

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

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



**Woodlot Management Plan**

**Property Number: 29132**

**Location: Freeland**

## Table of Contents

Goals and Management Objectives .....	1
Property Overview .....	2
Location.....	2
Past Information .....	2
Property Information .....	2
Wetland and Watercourses .....	3
Property Access.....	3
Property Boundaries .....	3
Fire Protection .....	4
Planting and Silviculture .....	4
Proposed Treatments .....	4
Table 1. Proposed Treatment Summary .....	5
Appendices.....	7
Appendix A. Map of Property with Locator Map.....	8
Appendix B. 1935 Aerial Photography .....	9
Appendix C. 1968 Aerial Photography .....	10
Appendix D. 2020 Corporate Land Use Inventory .....	11
Appendix E. Forest Inventory Codes .....	12
Appendix F. Stand Tally Sheets from on the Ground Assessment.....	13
Appendix G. Plantation Map with Contour Lines.....	22
Appendix H. Work Completed .....	23

## 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 -](http://www.princeedwardisland.ca/sites/default/files/publications/2018_eco_manual_technical_version_-_final.pdf)

[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.**

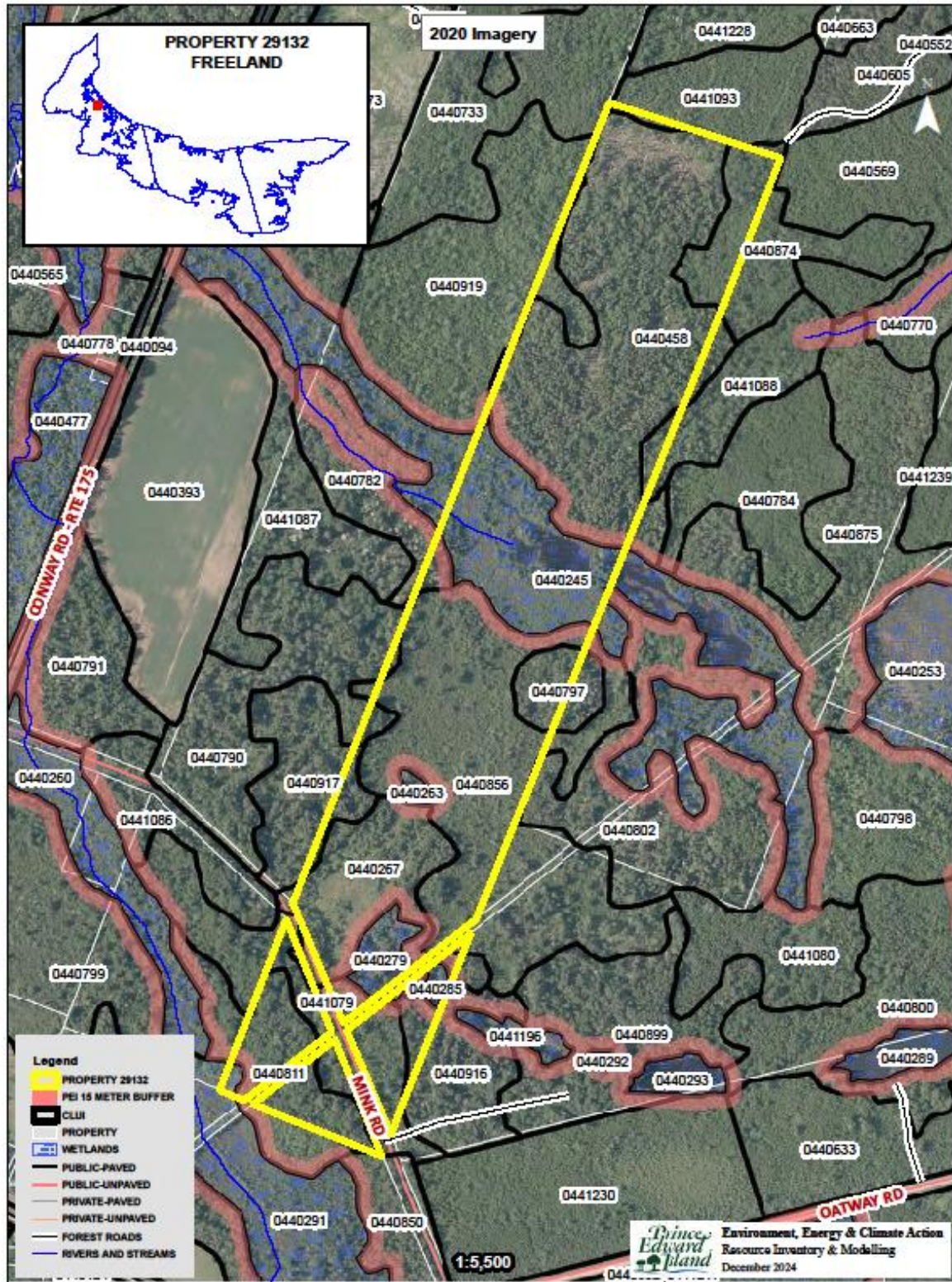
Stand Number and Plantation Number	Treatment Type	Treatment Year	Amount Proposed	2018 Eco-Manual Reference	Comments	Goals
440263, 440279, 440285	Nesting Boxes	2025	3-6	Pg. 33	Gravel pit ponds could be enhanced for birds by providing nesting boxes.	Enhance nesting opportunities for wildlife.
440458	Block 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.



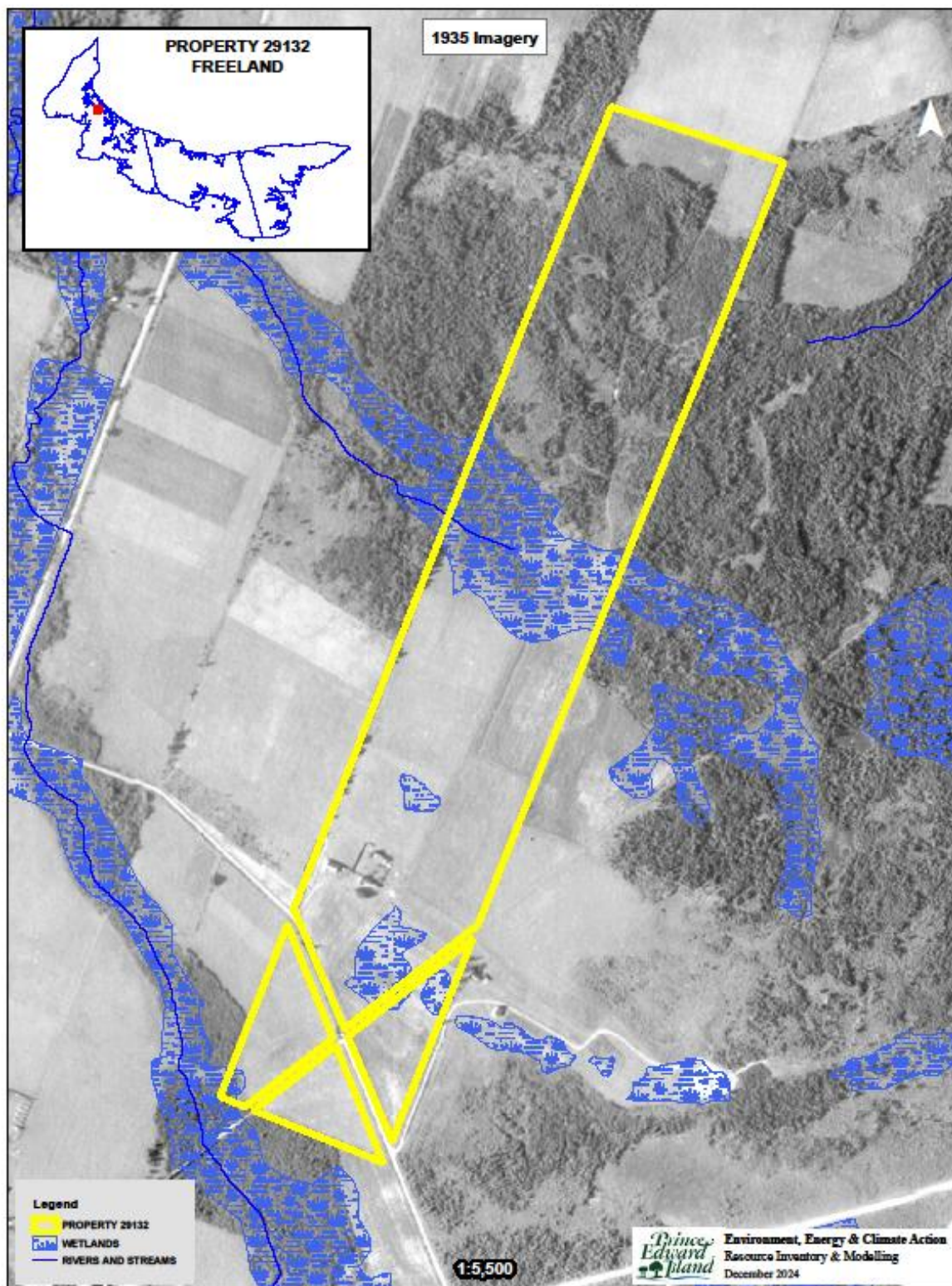
## **Appendices**

## Appendix A. Map of Property with Locator Map



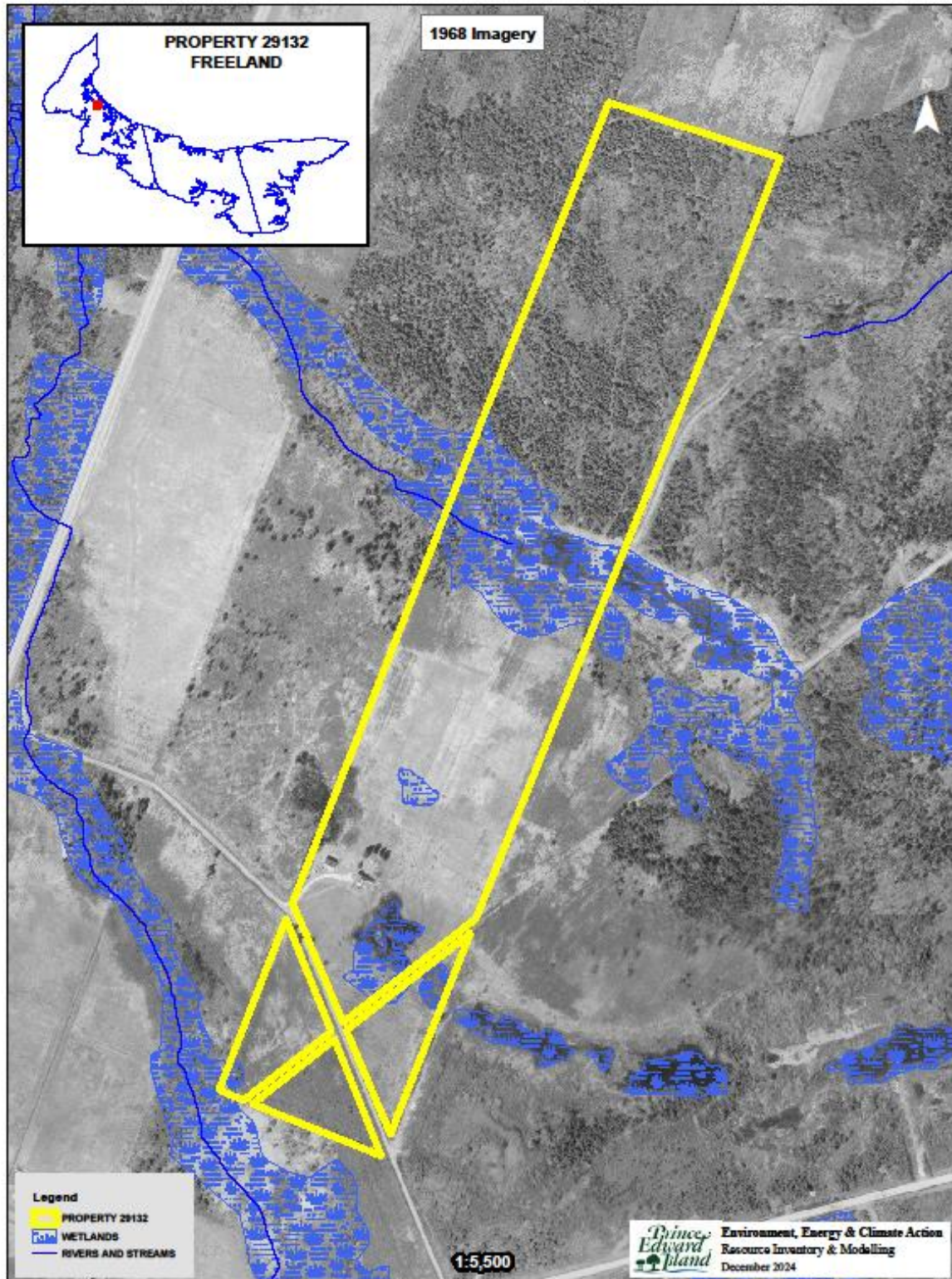


## Appendix B. 1935 Aerial Photography





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

#### CROWN CLOSURE

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

#### ORIGIN AND HISTORY

<b>BR</b> - Burn	<b>DI</b> - Disease-Insect
<b>BD</b> - Blow Down	<b>OF</b> - Old Field
<b>PC</b> - Partial Cut	<b>PN</b> - Plantation
<b>CC</b> - Clear Cut	<b>HR</b> - Hedgerow
<b>TH</b> - Thinning	<b>EP</b> - 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 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	
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: snowberry - wet site							
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-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			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		
									D	M	Y		
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-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	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
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	Beaver activity												
Comments	Buffer adjacent stands to this stream/wetland 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:	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	
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	
Drainage:		Poor		X		Moderate		X		Good		Excellent	
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.											

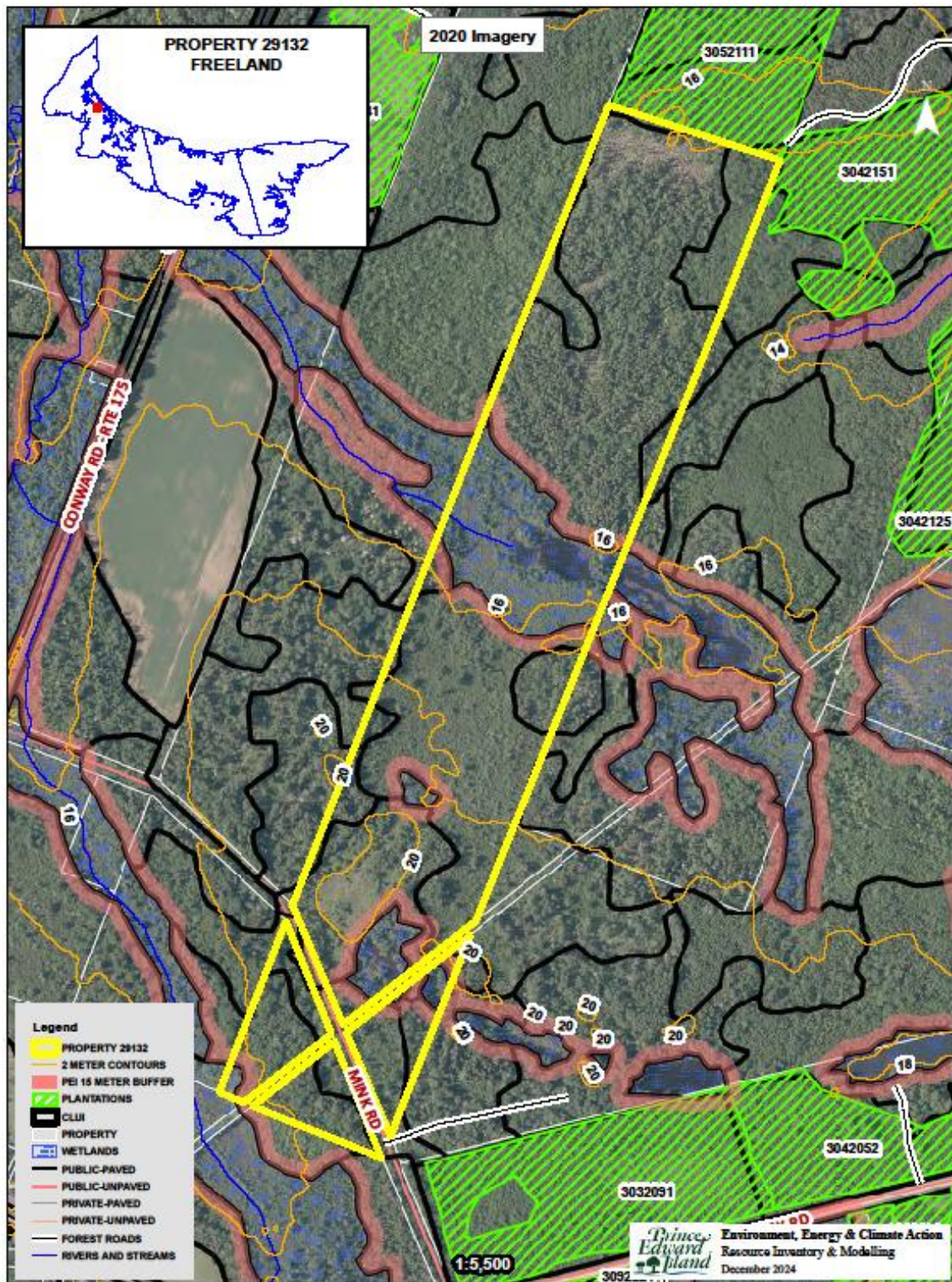
STAND TALLY SHEET													
0440279, 0440291,													
CRUISER	J. LeClair & M. Buchanan			STAND #	0440263, 0440285			PLANTATION #					
PROPERTY #	29132 Freeland			AREA	0.84 ha			Date	3 /	1 /	2025		
								D	M	Y			
SAMPLE TREE INFORMATION													
Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%	Tree#	SPP.	AGE	D.B.H.	HEIGHT	LCR%		
1	PO	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-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	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														
0440917, 0440782,														
CRUISER	J. LeClair & M. Buchanan			STAND #	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.	AL	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	Y / N			
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.