

Date: January 7<sup>th</sup>, 2025

**P.E.I.**

**Public Forests**



**Woodlot Management Plan**

**Property Number: 29132**

**Location: Freeland**

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## **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 29132 is located on the south of Route 12 and east of Conway road, in the community of Freeland, P.E.I., (Appendix A). Mink road also intersects the south end of this property. The total area of this property is 24.3 hectares (60.0 acres) and the midpoint of the property is Latitude N 46.66363 decimal degrees, Longitude W -63.98103 decimal degrees.

### **Past Information**

Local records and previous aerial photography show that the south half of the property, below the creek, was used for agricultural purposes early in the 20<sup>th</sup> century, with farm buildings visible just north of Mink Road on the western side. Fields along the north border of the property can also be seen in past photography. The main wooded section north of the creek has been partially logged, as an old logging road can be seen running north/south and various cut patches visible in the old photos. 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 2020 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 is one main stream on this property, with a 2.76 hectare wetland accompanying it running E/W at approximately the middle of the property. There are also three wetlands south of this stream and north of Mink road and another fourth wetland area that can be found in the south west corner, adding another 0.84 ha of wetland to the property. These features can be seen on the map in Appendix A. A 15 metre buffer zone is to be maintained around these wetlands and the stream.

### **Property Access**

Mink road (450 m, class 1) can be used to access stands to the south of the property from the west access point off of Conway Road. For vehicles larger than an ATV, the existing crossing structure over Freeland creek would need to be assessed and possibly upgraded. 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 roads on the property can be seen on Appendix A. For stands in the northern section, access can be had through private land, either East of Conway road or south of Route 12, if permission is granted.

### **Property Boundaries**

This property is bounded on the north, east and south by private land. Government land borders the southwest portion of the property and the northwest portion is bounded by a property owned by the Island Nature Trust.

## **Fire Protection**

This property is located within the jurisdiction of the Tyne Valley 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 no 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](http://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.

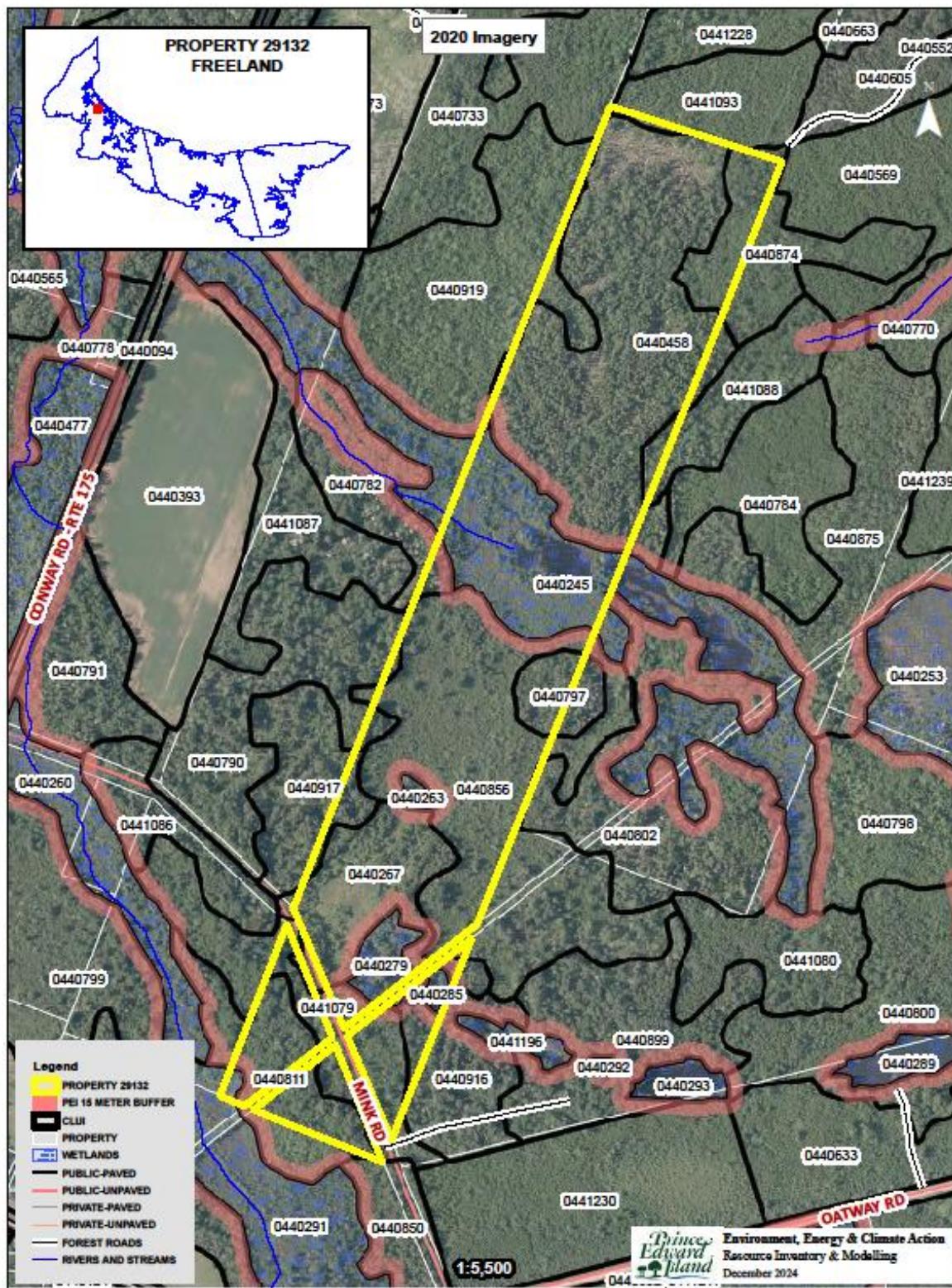
**Table 1. Proposed Treatment Summary.**

Stand Number and Plantation Number	Treatment Type	Treatment Year	Amount Proposed	2018 Eco-Manual Reference	Comments	Goals
440263, 440279, 440285	Nesting Boxes	2025	3-6	Pg. 33	Gravel pit ponds could be enhanced for birds by providing nesting boxes.	Enhance nesting opportunities for wildlife.
440458	Block Harvest	2025	5.0	Pg. 30	BS/RS stand with patches of blowdown in decline with access opportunity. Leave RS and CE of good form for seed trees.	Salvage wood.
440458	Manual Site Preparation & Reforestation	2025	5.0	Pg. 14 & Pg. 16	Create microsites for planting and plant with tree species suitable for the site. Could plant RS, BS, CE, LA, WP, EH, YB or WA.	Regenerate a biodiverse forest stand.

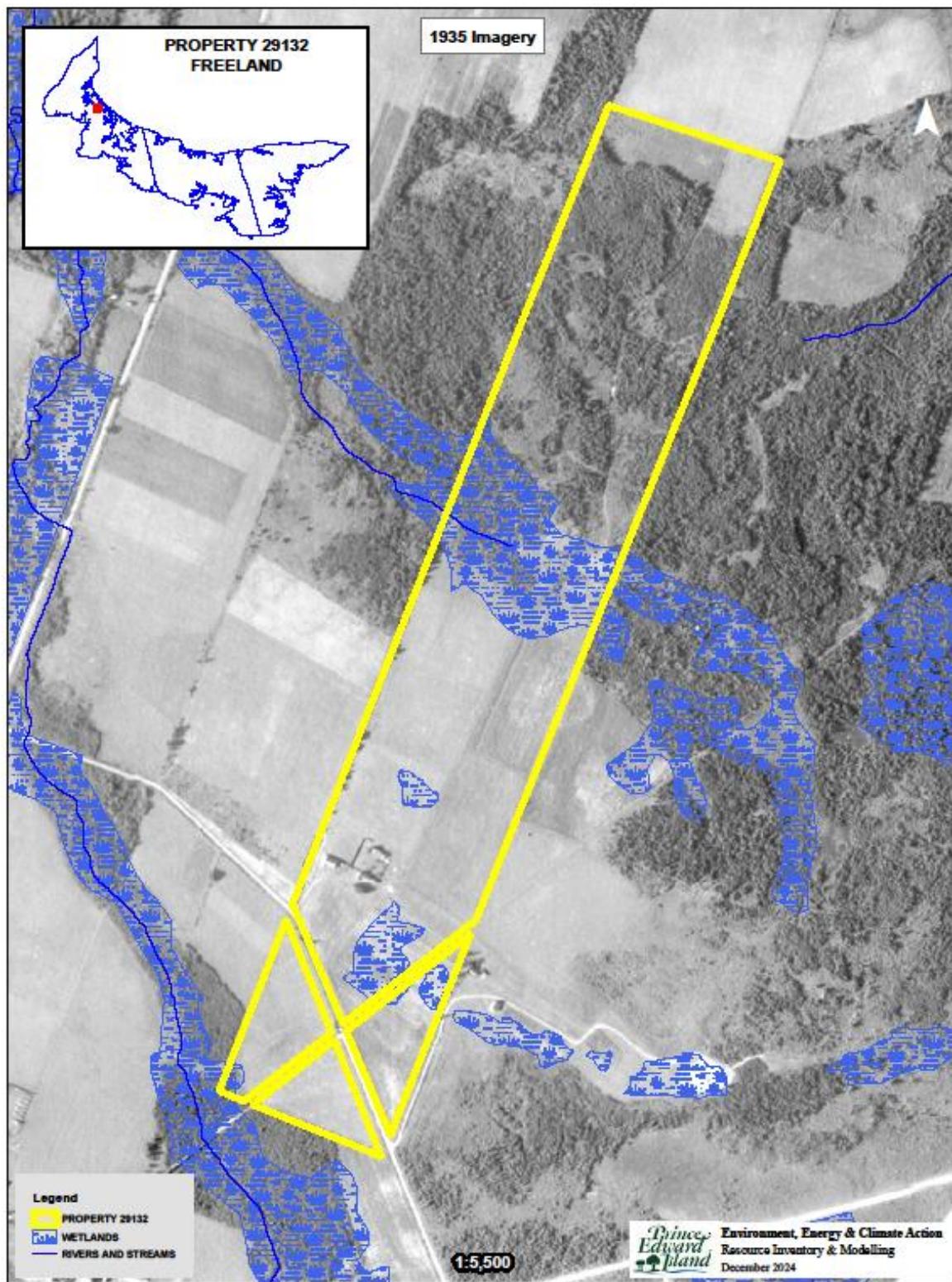
440458	Manual Maintenance	2028	5.0	Pg. 17-18	Eliminate undesirable competing vegetation.	Improve growth of crop trees.
440267	Reforestation - Enrichment Planting	2025	0.6	Pg. 17	Reforest old farm site by planting unforested pockets with WS, WP or LA.	Regenerate a biodiverse forest stand.

## **Appendices**

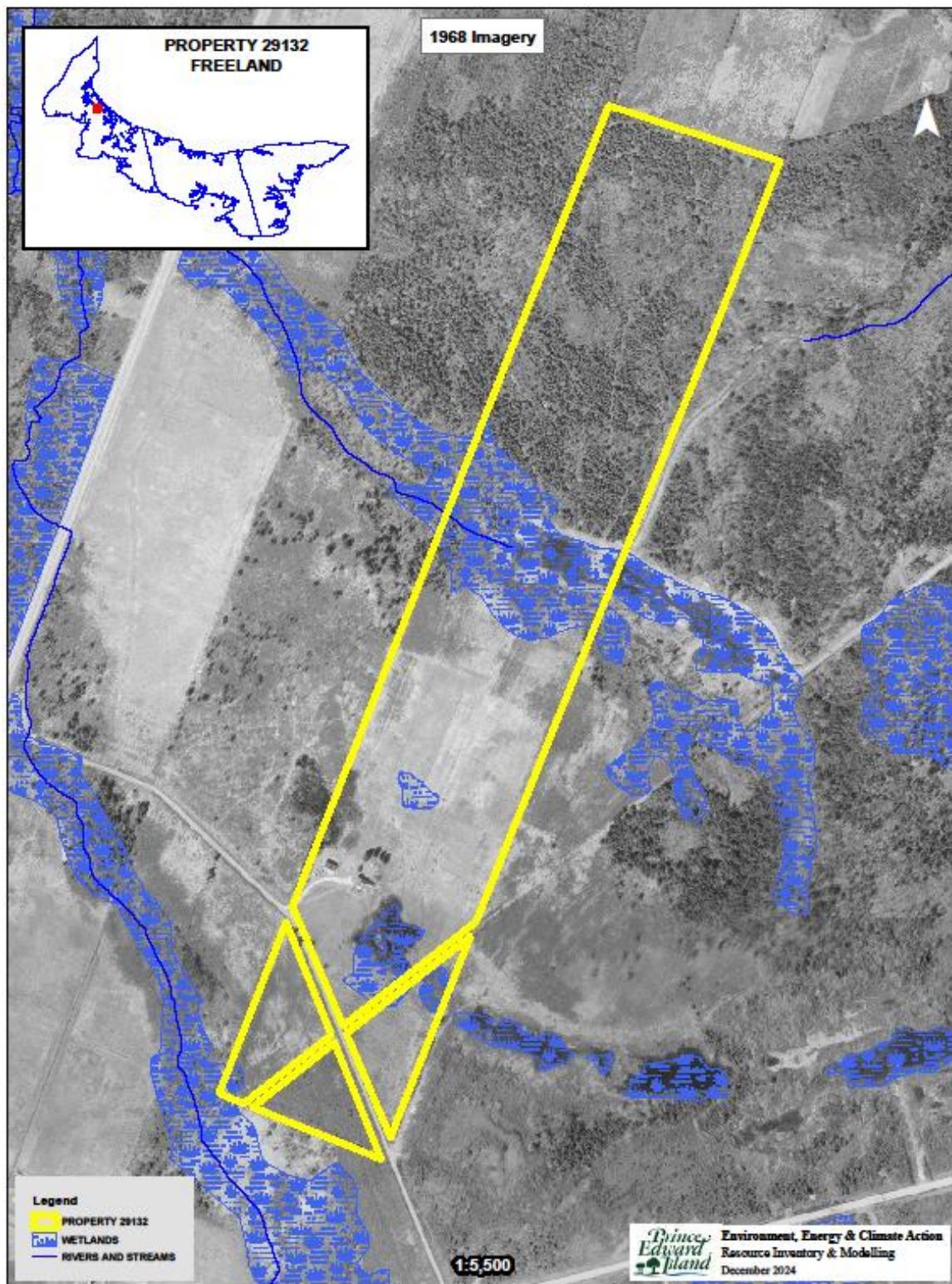
## Appendix A. Map of Property with Locator Map



## Appendix B. 1935 Aerial Photography



## Appendix C. 1968 Aerial Photography



### Appendix D. 2020 Corporate Land Use Inventory

FIELDID	COVER1	PER1	COVER2	PER2	COVER3	PER3	COVER4	PER4	COVER5	PER5	HEIGHT	CROWN	HECTARES	WOODSTOCK
0440245		0		0		0		0		0	0	0	2.76	
0440263		0		0		0		0		0	0	0	0.12	
0440267	GB	7	AL	2	RM	1		0		0	8	40	2.31	IHPH
0440279		0		0		0		0		0	0	0	0.53	
0440285		0		0		0		0		0	0	0	0.12	
0440291		0		0		0		0		0	0	0	0.07	
0440458	RM	3	BS	3	RS	2	PO	1	LA	1	16	75	7.71	SWIH
0440782	RM	4	WS	2	PO	2	BF	1	GB	1	14	70	0.16	IHMX
0440790	PO	4	RM	4	WB	1	WS	1		0	17	55	0.16	IHMX
0440797	PO	4	RM	3	GB	2	WS	1		0	14	75	0.53	IHMX
0440811	RM	5	WS	2	GB	2	PO	1		0	13	85	1.37	IHMX
0440856	AL	5	RM	2	PC	1	PO	1	WI	1	4	95	5.01	IHMX
0440874	RM	5	PO	2	BF	1	WS	1	GB	1	14	85	0.97	IHMX
0440916	RM	4	WS	3	PO	2	GB	1		0	16	60	0.28	IHMX
0440917	PO	5	GB	2	RM	2	WS	1		0	16	35	0.30	IHMX
0440919	PO	4	BS	2	RM	2	BF	1	GB	1	7	85	0.43	IHMX
0441079	RM	7	GB	1	CE	1	WS	1		0	11	65	1.26	RMPR
0441088	RM	4	AL	2	RS	2	LA	1	PO	1	13	75	0.19	IHMX
0441093	WS	9	RM	1		0		0		0	4	75	0.10	WSPR

## Appendix E. Forest Inventory Codes

### EXPLANATION OF FORESTRY CODES:

#### SPECIES

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

#### PERCENT

<b>0</b>	1 - 9%	<b>A</b>	91% - 100%
<b>1</b>	10 - 19%	<b>B</b>	81% - 90%
<b>2</b>	20 - 29%	<b>C</b>	71% - 80%
<b>3</b>	30 - 39%	<b>D</b>	61% - 70%
<b>4</b>	40 - 49%	<b>E</b>	51% - 60%
<b>5</b>	50 - 59%	<b>F</b>	41% - 50%
<b>6</b>	60 - 69%	<b>G</b>	31% - 40%
<b>7</b>	70 - 79%	<b>H</b>	21% - 30%
<b>8</b>	80 - 89%	<b>I</b>	11% - 20%
<b>9</b>	90 - 100%	<b>J</b>	0% - 10%

#### 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 overlay 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

<b>BO</b>	Bog	<b>AL</b>	Alders
<b>CL</b>	Clear Land	<b>FL</b>	Flowerage
<b>SO</b>	Swamps-Open	<b>AG</b>	Agriculture Land
<b>EP</b>	Excavation Pit	<b>SD</b>	Sand Dune
<b>PL</b>	Power Line	<b>UR</b>	Urban
<b>C</b>	Cemetery	<b>WW</b>	Water

#### FOREST GROUND CONDITIONS

<b>SW</b>	Wet-Swampy
<b>ST</b>	Steep
<b>SY</b>	Sandy

## Appendix F. Stand Tally Sheets from on the Ground Assessment

STAND TALLY SHEET												
CRUISER	J.LeClair & M. Buchanan		STAND #	440458		PLANTATION #						
PROPERTY #	29132 Freeland			AREA	7.71 ha	Date	3 / 1 / 2025	D	M	Y		
SAMPLE TREE INFORMATION												
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	
1	BS/RS	80	27.5	20	40	4						
2	LA	80	29.5	20	40	5						
3						6						
STAND INFORMATION												
Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha				
Species and (%)	BS50	%	RS20	%	WS10	%	BF10	%	CE, RM, LA, PO 10%			
Even-aged	X	Uneven-aged						Biomass				
Slope	0 %	Aspect	L									
Stand Origin:	Old Field	X	Partial Cut	X	Burn		Unploughed	X				
	Windfall		Non Forest				Ploughed	X				
	Clear Cut		Unknown									
Stand Maturity Class:	Regeneration		Immature		Mature	X	Over-mature	X				
Stand Stocking:	Understocked		Fully Stocked	X	Overstocked		Patchy					
Density:	SW	1,650	HW	100								
Advanced Regeneration:	Understocked	X	Fully Stocked		Overstocked		Patchy					
Regeneration:	1. Spp. RS		Height	0.5 m	2. Spp. BF		Height	0.5-1.0				
	3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS												
Ground Vegetation Species Present:	sheep laurel, feather moss, wintergreen, wild raisin, blueberry											
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:								
ENVIRONMENTAL OBSERVATIONS												
Water Course	Y	Bog		Pond		Stream	X	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	snowshoe hare tracks, red squirrel											
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 patches of blowdown in the stand, particularly the north section and the SE corner. Block harvest approximately 5 ha of stand. RS trees in the stand of good form should be retained for seed trees and patches of advanced regeneration should be saved where possible. RM, CE and PO should be left for retention and biodiversity in the stand. Only harvest in frozen ground conditions. Could plant BS, RS, LA, EH, WP, CE, YB, RM.											

### STAND TALLY SHEET

CRUISER	J.LeClair & M. Buchanan	STAND #	440267	PLANTATION #	
PROPERTY #	29132 Freeland	AREA	2.31 ha	Date	3 / 1 / 2025

D M Y

#### SAMPLE TREE INFORMATION

Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	GB	30	15.6	8	60	4					
2	WS	12	7.3	3	95	5					
3						6					

#### STAND INFORMATION

Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha
Species and (%)	PC20 %	GB20 %	WS20 %	PO20 %		Apple, WB 20%		
Even-agerc X	Uneven-aged						Biomass	
Slope	0 %	Aspect	L					
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 200	HW 800						
Advanced Regeneration:	Understocked X		Fully Stocked		Overstocked		Patchy	
Regeneration:	1. Spp.	Height		2. Spp.	Height			
	3. Spp.	Height		4. Spp.	Height			

#### GROUND OBSERVATIONS

Ground Vegetation Species Present:	raspberry, red-osier dogwood, staghorn sumac		
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 X	Bog	Pond X	Stream	Seeps	Beaver Present	Y / N
Drainage:	Poor	Moderate X	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	None seen					
Comments	two gravel pit ponds one north of the stand and one east of the stand - buffer 15 m					

#### STAND PRESCRIPTION

No Treatment	Regeneration Cut	Crop Tree Release	Block Cut
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:	Farm buildings used to be present on this site in the past, as can be seen in historical photos. Could do enhancement planting in open grassy areas where raspberry is not dominant, planting WS, LA, or WP.		

### STAND TALLY SHEET

CRUISER J.LeClair & M. Buchanan STAND # 440919 PLANTATION #  
 PROPERTY # 29132 Freeland AREA 0.43 ha Date 3 / 1 / 2025  
 D M Y

SAMPLE TREE INFORMATION											
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	BS	50	13.8	10	80	4					
2	RM	31	10	12	50	5					
3						6					

### STAND INFORMATION

Stand Basal Area SW M<sup>2</sup>/Ha SWSL M<sup>2</sup>/Ha HW M<sup>2</sup>/Ha HWSL M<sup>2</sup>/Ha  
 Species and (%) BS40 % RS20 % RM20 % GB10 % LA 10%  
 Even-aged X Uneven-aged \_\_\_\_\_ Biomass \_\_\_\_\_  
 Slope 0 % 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 Over-mature \_\_\_\_\_  
 Stand Stocking: Understocked X Fully Stocked Overstocked Patchy \_\_\_\_\_  
 Density: SW 1,000 HW 400  
 Advanced Regeneration: Understocked X Fully Stocked Overstocked Patchy \_\_\_\_\_  
 Regeneration: 1. Spp. BS/RS Height 2-3 m 2. Spp. LA Height 5 m  
 3. Spp. GB Height 5 m 4. Spp. \_\_\_\_\_ Height \_\_\_\_\_

### GROUND OBSERVATIONS

Ground Vegetation Species Present: rhodora, labrador tea, sheep laurel  
 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: rhodora, lab tea - wet site

### ENVIRONMENTAL OBSERVATIONS

Water Course N 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 snowshoe hare tracks  
 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:	Deep moss and sensitive soils, no treatment recommended.			

### STAND TALLY SHEET

CRUISER	J.LeClair & M. Buchanan	STAND #	440245	PLANTATION #	
PROPERTY #	29132 Freeland	AREA	2.76 ha	Date	3 / 1 / 2025

SAMPLE TREE INFORMATION											
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	RM	45	15	14	60	4					
2	BS	45	16	15	55	5					
3						6					

### STAND INFORMATION

Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha
Species and (%)	AI40 %	RM20 %	BS20 %	CE10 %	PO, WB, GB 10%			
Even-agerc X	Uneven-aged						Biomass	
Slope 0 %	Aspect L							
Stand Origin:	Old Field X	Partial Cut X	Burn		Unploughed X			
	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 200	HW 1,500						
Advanced Regeneration:	Understocked X	Fully Stocked		Overstocked		Patchy		
Regeneration:	1. Spp. AI	Height 1-5 m		2. Spp. RM	Height 2 m			
	3. Spp.	Height		4. Spp.	Height			

### GROUND OBSERVATIONS

Ground Vegetation Species Present:	cattails, 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: sensitive fern, cattails - wet site

### ENVIRONMENTAL OBSERVATIONS

Water Course X	Bog	Pond	Stream X	Seeps	Beaver Present X	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.)					

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:	Wetland south of the stream is primarily Alders, RM, PO and to the north of the stream there is a higher BS/RS/LA/CE component. South of the creek was farmed in the past as can be seen in past photography, as well as openings suggesting partial cutting for timber north of the creek. Ponds along the creek potentially man made as look to be dug up for gravel. No treatment recommended although nesting boxes could be put in to enhance wildlife habitat.					

STAND TALLY SHEET											
				0441079, 0440811, CRUISER J.LeClair & M. Buchanan STAND # 0440916				PLANTATION #			
PROPERTY # 29132 Freeland				AREA 2.91 ha		Date 3 / 1 / 2025					
								D	M	Y	
SAMPLE TREE INFORMATION											
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	RM	70	21	15	55	4					
2	Elm	70	28.5	15	40	5					
3	WS	75	41.5	16	60	6					
STAND INFORMATION											
Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha			
Species and (%)	RM30 %	WB20 %	PO20 %	Elm10 %	WS, CE, GB, AL 20%						
Even-aged X	Uneven-aged				Biomass						
Slope 0 %	Aspect L										
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 100	HW 1,400									
Advanced Regeneration:	Understocked X	Fully Stocked		Overstocked		Patchy					
Regeneration:	1. Spp. PO	Height 2 m	2. Spp. PC	Height 2 m							
	3. Spp. RM	Height 1-2 m	4. Spp.	Height							
GROUND OBSERVATIONS											
Ground Vegetation Species Present:	Striped maple, sensitive fern, alternate leaved dogwood, staghorn sumac, beaked hazelnut										
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 - wet site									
ENVIRONMENTAL OBSERVATIONS											
Water Course X	Bog	Pond X	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	None seen										
Comments	gravel pit ponds north of stand 0441079, 0440916										
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:	Mature WS along boundary lines. Immature WS on Mink road. Most of the stand is hardwood, with some overmature PO for wildlife trees and less common trees such as Elm. Best left with no treatment for preserve biodiversity values.										

### STAND TALLY SHEET

CRUISER	J.LeClair & M. Buchanan	STAND #	440856	PLANTATION #	
PROPERTY #	29132 Freeland	AREA	5.01 ha	Date	3 / 1 / 2025

D M Y

#### SAMPLE TREE INFORMATION

Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	Elm	40	12.4	8	60	4					
2	RM	50	20.8	8.5	50	5					
3						6					

#### STAND INFORMATION

Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha
Species and (%)	AI 50 %	RM20 %	GB20 %	%	Elm, Willow 10%			
Even-aged	X	Uneven-aged					Biomass	
Slope	0 %	Aspect	L					
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		HW 2,000					
Advanced Regeneration:	Understocked	X	Fully Stocked		Overstocked		Patchy	
Regeneration:	1. Spp. AI		Height 1-5 m		2. Spp. RM		Height 4-5 m	
	3. Spp.		Height		4. Spp.		Height	

#### GROUND OBSERVATIONS

Ground Vegetation Species Present:	sedges, red-osier dogwood, sensitive fern		
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: sedge, alders, sensitive fern - 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		Inadequate	X							
Coarse Woody Material:	Adequate		Inadequate	X							
Dens		Nests (Raptors, songbirds, etc.)									
Wildlife Observed		Grouse									
Comments	Stream and wetland to the north of this stand, 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:	Sensitive soils, no treatment recommended.						

STAND TALLY SHEET												
CRUISER J.LeClair & M. Buchanan STAND #				0440279, 0440291, 0440263, 0440285				PLANTATION #				
PROPERTY # 29132 Freeland				AREA	0.84 ha	Date	3 /	1 /	2025	D	M	
SAMPLE TREE INFORMATION												
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	
1	PO	35	14	11	60	4						
2	GB	40	17.8	13	80	5						
3	WB	35	10.4	12	50	6						
STAND INFORMATION												
Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha				
Species and (%)	PO30	%	GB20	%	PC20	%	AI20	%	WS 10%			
Even-agerc	X	Uneven-aged								Biomass		
Slope	0 %	Aspect	L									
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	100	HW	1,200								
Advanced Regeneration:	Understocked	X	Fully Stocked		Overstocked		Patchy					
Regeneration:	1. Spp.	PC	Height	2 m	2. Spp.	PO	Height	2 m				
	3. Spp.		Height		4. Spp.		Height					
GROUND OBSERVATIONS												
Ground Vegetation Species Present:	cattails, raspberry, ostrich fern, sensitive fern											
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: cattails, alders - wet site								
ENVIRONMENTAL OBSERVATIONS												
Water Course	Y	Bog		Pond	X	Stream		Seeps		Beaver Present	Y / N	
Drainage:	Poor		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 seen.											
Comments	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:	No silvicultural treatment recommended for stream buffer in SW corner of property and the three other gravel pit ponds north of Mink road. Nesting boxes could be considered for wildlife enhancement for the ponds.											

STAND TALLY SHEET											
CRUISER J.LeClair & M. Buchanan STAND #				0440917, 0440782, 0440790, 0440797				PLANTATION #			
PROPERTY # 29132 Freeland				AREA 1.15 ha		Date 3 / 1 / 2025					
								D	M	Y	
SAMPLE TREE INFORMATION											
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	PO	55	24	14	40	4					
2	RM	40	13.8	11	60	5					
3						6					
STAND INFORMATION											
Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha			
Species and (%)	PO40 %	GB20 %	RM20 %	WB 10 %		BF, SM 10%					
Even-aged	X	Uneven-aged					Biomass				
Slope	0 %	Aspect	L								
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	X			
Stand Stocking:	Understocked		Fully Stocked	X	Overstocked		Patchy				
Density:	SW	50	HW	1,600							
Advanced Regeneration:	Understocked	X	Fully Stocked		Overstocked		Patchy				
Regeneration:	1. Spp.	RM	Height	1-5 m	2. Spp.	PO	Height	1-5 m			
	3. Spp.		Height		4. Spp.		Height				
GROUND OBSERVATIONS											
Ground Vegetation Species Present:	beaked hazelnut, wild raisin										
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	Y	Bog	Pond	Stream	X	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	Red squirrel										
Comments	Stream/wetland north of stands 0441087 and 0440797, 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:	Overmature PO snags in stands good for wildlife habitat. Not treatment recommended at this time.										
	PO blowdown present in stand.										

### STAND TALLY SHEET

CRUISER J.LeClair & M. Buchanan STAND # 0441088, 0440874 PLANTATION #  
 PROPERTY # 29132 Freeland AREA 1.16 ha Date 3 / 1 / 2025  
 D M Y

#### SAMPLE TREE INFORMATION

Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%
1	RM	92	29	13	45	4					
2	RM	65	17.4	12	50	5					
3						6					

#### STAND INFORMATION

Stand Basal Area	SW	M <sup>2</sup> /Ha	SWSL	M <sup>2</sup> /Ha	HW	M <sup>2</sup> /Ha	HWSL	M <sup>2</sup> /Ha
Species and (%)	RM50	%	WB30	%	PO10	%	%	BF, AL 10%
Even-aged	X	Uneven-aged					Biomass	
Slope	0	%	Aspect	L				
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		HW	2,000				
Advanced Regeneration:	Understocked	X	Fully Stocked		Overstocked		Patchy	
Regeneration:	1. Spp.	BF	Height	1 m	2. Spp.	RM	Height	1 m
	3. Spp.	BS/RS	Height	0.3 m	4. Spp.	AI	Height	2 m

#### GROUND OBSERVATIONS

Ground Vegetation Species Present:	snowberry, meadowsweet, blueberry		
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: snowberry, alders - wet site

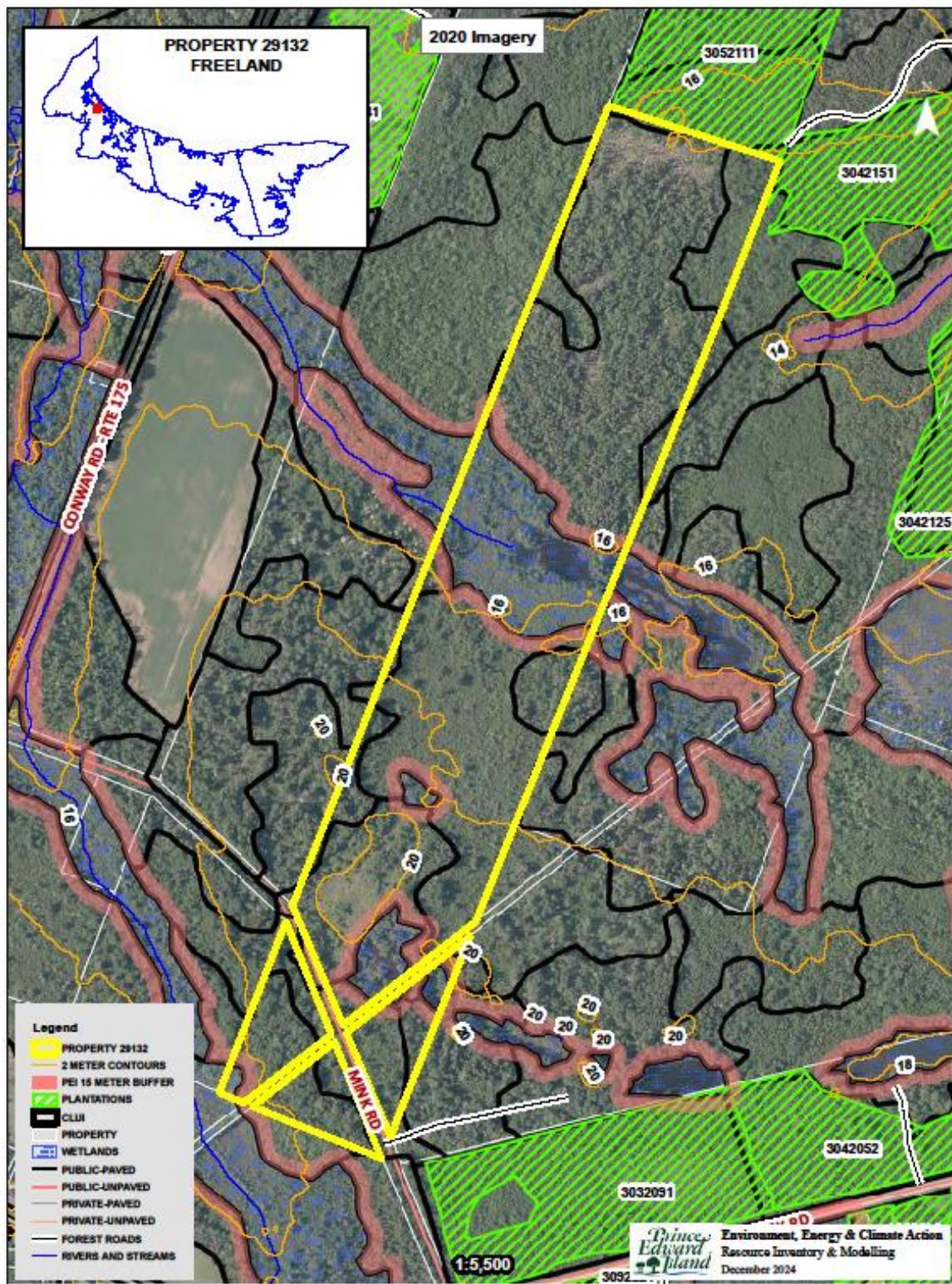
#### ENVIRONMENTAL OBSERVATIONS

Water Course	N	Bog	Pond	Stream	Seeps	Beaver Present	Y / N
Drainage:	Poor	X	Moderate	X	Good	Excellent	Erosion Control Required
Snag Trees:	Adequate		Inadequate	X			
Coarse Woody Material:	Adequate		Inadequate	X			
Dens		Nests (Raptors, songbirds, etc.)					
Wildlife Observed	None 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:	Immature RM stands, no treatment recommended at this time.					

## Appendix G. Plantation Map with Contour Lines



#### **Appendix H. Work Completed**

To date no work has been completed on this property by government.