
Species and (%)		AI 3 %		BS 3 %		LA 2 %		PO 1 %		WS, WB, RM 1%			
Even-aged		X		Uneven-aged						Biomass			
Slope		L		% Aspect									
Stand Origin:		Old Field		X		Partial Cut		Burn		Unploughed			
		Windfall				Non Forest				Ploughed		X	
		Clear Cut				Unknown							
Stand Maturity Class:		Regeneration				Immature		X		Mature		Over-mature	
Stand Stocking:		Understocked		X		Fully Stocked				Overstocked		Patchy	
Density:		SW		300		HW		25					
Advanced Regeneration:		Understocked		X		Fully Stocked				Overstocked		Patchy	
Regeneration:		1. Spp. BS		Height		2 m		2. Spp.		Height			
		3. Spp.		Height				4. Spp.		Height			
GROUND OBSERVATIONS													
Ground Vegetation Species Present:				Wild raisin, red-osier dogwood, alders, sensitive fern, mountain holly willows.									
Ground Hemlock				Y / N		X							
Invasive Species Present				Y / N		X		If yes then what species:					
Site Indicators				X		Y / N		If yes then what species: red osier, alders, mountain holly - wet site					
ENVIRONMENTAL OBSERVATIONS													
Water Course		Bog		Pond		Stream		Seeps		Beaver Present		Y / N	
Drainage:		Poor		X		Moderate		Good		Excellent		Erosion Control Required	
Snag Trees:		Adequate		X		Inadequate							
Coarse Woody Material:		Adequate		X		Inadequate							
Dens				Nests (Raptors, songbirds, etc.)									
Wildlife Observed				None observed.									
Comments		This stand has some features consistent with a wetland.											
STAND PRESCRIPTION													
No Treatment				X		Regeneration Cut				Crop Tree Release		Block Cut	
Shelterwood Cut						Selection Cut				Patch Cut		Strip Cut	
Commercial Thinning						Afforestation				Site Preparation			
Pre-commercial Thinning						Reforestation				Riparian Zone Mgmt			
Pln. Maint.		Y / N		Stems/Ha									
Comments:		This area was planted with BS in 1980 and WS planted in 1996. The site is wet and open with a lot of alder and willow and herbaceous vegetation. The Nov. winds in 2018 blew down most of the stand. Leave stand for wildlife and biodiversity values as it is a possible wetland with wet site indicators and sensitive soils.											

Appendix G. Plantation Map with Contour Lines



Appendix H. Work Completed

Activity Number	Treatment Code	Amount Completed	Treatment Date	Treatment Description
0	2	66.7	7/30/2005	Fill
3955031	23C	7	9/9/1994	Rhome Disc Triple Pass - Per Ha
3801501	25B	2.11	2/22/1996	Chemical Broadcast
3955031	59W	1044	6/21/1995	EASTERN LARCH - WESTERN
3970581	59W	6826	7/17/1997	EASTERN LARCH - WESTERN
3970581	59W	11227	7/17/1997	EASTERN LARCH - WESTERN
3955032	61W	17835	6/21/1995	JAPANESE LARCH - WESTERN
3801501	97	45	12/19/2006	Wood Extraction