P.E.I.

Public Forests

Woodlot Management Plan

Property 108506 & 479691

Location: Kingsboro

Date: September 2021

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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

Properties 108506 & 479691 is located on East Point road, extending south to an extension of Basin Head Harbour, in the community of Kingsboro, P.E.I., (Appendix A). The total area of this property is 18.1 hectares (30.0 acres) and 7.3 hectares (18.1 acres) respectively. The midpoint of the property represented in decimal degrees is 62.10870 46.38948 Degrees.

Past Information

Local records and previous aerial photography show that this property has been in agricultural rotation since prior to the 1930's. To better illustrate this, 1968 photography can be seen in Appendix B.

Property Information

The information in Appendix C has been taken from the 2010 Corporate Land Use Inventory. An explanation of forestry code meanings can be seen in Appendix D. 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 E) 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 F).

Wetland and Watercourse

There are no named streams located on this property but a large drainage area allows for water movement into the Basin Head Harbour. This observation can be viewed in Appendix A.

Property Access

There is a field access to enter the property entering off the East Point road, Route 16. There is also a Provincial Tourism look out area located on the north west boundary of the properties.

Property Boundaries

These properties are bounded on the north by the East Point road, Route 16, and on the south by a segment of Basin Head Harbour. The west boundary is public land in agriculture and the eastern boundary is a privately owned agriculture field.

Fire Protection

This property is located within the jurisdiction of the Eastern Kings Fire Department. The amount of personnel and equipment used to fight any forest fire will depend greatly upon the size and severity of the fire. Protection of our woodland from forest fire is the responsibility of the Forest, Fish and Wildlife Division and our local community fire brigades. In the Eastern District, there is a 900 gallon (gal) four wheel drive forestry fire truck housed at the Souris Fire Department as well a 460 gallon four wheel drive forestry fire truck located in the East River Fire Department and Georgetown Fire Department. 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.

Planting and Silviculture

There are no plantations on these properties. A list of all silviculture treatments completed on the property from 1990 to present is shown in Appendix G.

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 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. For a better understanding of the treatments prescribed, a more detailed explanation is available in the Eco Manual, 2018 eco-manual. Any additional information may be obtained by contacting a Provincial Forest representative at the District Forestry Office in Southampton.

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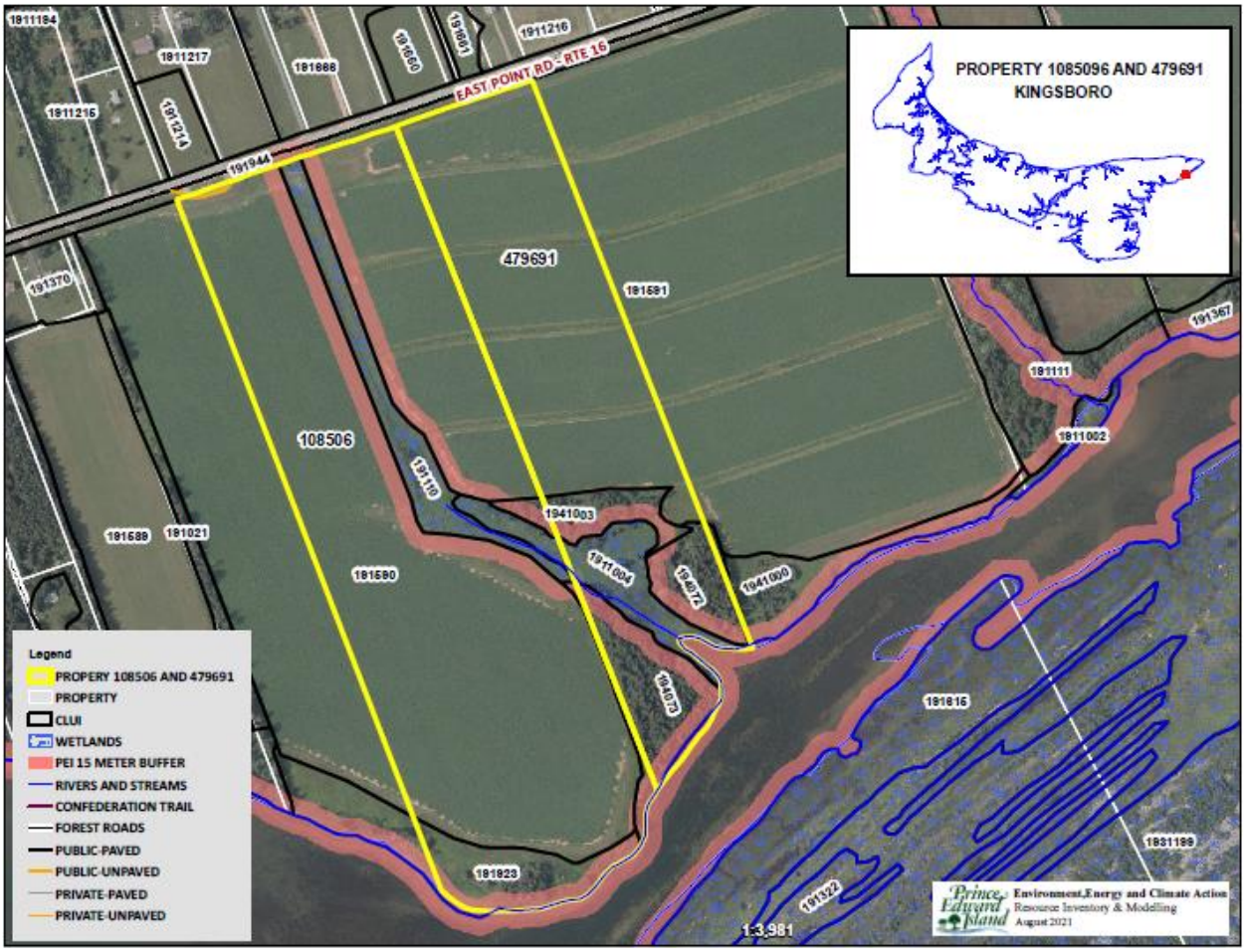
Table 1. Proposed treatment summary.

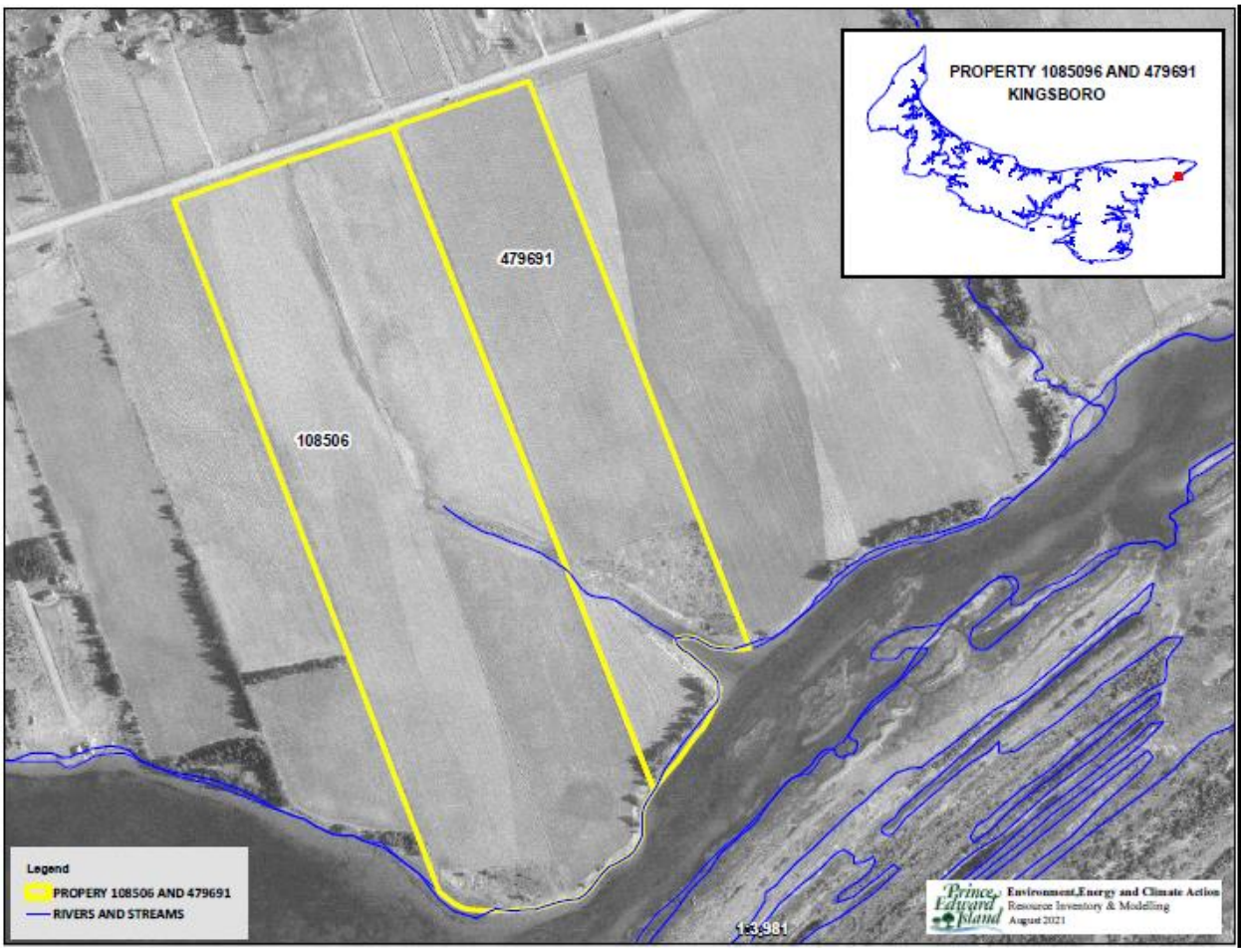
Stand Number	Plantation Number	Treatment Type	Treatment Year	Amount Proposed	2018 Eco-Manual Reference	Comments	Goals
191110		Buffer Zone Enhancement	2022		Page 9	Grassed wet area with an open water component providing drainage from surrounding fields	Improve the overall quality and diversity of the buffer zone with enhancement planting where not used as a farmable drainage
1911004		Buffer Zone Enhancement	2022		Page 9	Grassed wet area with an open water component that flows into the basin head harbour	Improving the overall quality and diversity of the buffer zone around this stand benefit this stand as well
1941003		Buffer Zone Enhancement	2022		Page 9	Forested Buffer Zone could benefit from enhancement to help achieve a more sustainable buffer of the basin head harbour	Improve the overall quality and diversity of the buffer zone with enhancement planting of native tree and shrub species
194072		Buffer Zone Enhancement	2022		Page 9	Forested Buffer Zone could benefit from enhancement to help achieve a more sustainable buffer of the basin head harbour	Improve the overall quality and diversity of the buffer zone with enhancement planting of native tree and shrub species
194073		Buffer Zone Enhancement	2022		Page 9	Forested Buffer Zone could benefit from enhancement to help achieve a more sustainable buffer of the basin head harbour	Improve the overall quality and diversity of the buffer zone with enhancement planting of native tree and shrub species
191923		Buffer Zone Enhancement	2022		Page 9	Grassed Buffer Zone could benefit from enhance forested cover for a more sustainable buffer of the basin head harbour	Improve the overall quality and diversity of the buffer zone with enhancement planting of native tree and shrub species

Appendices

Appendix A. Map of Property with Locator Map



Appendix B. 1968 Aerial Photography



Appendix C. 2010 Corporate Land Use Inventory

CLUI 479691

FIELDID	LANDUSE	COVER1	PER1	COVER2	PER2	COVER3	PER3	HEIGHT	CROWN	HECTARES
194072	FOR	WS	9.0	WB	1.0		0.0	17.0	75.0	0.53
194073	FOR	WS	8.0	WB	1.0	RM	1.0	15.0	75.0	0.89
1941003	FOR	WS	10.0		0.0		0.0	8.0	30.0	0.40
1941000	NON	GRS	9.0	SHR	1.0		0.0	0.0	0.0	0.00

CLUI 108506

FIELDID	LANDUSE	COVER1	PER1	COVER2	PER2	COVER3	PER3	HEIGHT	CROWN	HECTARES
194073	FOR	WS	8.00	WB	1.00	RM	1.00	15.00	75.00	0.12
1941003	FOR	WS	10.00		0.00		0.00	8.00	30.00	0.08
191923	NON	GRS	8.00	SHR	1.00	TRE	1.00	0.00	0.00	0.80

Appendix D. 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 over lay with the minimum values in the southwest corner and the maximum values in the northeast corner.

A stand labelled 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 E. Stand Tally Sheets from on the Ground Assessment

STAND TALLY SHEET

CRUISERS: TK | STAND #: 194073 | PLANTATION #:
PROPERTY #: 108506 & 479691 | AREA: 1.50 ha | DATE: 23 / 8 / 2021 (D / M / Y)

SAMPLE TREE INFORMATION

TREE #	SPP.	AGE	D.B.H.	Height	Dominance	LCR
1	ws		22	15.0	c	40
2	wb		18	15.0	c	30
3						
4						

STAND INFORMATION

Stand Basal Area: SW ____ M^2/Ha | SW Crop ____ Per Ha | HW ____ M^2/Ha | HW Crop ____ Per Ha

Species and (%): Ws 80 %, Wb 10 %, Rm 5 %, Pc 5 %

Density: SW ____ HW ____ | Unploughed ____ Ploughed ____

Stand Development Stage: Young ____ Immature ____ Mature x Over-mature ____

Stand Stocking: Understocked x Fully Stocked ____ Overstocked ____ Patchy ____

Even-aged x | Slope ____ % | Uneven-aged ____ | Aspect ____

Plantation: Crop Spp. ____ Comp Spp. ____ | Crop Density ____ Comp Density ____ 1/250th | Crop Height ____ Comp Height ____

Advanced Regeneration: 1. Spp. ____ ____ Per Ha 2. Spp. ____ ____ Per Ha 1/250th
Avg Height (m) ____ 3. Spp. ____ ____ Per Ha 4. Spp. ____ ____ Per Ha

Regeneration: 1. Spp. ____ ____ Per Ha 2. Spp. ____ ____ Per Ha 1/2000th
Avg Height (m) ____ 3. Spp. ____ ____ Per Ha 4. Spp. ____ ____ Per Ha

GROUND OBSERVATIONS

Ground Vegetation Species Present: Wild Raisin, bayberry, grass sp.

Invasive Species Present ___ Y / N x If yes then what species: ____

ENVIRONMENTAL OBSERVATIONS

Drainage Poor ____ Good x | Snag Trees ____ Per Ha | Coarse Woody Material ____ Per Ha

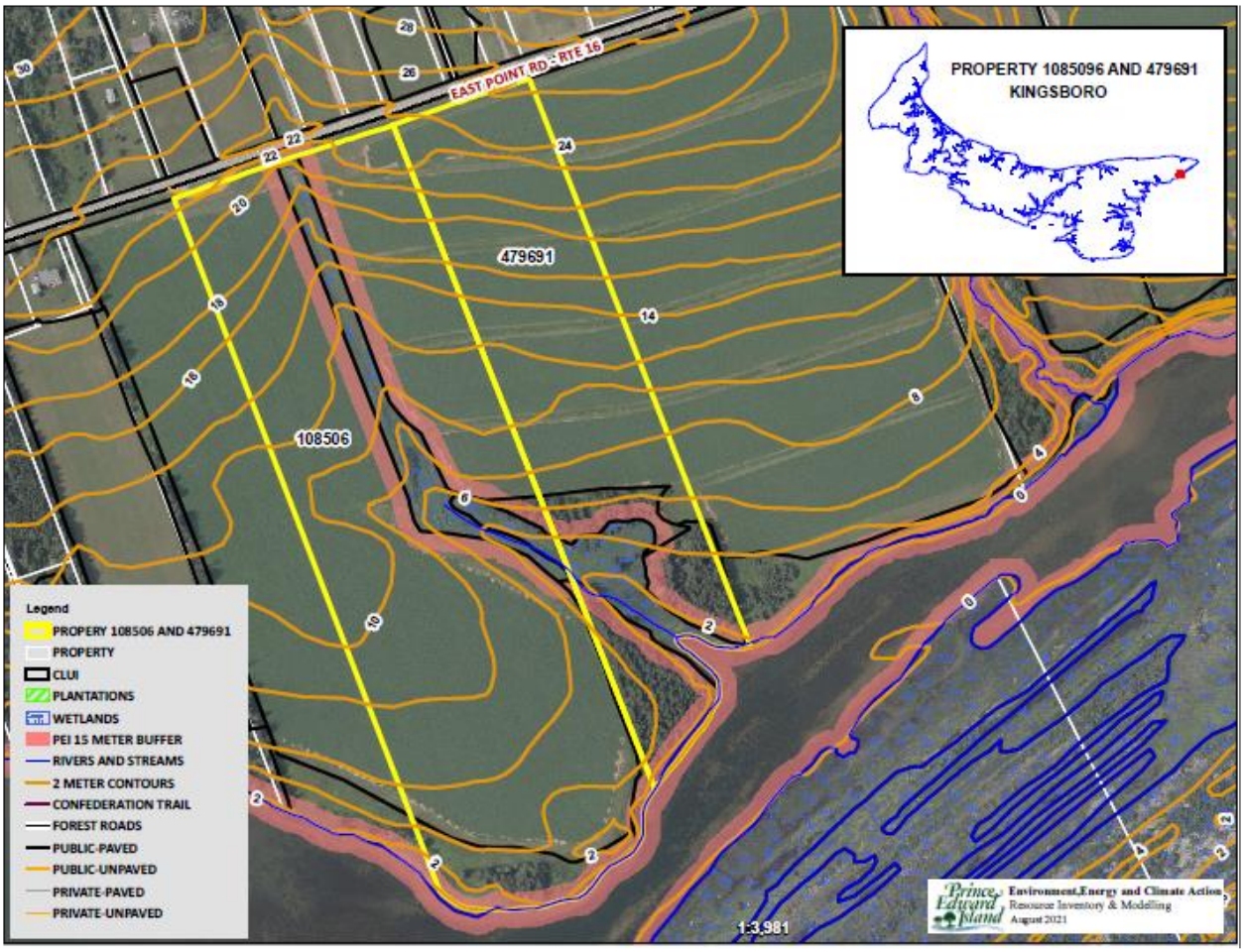
Comments: ____

STAND PRESCRIPTION

No Treatment		Pre-com Hw Thinning		Uniform Shelterwood	
Enrich. Planting	x	Pre-com Sw Thinning		Clearcut Strip Harvest	
Fill Planting		Commercial Hw Thinning		Clearcut Patch Harvest	
Manual Maint		Commercial Sw Thinning		Clearcut Block Harvest	
Manual Cleaning		Crop Tree Pruning		Other	
Crop Tree Release		Select Tree Harvest		Year of treamtent start date	2021

Comments:

Appendix F. Plantation Map with Contour Lines



Appendix G. Work Completed

No work has been completed on these properties.