

Property of Lake of Bays Heritage Foundation

Westermain Woods Forest Management Plan - DRAFT

January 1, 2026 to December 31, 2035

August 2025



Property Information:

RN: 44 42 060 005 03400 0000	Concession 3, Part Lots 31 & 32 Concession 4, Lot 31, Part Lot 32 Geographic Township of Brunel Town of Huntsville
RN: 44 42 060 005 03706 0000	Concession 3, Part Lot 32 Geographic Township of Brunel Town of Huntsville
RN: 44 27 010 001 00106 0000	Concession 3, Part Lot 29 Geographic Township of Franklin Township of Lake of Bays District Municipality of Muskoka

Prepared for:



Lake of Bays Heritage Foundation

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Produced by



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STEWARDSHIP PLAN

This stewardship plan is for the 20-year period from January 1st, 2026 to December 31st, 2045
with activities described for the 10-year period from January 1st, 2026 to December 31st, 2035

The Managed Forest Tax Incentive Program (MFTIP) is designed to encourage landowner participation in natural resource stewardship on private forest land in Ontario. The program is voluntary and offers a direct reduction from property taxes to forest owners who are involved managers and stewards of their forests. Lands that are eligible must be owned by a Canadian citizen or permanent resident, a Canadian corporation, partnership or trust or a Conservation Authority, and the forest area must cover 4 hectares (9.88 acres).

CERTIFICATION

I certify that this plan has been prepared in accordance with the MFTIP guidelines¹.

Paul C. Heaven/ 168

Name/MFPA#

Signature

¹ This plan has an exemption to the 9.88-acre rule that has been approved by the Ministry of Natural Resources.



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1 PROPERTY OWNER INFORMATION

1.1 REGISTERED PROPERTY OWNER

Name Lake of Bays Heritage Foundation
 Address P.O. Box 81
 Baysville Ontario,
 Postal Code POB 1A0
 Telephone 416-433-2174
 Email info@lakeofbaysheritage.ca

1.2 PLAN AUTHOR INFORMATION

Name Paul C. Heaven
 Company Glenside Ecological Services Limited
 Address 2490 Horseshoe Lake Road
 Minden, ON
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 Telephone 705-286-3181
 Email pheaven@glenside-eco.ca

2 PROPERTY LOCATION INFORMATION

2.1 PROPERTY LOCATION

Roll number (19 digits)	Property description (municipality, lot, concession)	Area	
		acres	hectares
44 42 060 005 03400 0000	Concession 3, Part Lots 31 & 32 Concession 4, Lot 31, Part Lot 32 Geographic Township of Brunel Town of Huntsville District Municipality of Muskoka	331.51	
44 42 060 005 03706 0000	Concession 3, Part Lot 32 Geographic Township of Brunel Town of Huntsville District Municipality of Muskoka	13.14	
44 27 010 001 00106 0000	Concession 3, Part Lot 29 Geographic Township of Franklin Township of Lake of Bays District Municipality of Muskoka	2.47	



2.2 FEDERAL, PROVINCIAL AND LOCAL POLICIES AND REGULATIONS

2.2.1 FEDERAL

The Federal Species at Risk Act prohibits killing, harming, harassing, capturing or taking an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species; as well as damaging or destroying the residence of such species

<http://laws-lois.justice.gc.ca/eng/acts/S-15.3/>

Fish habitat is protected against harmful alteration, disturbance or destruction (HADD) at the federal level under the Fisheries Act and at the provincial level under the Public Lands Act and the Lakes and Rivers Improvement Act.

<http://laws-lois.justice.gc.ca/eng/acts/F-14/>

http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90p43_e.htm

http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90l03_e.htm

2.2.2 PROVINCIAL

The Provincial Endangered Species Act (2007) prohibits killing, harming, harassing, capturing or taking a living member of a species that is listed as an endangered or threatened species on the Species at Risk in Ontario List; as well as damaging or destroying the habitat of such species.

www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm

Councils of Counties and Townships were empowered to enact tree cutting bylaws through the Forestry Act

www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90f26_e.htm.

The Ontario Professional Foresters Act defines the Scope of Practice of professional forestry. Managed Forest Plan Approvers have an exemption from this act.

www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_00p18_e.htm

2.2.3 MUNICIPAL

2.2.3.1 MUSKOKA

The District Municipality of Muskoka has enacted the Good Forestry Practices By-law 2000-88

- (1) In cutting or removing any tree, no person shall so conduct his operations in a manner or at such a time as to unnecessarily injure or damage the forest ecosystem or any other tree;
- (2) Subject to Section 2(3) herein, no person shall destroy by cutting, burning, bulldozing or other means any tree or trees growing in a sensitive natural area;



- (3) No person shall destroy any tree or trees so that the average basal area per acre of the woodlot in which the tree is situated is reduced below 16 square metres per hectare (70 square feet per acre) except where the cutting is in accordance with a specific silvicultural prescription prepared by a Registered Professional Forester or a Certified Tree Marker.

<https://muskoka.civicweb.net/document/1266/>

The District Municipality of Muskoka Official Plan states that no development is allowed within Provincially Significant Wetlands, and development within other wetlands or adjacent to Provincially Significant Wetlands is subject to an Environmental Impact Study demonstrating that there will not negative impacts on the wetland feature or its ecological function.

<https://muskoka.civicweb.net/filepro/document/34235/Approved%20Muskoka%20Official%20Plan%20June%2028%202019.pdf>



3 PROPERTY HISTORY

3.1 PAST ACTIVITIES

Westermains Woods is a non-profit organization established in 1977 to protect two tracts of land near Lake of Bays: the 15.6-acre Block B (Needler Point) and the 333.75-acre Backlands. The organization was composed of seven lakefront cottage owners whose lots border these lands. Originally owned by George Needler in the early 1900s, the property was passed to his daughter Mary Needler Hinde, who transferred it to Westermains Woods in 1979. Between 1973 and 1979, the land was subdivided into residential lots while preserving significant shoreline for conservation. The subdivision process faced challenges due to municipal restructuring and land title changes, requiring approvals from multiple jurisdictions and resulting in an Ontario Municipal Board hearing. Westermains Woods was founded with a mandate to preserve the natural environment, and for 20 years imposed covenants restricting development, noise, pollution, and other human impacts. The organization enrolled its lands in the Managed Forest Tax Incentive Program in 1997, allowing for selective logging to maintain forest health and generate revenue. Notably, Block B was initially excluded from the program due to its location in two municipalities, but a confidential settlement in 2010 resolved the issue and significantly reduced property taxes. Logging activities in 1996–97 and 2015 yielded substantial timber and firewood, while preserving unique ecological features such as centuries-old trees and a grove of supercanopy hemlocks.

In 2025 the lands were acquired by the Lake of Bays Heritage Foundation through a fee simple donation.

3.2 THE SURROUNDING LANDSCAPE

At the landscape level, the property provides valuable environmental functions, specifically in regard to **biodiversity**, **connectivity** and building **climate change resilience**.

3.2.1 BIODIVERSITY

The diversity of life on Earth — biodiversity — provides a range of benefits and essential ecosystem services. Healthy ecosystems support healthy people, animals and plants, as well as a healthy economy. With a mosaic of natural habitats the subject property provides verified and/or suitable habitat for the Species at Risk, and provincially and locally rare species identified in Table 1, thereby contributing to biodiversity at the landscape level.

Table 1: Biodiversity values of the subject property

Common Name	Scientific Name	COSEWIC	SARO	Prov. Tracked	Verified	Suitable Habitat
Canada Warbler	<i>Cardellina canadensis</i>	THR	SC	Y	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Eastern Wood-pewee	<i>Contopus virens</i>	SC	SC	Y	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wood Thrush	<i>Hylocichla mustelina</i>	THR	SC	Y	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>			N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Black Ash	<i>Fraxinus nigra</i>	THR	END	Y	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Plantain-leaved Sedge	<i>Carex plantaginea</i>			N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Musk Monkeyflower	<i>Erythranthe moschata</i>			Y	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monarch	<i>Danaus plexippus</i>	END	SC	Y	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Eastern Red Bat	<i>Lasiurus borealis</i>	END		Y	☒	☒
Little Brown Myotis	<i>Myotis lucifugus</i>	END	END	Y	☒	☒
Northern Myotis	<i>Myotis septentrionalis</i>	END	END	Y	☐	☒
Northern Hoary Bat	<i>Lasiurus cinereus</i>	END		Y	☒	☒
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	END		Y	☒	☒

END – Endangered; THR – Threatened; SC – Special Concern; COSEWIC – Committee on the Status of Wildlife in Canada; SARO - Species at Risk Ontario

3.2.2 CONNECTIVITY

Destruction and degradation of natural ecosystems are the primary causes of declines in global biodiversity. Habitat destruction typically leads to fragmentation - the division of habitat into smaller and more isolated fragments separated by a matrix of human-transformed land cover. The loss of area, increase in isolation, and greater exposure to human land uses initiate long-term changes to the ecosystems of the remaining fragments.

The natural habitat of the subject property provides habitat connectivity at the landscape level, thereby functioning as a wildlife corridor between adjacent protected areas, specifically crown land, Algonquin Provincial Park, J. Albert Bauer Provincial Park, Oxtongue River – Ragged Falls Provincial Park, and Bigwind Lake Provincial Park. This connectivity supports wildlife migrations, protects biodiversity and provides for healthy ecosystems.

3.2.3 CLIMATE CHANGE RESILIENCE

In 2013, 2019 and 2023 the District Municipality of Muskoka experienced serious flooding, and warnings were again issued in 2025. These flooding and erratic weather patterns are an increasing product of climate change and require mitigative action. It is estimated that maintaining wetlands can reduce flood damages and costs by 29% in rural areas and by 38% in urban areas. Protection of wetlands and other natural infrastructure is a cost-effective way to mitigate material financial losses that would otherwise result from flooding.

The Government of Ontario recognizes the important role that natural areas play in mitigating and adapting to climate change and has committed to working with partners to conserve and restore these areas in its Environment Plan. Similarly, the federal government has identified investment in natural infrastructure as an action that reduces disaster risk and protects Canadian communities from climate related hazards such as flooding.

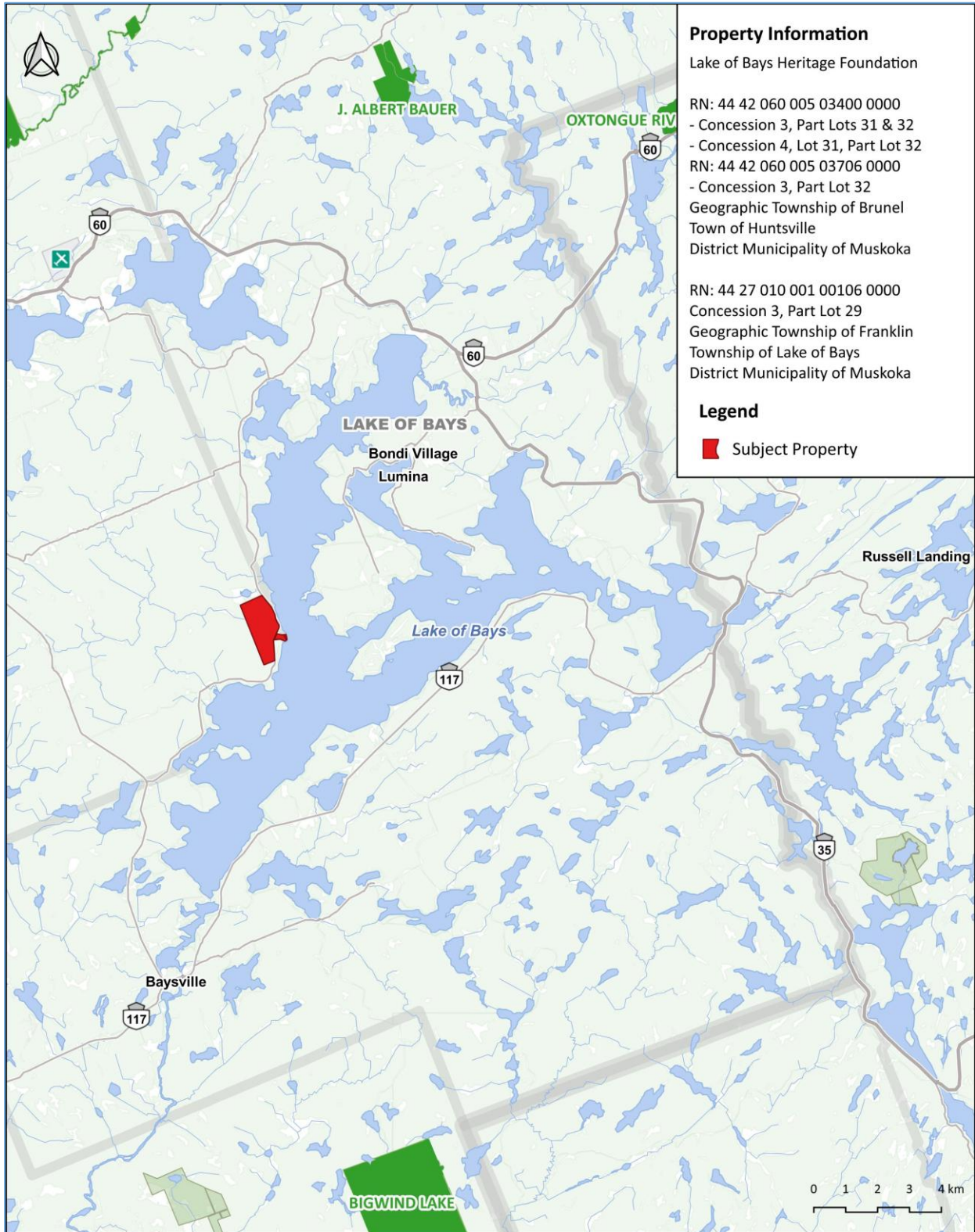
The natural infrastructure of the subject property builds climate resilience through the provision of the following ecoservices:

- ✓ Carbon sink and sequestration through the retention and enhancement of forests and wetland vegetation.
- ✓ Deep carbon sinks in the form of peat found in fen and bog habitat.
- ✓ Diversion of surface water through groundwater recharge and vegetation uptake.
- ✓ Flood attenuation through the provision of wetland catchment areas, thereby holding surface water during wet periods, and releasing it slowly during dry periods.
- ✓ Flood attenuation through slowing the flow of surface water through vegetative barriers (e.g. trees, shrubs, reeds and tall grasses).
- ✓ Maintaining biodiversity and healthy ecosystems.



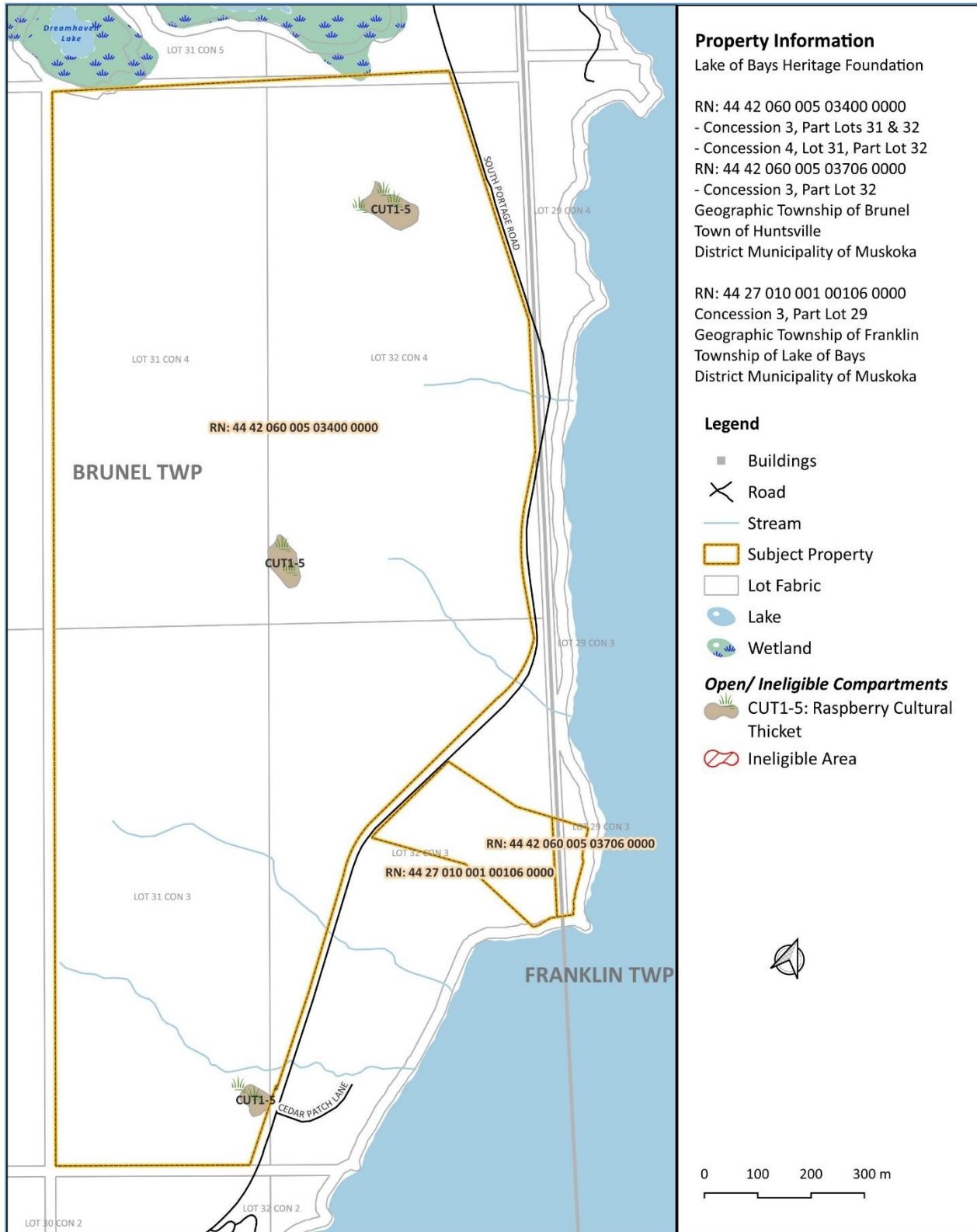
4 ADMINISTRATION MAPS

4.1 PROPERTY LOCATION MAP AND THE SURROUNDING AREA



4.2 DETAILED PROPERTY MAP

This map should provide an overview of your property and its features.



5 LANDOWNER OBJECTIVES

5.1 YOUR GENERAL OBJECTIVES

For the next 20 years, indicate how important the objective is to you. Rank only those which apply to you.

Management objective	How important is the objective to you?				
	Less important → More important				
Environmental protection					1
Forest products					
Investment					
Recreation					
Wildlife				2	
Nature appreciation			3		

5.2 DETAILS ABOUT YOUR PROPERTY LEVEL OBJECTIVES

In your own words, explain why each of the objectives is important.

Environmental protection	The long-term conservation goals are to protect the natural heritage of Westermain Woods and to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity.
Forest products	Not an objective
Investment	Not an objective
Recreation	Westermain Woods will remain private and closed to the public except for guided hikes.
Wildlife	The Lake of Bays Heritage Foundation recognizes that healthy ecosystems sustain healthy people and a healthy economy and therefore conserving Ontario's biodiversity is a primary objective. The long-term protection of Westermain Woods represents a significant step forward in the Lake of Bays Heritage Foundation's commitment to the preservation of the natural heritage of the Lake of Bays region.
Nature appreciation	The Foundation focuses its efforts on engaging the community in protecting natural heritage and to this end recognize the opportunity to host nature events at Westermain Woods to educate the public about the importance of biodiversity and Ontario's ecosystems.

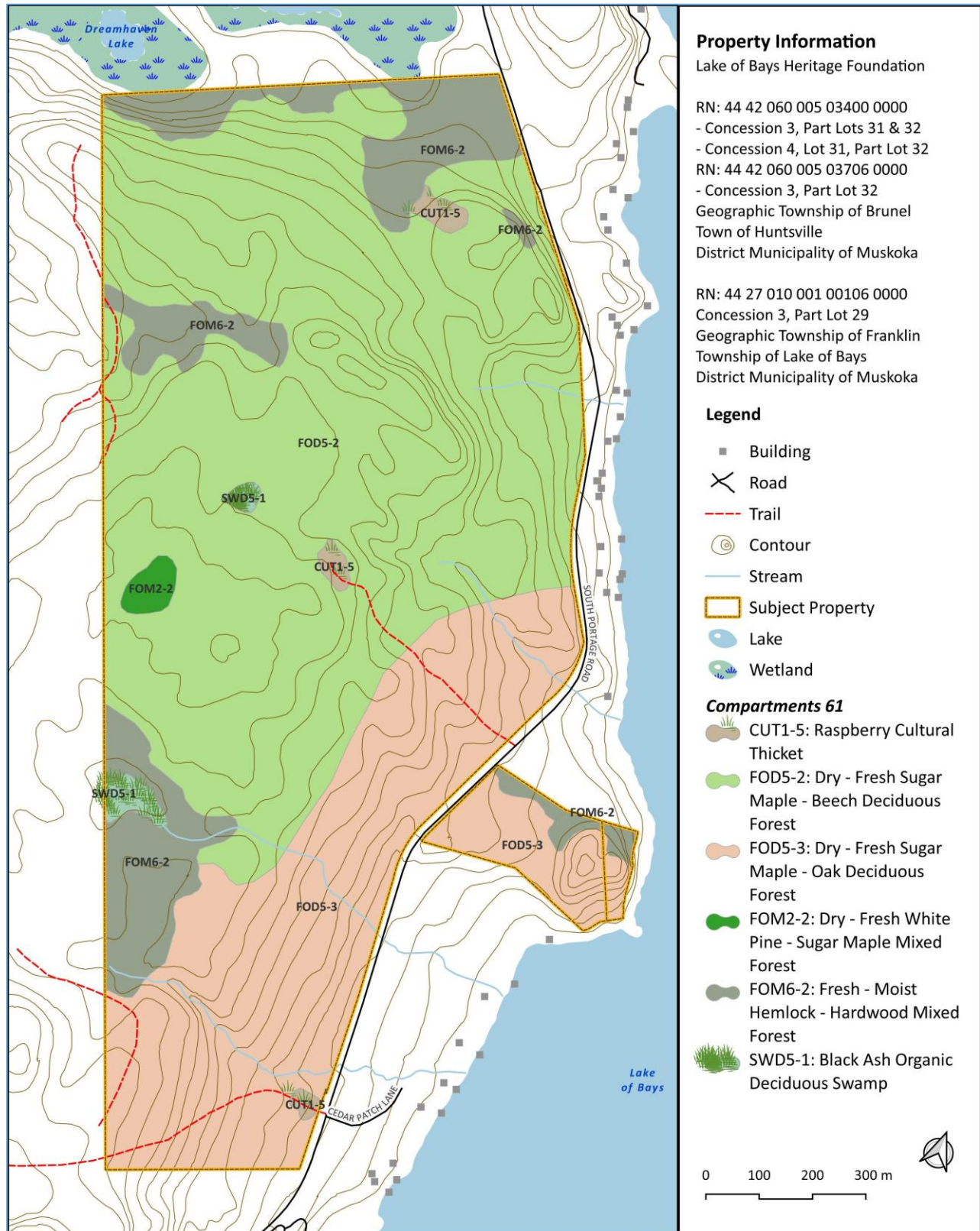
5.3 HOW WILL YOU ACHIEVE YOUR OBJECTIVES?

The Lake of Bays Heritage Foundation will rely on the Board of Directors and volunteers to manage Westermain Woods. Where expertise is required for targeted inventories and legal issues, professional assistance will be retained.

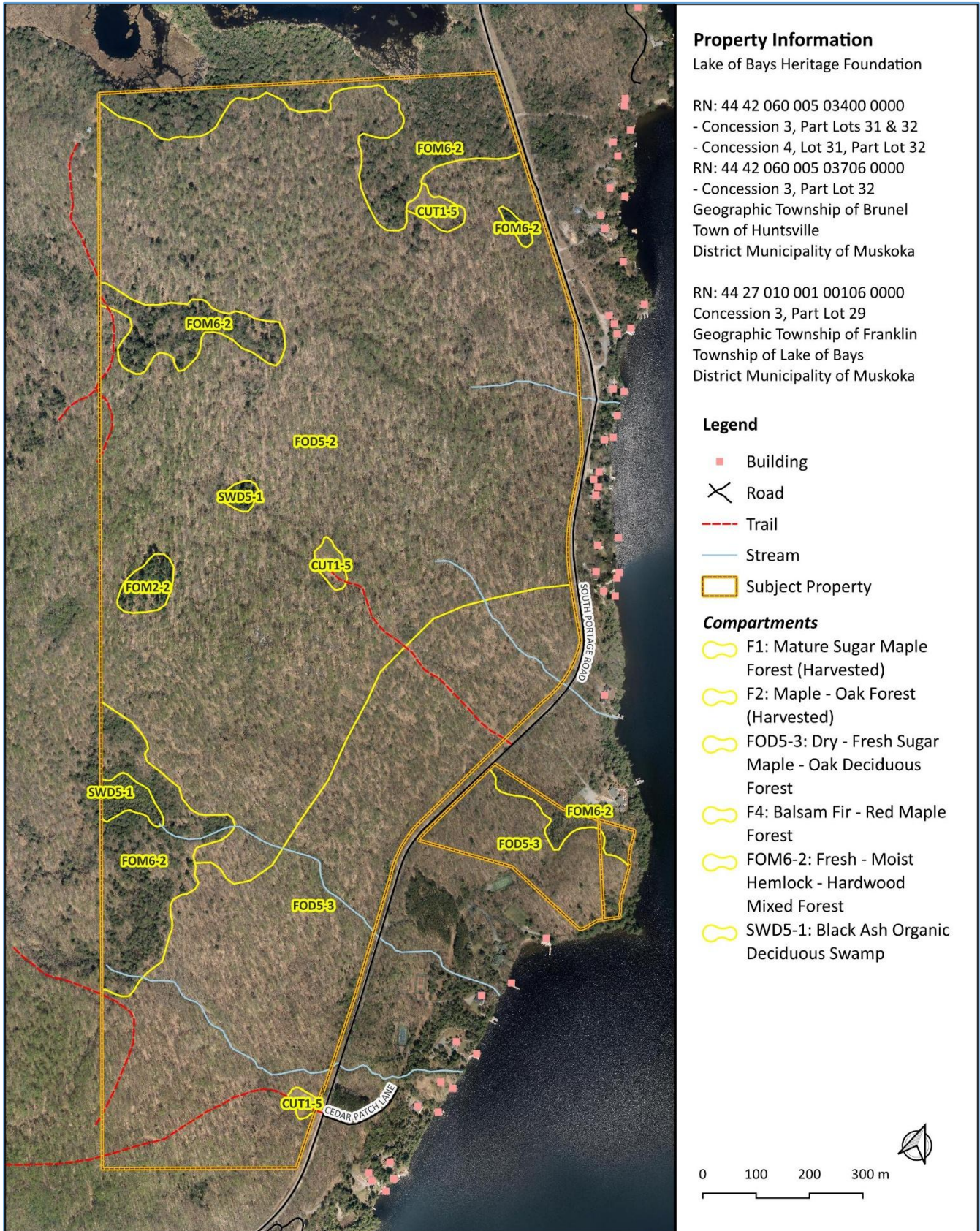


6 PROPERTY COMPARTMENT MAP

6.1 TOPOGRAPHICAL MAP



6.2 AERIAL MAP



6.3 COMPARTMENT SUMMARY BY ROLL NUMBER

6.3.1 RN: 44 27 010 001 00106 0000

Label	Description	Acres
FOD5-3	Dry - Fresh Sugar Maple - Oak Deciduous Forest	1.47
FOM6-2	Fresh - Moist Hemlock - Hardwood Mixed Forest	1.00
	Total	2.47

6.3.2 RN: 44 42 060 005 03400 0000

Label	Description	Acres
CUT1-5	Raspberry Cultural Thicket	2.49
FOD5-2	Dry - Fresh Sugar Maple - Beech Deciduous Forest	203.82
FOD5-3	Dry - Fresh Sugar Maple - Oak Deciduous Forest	82.99
FOM2-2	Dry - Fresh White Pine - Sugar Maple Mixed Forest	1.83
FOM6-2	Fresh - Moist Hemlock - Hardwood Mixed Forest	38.16
SWD5-1	Black Ash Organic Deciduous Swamp	2.22
	Total	331.51

6.3.3 RN: 44 42 060 005 03706 0000

Label	Description	Acres
FOD5-3	Dry - Fresh Sugar Maple - Oak Deciduous Forest	11.19
FOM6-2	Fresh - Moist Hemlock - Hardwood Mixed Forest	1.95
	Total	13.14



7 COMPARTMENT DETAIL AND MANAGEMENT

(Fill out a separate form for each upland compartment)

7.1 FOD5-2: DRY-FRESH SUGAR MAPLE–BEECH DECIDUOUS FOREST

7.1.1 AREA

Acres: 203.82

Hectares:

7.1.2 COMPARTMENT CHARACTERISTICS

Soil type	<input checked="" type="checkbox"/> light (generally sand)	Soil Depth	<input checked="" type="checkbox"/> very shallow (less than 15cm)
	<input type="checkbox"/> medium (generally loam)		<input type="checkbox"/> shallow (between 15 and 30 cm)
	<input type="checkbox"/> heavy (generally clay)		<input type="checkbox"/> moderate to deep (greater 30cm)
Stony	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Topography	<input type="checkbox"/> flat <input checked="" type="checkbox"/> generally rolling <input type="checkbox"/> steep
Drainage	<input checked="" type="checkbox"/> well drained	Accessibility	<input type="checkbox"/> year-round <input checked="" type="checkbox"/> seasonal
	<input type="checkbox"/> moderate	Additional Information	
	<input type="checkbox"/> poor		

7.1.3 COMPARTMENT HISTORY

The *Dry-Fresh Sugar Maple–Beech Deciduous Forest* is located on the northern slopes of Westermain Woods, with a representation of approximately 59%. This ecosite is characterized as a mature, shade-tolerant hardwood forest featuring numerous large-diameter trees (see Photograph 1). Harvesting has been extensive with many cut stumps as evidence to this recent occurrence. Beech Bark Disease has also affected all the American Beech (*Fagus grandifolia*) and most beech trees are in a state of decline or have toppled thereby creating canopy gaps. The combination of these events has spurred extensive regeneration of Sugar Maple (*Acer saccharum*) and American Beech saplings.

With the extensive regeneration, tall shrubs are limited but where present consist of Red Elderberry (*Sambucus racemosa*), Hobblebush (*Viburnum lantanoides*) and Striped Maple (*Acer pensylvanicum*). However, the herbaceous layer is diverse, featuring Hairy Solomon's Seal (*Polygonatum pubescens*), Wild Lily-of-the-valley (*Maianthemum canadense*) and White Trillium (*Trillium grandiflorum*). Of interest, are the small herbaceous communities found around the seeps on the slopes and consisting of Wild Leek (*Allium tricoccum*), Maidenhair Fern (*Adiantum pedatum*) and Rattlesnake Fern (*Botrypus virginianus*) – species typically associated with richer soils.

Large diameter (>1m) trees, downed woody debris, and standing dead snags are some of the unique habitat features of this community (see Photograph 2).

The soil substrate consists of shallow, silty sand; and the topography has a north to easterly aspect and is moderately sloped.

The vegetation type is classified as FOD5-2 in accordance with the Ecological Land Classification for Southern Ontario (Lee, et al., 1998)



7.1.4 INVENTORY

If the compartment is dominated by trees, complete the Forested Compartment Description (below). If the compartment has few trees, complete the Open Area description (below).

Forested compartment description

- Much woody debris on forest floor yes no
Good diversity of understory plants yes no
Signs of grazing or other disturbance yes no
Good regeneration of seedling/saplings yes no
Trees generally younger yes no
Trees generally older growth yes no
Trees generally the same age yes no
Trees of all sizes and ages yes no

Open area description

- Agricultural areas pasture
cropland
Other areas old field
exposed rock
hydro or pipeline corridor
shallow limestone alvar
native grass prairie
sparsely treed savannah

Tree species found

Species	Sugar Maple	66 %
Species	American Beech	18 %
Species	White Ash	7 %
Species	Large-toothed Aspen	7 %
Species	American Basswood	2 %
Species	Other	%
		100 %

Estimated height of trees ft 20 m
Average diameter at breast height in 28 cm
Estimated age of majority of trees yrs

Other features

- Such as small open areas
 small rock knobs/barrens
 fencerows
 small wet areas
 beaver floods
 pond/stream
 lake

General cover type determination:

- coniferous forest deciduous forest mixed forest
coniferous plantation deciduous plantation mixed plantation



7.1.4.1 PHOTODOCUMENTATION

Photograph 1: Dry – Fresh Sugar Maple Beech Deciduous Forest



Photograph 2: Large diameter downed woody debris



7.1.4.2 HABITAT FEATURES

Check the boxes that describe the habitat features found on your property.

Habitat feature		Details/comments
Snags	<input checked="" type="checkbox"/>	Snags are abundant due to Beech Bark Disease.
Cavity Trees	<input checked="" type="checkbox"/>	Nesting, feeding and escape cavities are common. Some of diameters large enough to support medium sized mammals and/or birds.
Very tall trees (supercanopy)	<input type="checkbox"/>	
Mast trees (nut or fruit bearing trees)	<input checked="" type="checkbox"/>	American Beech and American Basswood are components of the overstory and provide valuable mast to the local wildlife populations.
Conifer thickets	<input type="checkbox"/>	
Stick nests	<input type="checkbox"/>	
Heronry	<input type="checkbox"/>	
Fallen and dead trees	<input checked="" type="checkbox"/>	Abundant and of large diameter.
Dens and dug holes	<input type="checkbox"/>	
Dropping, tracks and other signs	<input checked="" type="checkbox"/>	Deer pellets are common.
Wildlife trails	<input type="checkbox"/>	
Deer wintering yard	<input type="checkbox"/>	
Deer bedding area	<input type="checkbox"/>	
Moose aquatic feeding area	<input type="checkbox"/>	
Waterfowl nesting	<input type="checkbox"/>	
Waterfowl feeding	<input type="checkbox"/>	
Waterfowl breeding pair habitat	<input type="checkbox"/>	
Waterfowl brood habitat	<input type="checkbox"/>	
Snake hibernaculum	<input type="checkbox"/>	
Other food sources (cones, saplings, salt licks)	<input type="checkbox"/>	

Additional comments:



7.1.5 UPLAND OBJECTIVES:

Long-term objectives (what do you want this compartment to be like in 20 years?)

To maintain this area as a natural area to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity. Specific ecological functions associated with this compartment include:

- ✓ Calcareous soil-based shade tolerant hardwood forest with a rich floral community.
- ✓ Riparian forest protecting water quality of adjacent lakes and wetlands through the provision and filtration of natural surface water runoff.
- ✓ Provision of a valuable food source, in the form of hard and soft mast, for the local wildlife community.
- ✓ Confirmed habitat for Species at Risk and uncommon species, specifically:
 - Eastern Red Bat
 - Northern Hoary Bat
 - Little Brown Myotis
 - Silver-haired Bat
 - Plantain-leaved Sedge
 - Yellow-billed Cuckoo
- ✓ Suitable habitat for Species at Risk and uncommon species, specifically:
 - Wood Thrush
 - Northern Myotis
- ✓ Mature forest with old growth characteristics emerging. Old growth forests are limited and declining in the County of the Haliburton and represent a habitat with many unique features such as the following:
 - Large diameter snags and cavities utilized by medium sized mammals and birds.
 - Large diameter downed woody debris providing optimal habitat for salamanders, snakes and fungal and moss communities.
 - Pit and mound features resulting from toppled root masses, that provide exposed soils for regeneration and ephemeral pools for amphibian breeding.

Short-term activities (What activities, if any do you have planned in this compartment over the next 10 years that will help reach your long-term objectives?)

Short-term activities will include the following:

- ✓ Post and maintain *No Trespassing* signs at all trail entrances to the property to discourage unauthorized trespassing.
- ✓ Maintain gated access to discourage unauthorized trespassing.
 - To inform management, conduct further field investigations into Species at Risk and under-represented taxa such as songbirds, amphibians, plants, fungi, moths and butterflies.
- ✓ Monitor for invasive species and manage accordingly if detected.
- ✓ Identify and engage neighbours to build community support and local monitoring.
- ✓ Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.
- ✓ Investigate trail on western boundary and close if detrimental.
- ✓ Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.



Conservation land designation

Eligible for Conservation Land Tax Incentive Program? yes no don't know

Type of conservation land

- | | |
|--|---|
| <input type="checkbox"/> Provincially Significant Wetland | <input type="checkbox"/> Provincially significant area of natural or scientific interest (ANSI) |
| <input type="checkbox"/> Habitat of endangered species | <input type="checkbox"/> Escarpment natural area in the Niagara Escarpment Plan |
| <input checked="" type="checkbox"/> Community conservation lands | |

Other Information



7.2 FOD5-3: DRY – FRESH SUGAR MAPLE – OAK DECIDUOUS FOREST

7.2.1 AREA

Acres: 95.65

Hectares:

7.2.2 COMPARTMENT CHARACTERISTICS

Soil type	<input checked="" type="checkbox"/> light (generally sand)	Soil Depth	<input checked="" type="checkbox"/> very shallow (less than 15cm)
	<input type="checkbox"/> medium (generally loam)		<input type="checkbox"/> shallow (between 15 and 30 cm)
	<input type="checkbox"/> heavy (generally clay)		<input type="checkbox"/> moderate to deep (greater 30cm)
Stony	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Topography	<input type="checkbox"/> flat <input checked="" type="checkbox"/> generally rolling <input type="checkbox"/> steep
Drainage	<input checked="" type="checkbox"/> well drained	Accessibility	<input type="checkbox"/> year-round <input checked="" type="checkbox"/> seasonal
	<input type="checkbox"/> moderate	Additional Information	
	<input type="checkbox"/> poor		

7.2.3 COMPARTMENT HISTORY

The *Dry – Fresh Sugar Maple – Oak Deciduous Forest* is found on the southern slopes of Westermain Woods as well as the property extending easterly to Lake of Bays. Total representation of this vegetation type is 28%. Like FOD5-2, this vegetation community is dominated by mature large diameter trees but has a stronger Red Oak (*Quercus rubra*) component and less American Beech (See Photograph 3). Harvesting has again been extensive with many cut stumps as evidence of this recent occurrence. It should be noted that the component of this vegetation type on the property extending to Lake of Bays, does not show the same evidence of harvesting; however, a mound of piled stones is present thereby suggesting past farming activities.

Regeneration consists of Sugar Maple, American Beech and Red Oak. Shrubs are primarily limited to Striped Maple. The herbaceous ground cover consists of Wild Lily-of-the-valley, Hairy Solomon's Seal, Northern Starflower (*Lysimachia borealis*) and False Solomon's Seal (*Maianthemum racemosum*).

The high component of the Red Oak provides valuable hard mast for the local wildlife community (see Photograph 4). Fieldwork identified Musk Monkeyflower (*Erythranthe moschata*) in this vegetation type (see Photograph 5). Musk Monkeyflower is a provincially rare species identified at only 11 other sites in Ontario. It should be noted that Musk Monkeyflower is hydrophilic with a wetland coefficient -5 and its occurrence was associated with a seep in this vegetation type. Other rare species include the Eastern Wood-pewee (*Contopus virens*), the Yellow-billed Cuckoo (*Coccyzus americanus*) and the Wood Thrush (*Hylocichla mustelina*).

The soil substrate consists of shallow, silty sand; and the topography has an easterly aspect and is moderately sloped. A knoll of approximately 20m in height is found at the most eastern point and prior to abutting Lake of Bays.

The vegetation type is classified as FOD5-3 in accordance with the Ecological Land Classification for Southern Ontario (Lee, et al., 1998).



7.2.4 INVENTORY

If the compartment is dominated by trees, complete the Forested Compartment Description (below). If the compartment has few trees, complete the Open Area description (below).

Forested compartment description

- Much woody debris on forest floor yes no
- Good diversity of understory plants yes no
- Signs of grazing or other disturbance yes no
- Good regeneration of seedling/saplings yes no
- Trees generally younger yes no
- Trees generally older growth yes no
- Trees generally the same age yes no
- Trees of all sizes and ages yes no

Open area description

- Agricultural areas pasture
- cropland
- Other areas old field
- exposed rock
- hydro or pipeline corridor
- shallow limestone alvar
- native grass prairie
- sparsely treed savannah

Tree species found

Species	Red Oak	37 %
Species	Sugar Maple	28 %
Species	American Beech	11 %
Species	White Ash	8 %
Species		%
Species	Other	16 %
		100 %

Other features

- Such as small open areas
- small rock knobs/barrens
- fencerows
- small wet areas
- beaver floods
- pond/stream
- lake

Estimated height of trees	ft	20 m	Other	
Average diameter at breast height	in	28 cm	Basal area	21m ² /ha
Estimated age of majority of trees		yrs		

General cover type determination:

- coniferous forest
- deciduous forest
- mixed forest
- coniferous plantation
- deciduous plantation
- mixed plantation



7.2.4.1 PHOTODOCUMENTATION

Photograph 3: Dry – Fresh Sugar Maple – Oak Deciduous Forest



Photograph 4: Hard mast (acorns) on the forest floor



Photograph 5: Musk Monkeyflower (*Erythranthe moschata*) in FOD5-3.



7.2.4.2 HABITAT FEATURES

Check the boxes that describe the habitat features found on your property.

Habitat feature		Details/comments
Snags	<input checked="" type="checkbox"/>	Abundant and primarily consisting of American Beech
Cavity Trees	<input checked="" type="checkbox"/>	Nesting, feeding and escape cavities are common
Very tall trees (supercanopy)	<input type="checkbox"/>	
Mast trees (nut or fruit bearing trees)	<input checked="" type="checkbox"/>	Red Oak dominates the overstory and would provide the local wildlife community with a valuable source of hard mast. American Beech is also present
Conifer thickets	<input type="checkbox"/>	
Stick nests	<input type="checkbox"/>	
Heronry	<input type="checkbox"/>	
Fallen and dead trees	<input checked="" type="checkbox"/>	Abundant and primarily consisting of American Beech
Dens and dug holes	<input type="checkbox"/>	
Dropping, tracks and other signs	<input type="checkbox"/>	
Wildlife trails	<input type="checkbox"/>	
Deer wintering yard	<input type="checkbox"/>	
Deer bedding area	<input type="checkbox"/>	
Moose aquatic feeding area	<input type="checkbox"/>	
Waterfowl nesting	<input type="checkbox"/>	
Waterfowl feeding	<input type="checkbox"/>	
Waterfowl breeding pair habitat	<input type="checkbox"/>	
Waterfowl brood habitat	<input type="checkbox"/>	
Snake hibernaculum	<input type="checkbox"/>	
Other food sources (cones, saplings, salt licks)	<input type="checkbox"/>	

Additional comments:



7.2.5 UPLAND OBJECTIVES:

Long-term objectives (what do you want this compartment to be like in 20 years?)

To maintain this area as a natural area to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity. Specific ecological functions associated with this compartment include:

- ✓ Riparian forest protecting water quality of adjacent lakes and wetlands through the provision and filtration of natural surface water runoff.
- ✓ Provision of a valuable food source, in the form of hard and soft mast, for the local wildlife community.
- ✓ Confirmed habitat for Species at Risk and uncommon species, specifically:
 - Eastern Red Bat
 - Northern Hoary Bat
 - Little Brown Myotis
 - Silver-haired Bat
 - Musk Monkeyflower
 - Eastern Wood-pewee
 - Wood Thrush
 - Yellow-billed Cuckoo
- ✓ Suitable habitat for Species at Risk and uncommon species, specifically:
 - Northern Myotis
- ✓ Mature forest with old growth characteristics emerging. Old growth forests are limited and declining in the County of the Haliburton and represent a habitat with many unique features such as the following:
 - Large diameter snags and cavities utilized by medium sized mammals and birds.
 - Large diameter downed woody debris providing optimal habitat for salamanders, snakes and fungal and moss communities.
 - Pit and mound features resulting from toppled root masses, that provide exposed soils for regeneration and ephemeral pools for amphibian breeding.

Short-term activities (What activities, if any do you have planned in this compartment over the next 10 years that will help reach your long-term objectives?)

- ✓ Post and maintain *No Trespassing* signs at all trail entrances to the property to discourage unauthorized trespassing.
- ✓ Close and/or reroute the southern trail to protect the small population of Musk Monkeyflower
- ✓ Monitor the population of Musk Monkeyflower to identify and mitigate potential impacts.
- ✓ Dismantle office trail perch to discourage unauthorized use.
- ✓ Maintain gated access to discourage unauthorized trespassing.
 - To inform management, conduct further field investigations into Species at Risk and under-represented taxa such as songbirds, amphibians, plants, fungi, moths and butterflies.
- ✓ Monitor for invasive species and manage accordingly if detected.
- ✓ Identify and engage neighbours to the north and west to build community support and local monitoring.
- ✓ Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.
- ✓ Investigate trail on western boundary and close if detrimental.



- ✓ Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.

Conservation land designation

Eligible for Conservation Land Tax Incentive Program? yes no don't know

Type of conservation land

- Provincially Significant Wetland
- Provincially significant area of natural or scientific interest (ANSI)
- Habitat of endangered species
- Escarpment natural area in the Niagara Escarpment Plan
- Community conservation lands

Other Information



7.3 FOM2-2: DRY – FRESH WHITE PINE – SUGAR MAPLE MIXED FOREST

7.3.1 AREA

Acres: 1.83

Hectares:

7.3.2 COMPARTMENT CHARACTERISTICS

- | | | | |
|-----------|--|------------------------|---|
| Soil type | <input type="checkbox"/> light (generally sand) | Soil Depth | <input type="checkbox"/> very shallow (less than 15cm) |
| | <input type="checkbox"/> medium (generally loam) | | <input type="checkbox"/> shallow (between 15 and 30 cm) |
| | <input type="checkbox"/> heavy (generally clay) | | <input type="checkbox"/> moderate to deep (greater 30cm) |
| Stony | <input type="checkbox"/> yes <input type="checkbox"/> no | Topography | <input type="checkbox"/> flat <input type="checkbox"/> generally rolling <input type="checkbox"/> steep |
| Drainage | <input type="checkbox"/> well drained | Accessibility | <input type="checkbox"/> year-round <input type="checkbox"/> seasonal |
| | <input type="checkbox"/> moderate | Additional Information | |
| | <input type="checkbox"/> poor | | |

7.3.3 COMPARTMENT HISTORY

The *Dry – Fresh White Pine – Sugar Maple Mixed Forest* is a small ecosite found in the western central boundary of Westermain Woods with a total representation of only 1%. This unique vegetation type is dominated by mature large-diameter White Pine (*Pinus strobus*) trees with diameters exceeding 1m (see Photograph 6 and Photograph 7). Most of the mature White Pine have been marked for removal; however, evidence of harvesting is minimal and limited to only a few cut stumps.

A common shrub is Striped Maple and the herbaceous consists of Wild Sarsaparilla (*Aralia nudicaulis*), Wild Lily-of-the-valley, Red Trillium (*Trillium erectum*) and Northern Starflower. Evergreen Wood Fern (*Dryopteris intermedia*) is also common.

The soil substrate is moderate to deep, silty sand; and the topography is flat to gently rolling.

The vegetation type is classified as FOM2-2 in accordance with the Ecological Land Classification for Southern Ontario (Lee, et al., 1998)



7.3.4 INVENTORY

If the compartment is dominated by trees, complete the Forested Compartment Description (below). If the compartment has few trees, complete the Open Area description (below).

Forested compartment description

- Much woody debris on forest floor yes no
- Good diversity of understory plants yes no
- Signs of grazing or other disturbance yes no
- Good regeneration of seedling/saplings yes no
- Trees generally younger yes no
- Trees generally older growth yes no
- Trees generally the same age yes no
- Trees of all sizes and ages yes no

Open area description

- Agricultural areas pasture
- cropland
- Other areas old field
- exposed rock
- hydro or pipeline corridor
- shallow limestone alvar
- native grass prairie
- sparsely treed savannah

Tree species found

Species	White Pine	64 %
Species	Sugar Maple	29 %
Species		%
Species		%
Species		%
Species	Other	7 %
		100 %

Other features

- Such as small open areas
- small rock knobs/barrens
- fencerows
- small wet areas
- beaver floods
- pond/stream
- lake

Estimated height of trees	ft	22 m
Average diameter at breast height	in	40 cm
Estimated age of majority of trees	yrs	

Other Basal area 28m²/ha

General cover type determination:

- coniferous forest
- coniferous plantation
- deciduous forest
- deciduous plantation
- mixed forest
- mixed plantation



7.3.4.1 PHOTODOCUMENTATION

Photograph 6: Dry – Fresh White Pine – Sugar Maple Mixed Forest



Photograph 7: White Pine tree with diameter exceeding 1m



7.3.4.2 HABITAT FEATURES

Check the boxes that describe the habitat features found on your property.

Habitat feature		Details/comments
Snags	<input checked="" type="checkbox"/>	Limited but present
Cavity Trees	<input checked="" type="checkbox"/>	Nesting, feeding and escape trees are common
Very tall trees (supercanopy)	<input checked="" type="checkbox"/>	Many White Pine trees extend well above the average canopy and would provide optimal roosting sites for raptors and refuge for mammals
Mast trees (nut or fruit bearing trees)	<input type="checkbox"/>	
Conifer thickets	<input type="checkbox"/>	
Stick nests	<input type="checkbox"/>	
Heronry	<input type="checkbox"/>	
Fallen and dead trees	<input type="checkbox"/>	
Dens and dug holes	<input type="checkbox"/>	
Dropping, tracks and other signs	<input type="checkbox"/>	
Wildlife trails	<input type="checkbox"/>	
Deer wintering yard	<input type="checkbox"/>	
Deer bedding area	<input type="checkbox"/>	
Moose aquatic feeding area	<input type="checkbox"/>	
Waterfowl nesting	<input type="checkbox"/>	
Waterfowl feeding	<input type="checkbox"/>	
Waterfowl breeding pair habitat	<input type="checkbox"/>	
Waterfowl brood habitat	<input type="checkbox"/>	
Snake hibernaculum	<input type="checkbox"/>	
Other food sources (cones, saplings, salt licks)	<input type="checkbox"/>	

Additional comments:



7.3.5 UPLAND OBJECTIVES:

Long-term objectives (what do you want this compartment to be like in 20 years?)

To maintain this area as a natural area to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity. Specific ecological functions associated with this compartment include:

- ✓ Supercanopy trees providing refuge for medium to large mammals, as well as roost sites for raptors.
- ✓ Confirmed habitat for Species at Risk and uncommon species, specifically:
 - Eastern Red Bat
 - Northern Hoary Bat
 - Little Brown Myotis
 - Silver-haired Bat
- ✓ Suitable habitat for Species at Risk and uncommon species, specifically:
 - Eastern Wood-pewee
 - Northern Myotis
- ✓ Mature forest with old growth characteristics emerging. Old growth forests are limited and declining in the County of the Haliburton and represent a habitat with many unique features such as the following:
 - Large diameter snags and cavities utilized by medium sized mammals and birds.
 - Large diameter downed woody debris providing optimal habitat for salamanders, snakes and fungal and moss communities.
 - Pit and mound features resulting from toppled root masses, that provide exposed soils for regeneration and ephemeral pools for amphibian breeding.

Short-term activities (What activities, if any do you have planned in this compartment over the next 10 years that will help reach your long-term objectives?)

help reach your long-term objectives?)

- ✓ Dismantle office trail perch to discourage unauthorized use.
 - To inform management, conduct further field investigations into Species at Risk and under-represented taxa such as songbirds, amphibians, plants, fungi, moths and butterflies.
- ✓ Monitor for invasive species and manage accordingly if detected.
- ✓ Identify and engage neighbours to the north and west to build community support and local monitoring.
- ✓ Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.
- ✓ Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.



Conservation land designation

Eligible for Conservation Land Tax Incentive Program? yes no don't know

Type of conservation land

- Provincially Significant Wetland Provincially significant area of natural or scientific interest (ANSI)
 Habitat of endangered species Escarpment natural area in the Niagara Escarpment Plan
 Community conservation lands

Other Information



7.4 FOM6-2: FRESH – MOIST HEMLOCK MIXED FOREST

7.4.1 AREA

Acres: 41.11

Hectares:

7.4.2 COMPARTMENT CHARACTERISTICS

Soil type	<input checked="" type="checkbox"/> light (generally sand)	Soil Depth	<input type="checkbox"/> very shallow (less than 15cm)
	<input type="checkbox"/> medium (generally loam)		<input type="checkbox"/> shallow (between 15 and 30 cm)
	<input type="checkbox"/> heavy (generally clay)		<input checked="" type="checkbox"/> moderate to deep (greater 30cm)
Stony	<input type="checkbox"/> yes <input type="checkbox"/> no	Topography	<input type="checkbox"/> flat <input checked="" type="checkbox"/> generally rolling <input type="checkbox"/> steep
Drainage	<input type="checkbox"/> well drained	Accessibility	<input type="checkbox"/> year-round <input checked="" type="checkbox"/> seasonal
	<input checked="" type="checkbox"/> moderate	Additional Information	
	<input type="checkbox"/> poor		

7.4.3 COMPARTMENT HISTORY

The *Fresh – Moist Hemlock Mixed Forest* primarily occupies the lower slopes and/or flatter moister areas of Westmain Woods. One exception is a small pocket perched on a steep slope in the northeastern corner of the property. This pocket would likely be better described as dry to fresh but with a small size of 0.19 ha it was grouped into the larger fresh – moist vegetation type. The total representation of FOM6-2 is approximately 12% (See Photograph 8).

The shrub layer is well-developed, featuring tall shrubs such as Hobblebush, Striped Maple, and Canada Fly Honeysuckle (*Lonicera canadensis*), as well as low shrubs such as Partridgeberry (*Mitchella repens*) and Eastern Teaberry (*Gaultheria procumbens*). The herbaceous ground cover is diverse and includes species such as Wild-lily-of-the-valley, Indian Cucumber-root (*Medeola virginiana*), Northern Starflower, Wild Sarsaparilla, Yellow Clintonia (*Clintonia borealis*), Rose Twisted-stalk (*Streptopus lanceolatus*) and White Wood-sorrel (*Oxalis montana*). Pink Lady's Slipper (*Cypripedium acaule*) and the less common Painted Trillium (*Trillidium undulatum*) are also found in this vegetation type (See Photograph 9).

Black Ash (*Fraxinus nigra*) can be found where soils are moister and is listed provincially as *Endangered* and federally as *Threatened*. Rattlesnake Plantain (*Goodyera sp.*) is an uncommon genus and has been reported on site (Muskoka Heritage Foundation, 1992). *Fresh – Moist Hemlock Mixed Forest* provides suitable habitat for this genus, though it was not observed during the 2025 field investigations.

The soil substrate is of moderate depth and silty sand with scattered organic deposits. The topography is flat to gently sloped.

The vegetation type is classified as FOM6-2 in accordance with the *Ecological Land Classification for Southern Ontario* (Lee, et al., 1998)



7.4.4 INVENTORY

If the compartment is dominated by trees, complete the Forested Compartment Description (below). If the compartment has few trees, complete the Open Area description (below).

Forested compartment description

- Much woody debris on forest floor yes no
- Good diversity of understory plants yes no
- Signs of grazing or other disturbance yes no
- Good regeneration of seedling/saplings yes no
- Trees generally younger yes no
- Trees generally older growth yes no
- Trees generally the same age yes no
- Trees of all sizes and ages yes no

Open area description

- Agricultural areas pasture
- cropland
- Other areas old field
- exposed rock
- hydro or pipeline corridor
- shallow limestone alvar
- native grass prairie
- sparsely treed savannah

Tree species found

Species	Eastern Hemlock	45 %
Species	Sugar Maple	15 %
Species	Red Maple	9 %
Species	Yellow Birch	8 %
Species	Red Oak	7 %
Species	Other	16 %
		100 %

Other features

- small open areas
- Such as small rock knobs/barrens
- fencerows
- small wet areas
- beaver floods
- pond/stream
- lake

Estimated height of trees	ft	15 m	Other
Average diameter at breast height	in	25 cm	Basal area
Estimated age of majority of trees	yrs		

General cover type determination:

- coniferous forest
- coniferous plantation
- deciduous forest
- deciduous plantation
- mixed forest
- mixed plantation



7.4.4.1 PHOTODOCUMENTATION

Photograph 8: Fresh – Moist Hemlock - Hardwood Mixed Forest



Photograph 9: Pink Lady's Slipper in FOM6-2



7.4.4.2 HABITAT FEATURES

Check the boxes that describe the habitat features found on your property.

Habitat feature		Details/comments
Snags	<input checked="" type="checkbox"/>	Primarily of smaller diameter and of Balsam Fir
Cavity Trees	<input checked="" type="checkbox"/>	Feeding holes of Yellow-bellied sapsucker are common. All other cavity types present as well
Very tall trees (supercanopy)	<input type="checkbox"/>	
Mast trees (nut or fruit bearing trees)	<input type="checkbox"/>	
Conifer thickets	<input checked="" type="checkbox"/>	Eastern Hemlock and Balsam Fir create thickets that would provide refuge for some wildlife
Stick nests	<input type="checkbox"/>	
Heronry	<input type="checkbox"/>	
Fallen and dead trees	<input checked="" type="checkbox"/>	Abundant and of all diameters
Dens and dug holes	<input type="checkbox"/>	
Dropping, tracks and other signs	<input checked="" type="checkbox"/>	White-tailed Deer pellets are common
Wildlife trails	<input type="checkbox"/>	
Deer wintering yard	<input type="checkbox"/>	
Deer bedding area	<input type="checkbox"/>	
Moose aquatic feeding area	<input type="checkbox"/>	
Waterfowl nesting	<input type="checkbox"/>	
Waterfowl feeding	<input type="checkbox"/>	
Waterfowl breeding pair habitat	<input type="checkbox"/>	
Waterfowl brood habitat	<input type="checkbox"/>	
Snake hibernaculum	<input type="checkbox"/>	
Other food sources (cones, saplings, salt licks)	<input type="checkbox"/>	Partridgeberry, Eastern Teaberry

Additional comments:



7.4.5 UPLAND OBJECTIVES:

Long-term objectives (what do you want this compartment to be like in 20 years?)

To maintain this area as a natural area to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity. Specific ecological functions associated with this compartment include:

- ✓ Riparian forest providing wildlife with natural cover and access to water features.
- ✓ Riparian forest protecting water quality of adjacent lakes and wetlands through the provision and filtration of natural surface water runoff.
- ✓ Provision of a valuable food source, in the form of soft mast, for the local wildlife community.
- ✓ Provision of thermal refuge for wildlife during the hot summers and cold winters.
- ✓ Confirmed habitat for Species at Risk and uncommon species, specifically:
 - Eastern Red Bat
 - Northern Hoary Bat
 - Little Brown Myotis
 - Silver-haired Bat
 - Black Ash
- ✓ Suitable habitat for Species at Risk and uncommon species, specifically:
 - Canada Warbler
 - Northern Myotis
 - Rattlesnake Plantain
- ✓ Mature forest with old growth characteristics emerging. Old growth forests are limited and declining in the County of the Haliburton and represent a habitat with many unique features such as the following:
 - Large diameter snags and cavities utilized by medium sized mammals and birds.
 - Large diameter downed woody debris providing optimal habitat for salamanders, snakes and fungal and moss communities.
 - Pit and mound features resulting from toppled root masses, that provide exposed soils for regeneration and ephemeral pools for amphibian breeding.

Short-term activities (What activities, if any do you have planned in this compartment over the next 10 years that will help reach your long-term objectives?)

help reach your long-term objectives?)

- ✓ Post and maintain *No Trespassing* signs at all trail entrances to the property to discourage unauthorized trespassing.
- ✓ Maintain gated access to discourage unauthorized trespassing.
- ✓ To inform management, conduct further field investigations into Species at Risk and under-represented taxa such as songbirds, amphibians, plants, fungi, moths and butterflies.
- ✓ Monitor for invasive species and manage accordingly if detected.
- ✓ Identify and engage neighbours to the north and west to build community support and local monitoring.
- ✓ Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.
- ✓ Investigate trail on western boundary and close if detrimental.



- ✓ Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.

Conservation land designation

Eligible for Conservation Land Tax Incentive Program? yes no don't know

Type of conservation land

- Provincially Significant Wetland
- Provincially significant area of natural or scientific interest (ANSI)
- Habitat of endangered species
- Escarpment natural area in the Niagara Escarpment Plan
- Community conservation lands

Other Information



7.5 CUT1-5: RASPBERRY CULTURAL THICKET

7.5.1 AREA

Acres: 2.49

Hectares:

7.5.2 COMPARTMENT CHARACTERISTICS

Soil type	<input checked="" type="checkbox"/> light (generally sand)	Soil Depth	<input type="checkbox"/> very shallow (less than 15cm)
	<input type="checkbox"/> medium (generally loam)		<input type="checkbox"/> shallow (between 15 and 30 cm)
	<input type="checkbox"/> heavy (generally clay)		<input checked="" type="checkbox"/> moderate to deep (greater 30cm)
Stony	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Topography	<input type="checkbox"/> flat <input checked="" type="checkbox"/> generally rolling <input type="checkbox"/> steep
Drainage	<input checked="" type="checkbox"/> well drained	Accessibility	<input type="checkbox"/> year-round <input checked="" type="checkbox"/> seasonal
	<input type="checkbox"/> moderate	Additional Information	Old staging areas for logging
	<input type="checkbox"/> poor		

7.5.3 COMPARTMENT HISTORY

The *Raspberry Cultural Thicket* is a product of past harvesting activities. These small open areas would have been used to stack logs during the operation and as such they are along or adjacent to the trail network. The representation is minimal at only 1%.

Although once cleared, advanced regeneration is extensive and consists of White Pine, Red Pine (*Pinus resinosa*), White Spruce (*Picea glauca*) Sugar Maple, Red Maple, White Ash and White Birch (see Photograph 10). The presence of White Spruce and Red Pine combined with the uniformity of White Pine age and spacing suggest that some replanting has occurred. Shrubs are extensive and thick, and consist of Allegheny Blackberry (*Rubus allegheniensis*), Red Raspberry (*Rubus idaeus*), White Meadowsweet (*Spiraea alba*) and Pin Cherry (*Prunus pensylvanica*). The herbaceous layer is also diverse, and typical of disturbed sites, has a high representation of exotic species. Common occurrences include Fringed Sedge (*Carex crinita*), Goldenrods (*Solidago sp*), Grasses, Asters (*Symphyotrichum sp.*), Common Self-heal (*Prunella vulgaris*), Common Yarrow (*Achillea millefolium*) and Common St. John's-wort (*Hypericum perforatum*).

The soil substrate consists of silty sand; and the topography is typically flat to gently sloped.

The vegetation type is classified as CUT1-5 in accordance with the *Ecological Land Classification for Southern Ontario* (Lee, et al., 1998). The vegetation type is classified as "open" in accordance with the Managed Forest Tax Incentive Program (MFTIP) guidelines.



7.5.4 INVENTORY

If the compartment is dominated by trees, complete the Forested Compartment Description (below). If the compartment has few trees, complete the Open Area description (below).

Forested compartment description

- Much woody debris on forest floor yes no
- Good diversity of understory plants yes no
- Signs of grazing or other disturbance yes no
- Good regeneration of seedling/saplings yes no
- Trees generally younger yes no
- Trees generally older growth yes no
- Trees generally the same age yes no
- Trees of all sizes and ages yes no

Open area description

- Agricultural areas pasture
- cropland
- Other areas old field
- exposed rock
- hydro or pipeline corridor
- shallow limestone alvar
- native grass prairie
- sparsely treed savannah

Tree species found

- Species %
 - Species %
 - Species %
 - Species %
 - Species %
 - Species Other %
- 100 %

Other features

- Such as small open areas
- small rock knobs/barrens
- fencerows
- small wet areas
- beaver floods
- pond/stream
- lake

- Estimated height of trees ft m
- Average diameter at breast height in cm
- Estimated age of majority of trees yrs

- Other
- Basal area

General cover type determination:

- coniferous forest deciduous forest mixed forest
- coniferous plantation deciduous plantation mixed plantation



7.5.4.1 PHOTODOCUMENTATION

Photograph 10: Raspberry Cultural Thicket



7.5.4.2 HABITAT FEATURES

Check the boxes that describe the habitat features found on your property.

Habitat feature		Details/comments
Snags	<input type="checkbox"/>	
Cavity Trees	<input type="checkbox"/>	
Very tall trees (supercanopy)	<input type="checkbox"/>	
Mast trees (nut or fruit bearing trees)	<input type="checkbox"/>	
Conifer thickets	<input checked="" type="checkbox"/>	This compartment is considered a thicket and would provide refuge for wildlife, despite the lack of conifer.
Stick nests	<input type="checkbox"/>	
Heronry	<input type="checkbox"/>	
Fallen and dead trees	<input type="checkbox"/>	
Dens and dug holes	<input type="checkbox"/>	
Dropping, tracks and other signs	<input type="checkbox"/>	
Wildlife trails	<input type="checkbox"/>	
Deer wintering yard	<input type="checkbox"/>	
Deer bedding area	<input type="checkbox"/>	
Moose aquatic feeding area	<input type="checkbox"/>	
Waterfowl nesting	<input type="checkbox"/>	
Waterfowl feeding	<input type="checkbox"/>	
Waterfowl breeding pair habitat	<input type="checkbox"/>	
Waterfowl brood habitat	<input type="checkbox"/>	
Snake hibernaculum	<input type="checkbox"/>	
Other food sources (cones, saplings, salt licks)	<input checked="" type="checkbox"/>	Allegheny Blackberry, Red Raspberry, Wild Strawberry, Common Milkweed (Monarch)

Additional comments:



7.5.5 UPLAND OBJECTIVES:

Long-term objectives (what do you want this compartment to be like in 20 years?)

To maintain this area as a natural area to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity. Specific ecological functions associated with this compartment include:

- ✓ Provision of a valuable food source, in the form of soft mast, for the local wildlife community.
- ✓ Confirmed habitat for Species at Risk and uncommon species, specifically:
 - Eastern Red Bat
 - Northern Hoary Bat
 - Little Brown Myotis
 - Silver-haired Bat
- ✓ Suitable habitat for Species at Risk and uncommon species, specifically:
 - Monarch

Short-term activities (What activities, if any do you have planned in this compartment over the next 10 years that will help reach your long-term objectives?)

help reach your long-term objectives?)

- ✓ To inform management, conduct further field investigations into Species at Risk and under-represented taxa such as songbirds, amphibians, plants, fungi, moths and butterflies.
- ✓ Monitor for invasive species and manage accordingly if detected.
- ✓ Identify and engage neighbours to the north and west to build community support and local monitoring.
- ✓ Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.
- ✓ Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.

Conservation land designation

Eligible for Conservation Land Tax Incentive Program? yes no don't know

Type of conservation land

- | | |
|--|---|
| <input type="checkbox"/> Provincially Significant Wetland | <input type="checkbox"/> Provincially significant area of natural or scientific interest (ANSI) |
| <input type="checkbox"/> Habitat of endangered species | <input type="checkbox"/> Escarpment natural area in the Niagara Escarpment Plan |
| <input checked="" type="checkbox"/> Community conservation lands | |

Other Information



7.6 SWD5-1: BLACK ASH ORGANIC DECIDUOUS SWAMP

(Fill out a separate form for each wetland compartment)

7.6.1 AREA

Acres: 2.22

Hectares:

7.6.2 COMPARTMENT CHARACTERISTICS

Soil type	<input checked="" type="checkbox"/> muck	Main source of water	<input checked="" type="checkbox"/> creek	Accessibility
	<input type="checkbox"/> peat	<input type="checkbox"/> spring	<input checked="" type="checkbox"/> runoff	<input type="checkbox"/> year-round
	<input type="checkbox"/> silt	<input type="checkbox"/> tile drain	<input checked="" type="checkbox"/> natural	<input checked="" type="checkbox"/> seasonal
	<input type="checkbox"/> marl	<input checked="" type="checkbox"/> snow melt	<input type="checkbox"/> groundwater seepage	
	<input type="checkbox"/> sand	<input type="checkbox"/> other		

7.6.3 COMPARTMENT HISTORY

<input type="checkbox"/> flooded year-round	<input type="checkbox"/> human-made impoundment	<input type="checkbox"/> wetland has been evaluated by OMNR
<input checked="" type="checkbox"/> flooded spring only	<input type="checkbox"/> beaver impoundment	Average yearly water level: _____
<input type="checkbox"/> dries mid-summer	<input checked="" type="checkbox"/> water at or near ground level	

The *Black Ash Organic Deciduous Swamp* occupies two lowland areas within Westermain Woods and has a representation of approximately 1% (see Photograph 11).

While plot data suggest the deciduous component exceeds 75%, 2018 aerial imagery defines a higher component of conifer resulting in a *mixed* swamp classification.

The shrub layer consists of species such as Fly Honeysuckle, Common Winterberry (*Ilex verticillata*) and Dwarf Raspberry (*Rubus pubescens*). The herbaceous ground cover is rich with species such as Bunchberry (*Cornus canadensis*), Goldthread (*Coptis trifolia*), Three-seeded Sedge (*Carex trisperma*) and Northern Water-Horehound (*Lycopus uniflorus*). Representation of fern species is also high and includes Sensitive Fern (*Onoclea sensibilis*), Cinnamon Fern (*Osmundastrum cinnamomeum*) and Royal Fern (*Osmunda regalis*). Sphagnum Moss (*Sphagnum sp.*) is abundant and covers most of the area. Small Duckweed (*Lemna minor*) was also observed floating on the surface where standing water was present.

Black Ash dominates the overstory and is listed provincially as *Endangered* and federally as *Threatened*. The Natural Heritage Information Centre reports that the Canada Warbler (*Cardellina canadensis*), which is listed as a species of *Special Concern* both provincially and federally, has been observed on site. This vegetation type provides suitable habitat though it should be noted that the Canada Warbler was not documented on site during the 2025 field investigations.

Organic deposits are typically deep and in excess of 40cm.

The vegetation type is classified as SWD5-1 in accordance with the *Ecological Land Classification for Southern Ontario* (Lee, et al., 1998)



7.6.4 INVENTORY

If trees and shrubs cover more than 25% of the compartment area, complete the left side of the form (below). If less than 25% of the compartment area is covered by trees or shrubs, complete the right side of the form.

Trees or shrubs cover more than 25%

- Most trees are dead yes no
- Mostly shrubs yes no
- Good diversity of understory plants yes no
- Signs of grazing or other disturbance yes no
- Trees generally younger yes no
- Trees generally older growth yes no
- Trees generally the same age yes no
- Trees of all sizes and ages yes no

Trees or shrubs cover less than 25%

- no open water some open water
- Vegetation is:
 - emergent submergent floating
- Composed of:
 - mostly cattails, rushes, reeds, grasses and sedges
 - mostly sedges and mosses
 - covered in sphagnum moss
- Other vegetation:

Tree species found

Species	Black Ash	75 %
Species	Eastern Hemlock	22 %
Species	Yellow Birch	3 %
Species		%
Species		%
Species		%
		100 %
Estimated height of trees	ft	15 m
Average diameter at breast height	in	20 cm
Estimated age of majority of trees		yrs

Other features

- stream
- pond
- other (describe)

Other

General cover type determination:

- marsh fen bog dead tree swamp
- thicket swamp coniferous swamp deciduous swamp mixed swamp



7.6.4.1 PHOTODOCUMENTATION

Photograph 11: Black Ash Organic Deciduous Swamp



7.6.4.2 HABITAT FEATURES

Check the boxes that describe the habitat features found on your property.

Habitat feature		Details/comments
Snags	<input checked="" type="checkbox"/>	Small diameter only
Cavity Trees	<input checked="" type="checkbox"/>	Some feeding cavities noted
Very tall trees (supercanopy)	<input type="checkbox"/>	
Mast trees (nut or fruit bearing trees)	<input type="checkbox"/>	
Conifer thickets	<input type="checkbox"/>	
Stick nests	<input type="checkbox"/>	
Heronry	<input type="checkbox"/>	
Fallen and dead trees	<input checked="" type="checkbox"/>	Small diameter downed woody debris is common
Dens and dug holes	<input type="checkbox"/>	
Dropping, tracks and other signs	<input type="checkbox"/>	
Wildlife trails	<input type="checkbox"/>	
Deer wintering yard	<input type="checkbox"/>	
Deer bedding area	<input type="checkbox"/>	
Moose aquatic feeding area	<input type="checkbox"/>	
Waterfowl nesting	<input type="checkbox"/>	
Waterfowl feeding	<input type="checkbox"/>	
Waterfowl breeding pair habitat	<input checked="" type="checkbox"/>	May utilize in early spring
Waterfowl brood habitat	<input type="checkbox"/>	
Snake hibernaculum	<input type="checkbox"/>	
Other food sources (cones, saplings, salt licks)	<input checked="" type="checkbox"/>	Dwarf Raspberry

Additional comments:



7.6.5 WETLAND OBJECTIVES

Long-term objectives (what do you want this compartment to be like in 20 years?)

To maintain this area as a natural area to contribute to landscape conservation through enhancing habitat connectivity and supporting biodiversity. Natural features and functions associated with deciduous swamp habitats include but are not limited to:

- ✓ Wildlife habitat with high biodiversity
 - Feeding, breeding and hibernation area for amphibians
 - High diversity of hydrophilic vegetation in rich hardwood swamp wetlands
- ✓ Groundwater recharge
- ✓ Flood attenuation through the provision of a catchment area and water diversion (groundwater recharge)
- ✓ Water quality improvement through the filtering and catchment of contaminants, sediments and nutrients
- ✓ Confirmed habitat for Species at Risk and uncommon species, specifically:
 - Black Ash
 - Eastern Red Bat
 - Northern Hoary Bat
 - Little Brown Myotis
 - Silver-haired Bat
- ✓ Suitable habitat for Species at Risk and uncommon species, specifically:
 - Canada Warbler

Short-term activities (What activities, if any do you have planned in this compartment over the next 10 years that will help reach your long-term objectives?)

help reach your long-term objectives?)

- ✓ To inform management, conduct further field investigations into Species at Risk and under-represented taxa such as songbirds, amphibians, plants, fungi, moths and butterflies.
- ✓ Monitor for invasive species and manage accordingly if detected.
- ✓ Identify and engage neighbours to the north and west to build community support and local monitoring.
- ✓ Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.
- ✓ Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.



Conservation land designation

Eligible for Conservation Land Tax Incentive Program? yes no don't know

Type of conservation land

- Provincially Significant Wetland Provincially significant area of natural or scientific interest (ANSI)
 Habitat of endangered species Escarpment natural area in the Niagara Escarpment Plan
 Community conservation lands

Other Information



8 TEN YEAR ACTIVITY SUMMARY

Compartment	Objective	Activity	Quantity	Year scheduled
All	Environmental Protection, Wildlife Habitat	To inform management, conduct further field investigations into Species at Risk and under-represented taxa and Species at Risk.	4-5 inventories	2026-2035
		Monitor for invasive species and manage accordingly if detected.	Annually	2026-2035
	Environmental Protection	Identify and engage neighbours to the north and west to build community support and local monitoring.	On-going	2026-2035
		Monitor all property boundaries once a year to ensure no unauthorized trespassing has occurred.	Annually	2026-2035
		Develop and maintain a database of species observed on site. Species at Risk observations should be georeferenced to inform management.	1 database	2026-2035
	Nature Appreciation, Environmental Protection	Host guided nature events to build community support for biodiversity and landscape conservation	1/ year	2026-2035
FOD5-2, FOD5-3, FOM6-2	Environmental Protection	Post and maintain <i>No Trespassing</i> signs at all trail entrances to the property to discourage unauthorized trespassing.	As required	2026-2035



		Maintain gated access to discourage unauthorized trespassing.	3 gates	2026-2035
		Investigate trail on western boundary and close if detrimental.		
FOM2-2	Environmental Protection	Dismantle office trail perch to discourage unauthorized use.	1 chair	2026-2027
FOD5-3	Environmental Protection, Wildlife Habitat	Close and/or reroute the southern trail to protect the small population of Musk Monkeyflower	1 trail	2026-2027
		Monitor the population of Musk Monkeyflower to identify and mitigate potential impacts.	Annually	2026-2035





10 CONTACTS AND NOTES

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Kemptville, Ontario
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Phone: 613-713-1525
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Forests Ontario
15 Maple Ave Unit #103
Barrie, ON L4N 2N6
Toll Free: 1-877-646-1193
Local: 416-646-1193
Fax: 416-493-4608
Email: info@forestsontario.ca

Ontario Ministry of Natural Resources – Bancroft
District
106 Monck St.
Bancroft, ON K0L 1C0
Tel: 1-613-332-3940

Natural Heritage Information Centre
300 Water Street, 2nd Floor, North Tower
P.O. Box 7000, Peterborough, ON, K9J 8M5
Tel: (705) 755-2159
Fax: (705) 755-2168
Web: www.nhic.mnr.gov.on.ca



11 RECOMMENDED FIELD GUIDES

- Barron, G. (1999). *Mushrooms of Ontario and Eastern Canada*. Edmonton, Alberta: Lone Pine Publishing.
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- Smith, W. R. (2018). *Sedges and Rushes of Minnesota: The complete guide to species identification*. Minneapolis: University of Minnesota Press.



12 PROPERTY SPECIES LIST

Scientific Name	Common Name	COSEWIC	SARO	S_RANK	Tracked
Amphibia					
<i>Eurycea bislineata</i>	Northern Two-lined Salamander			S5	N
<i>Lithobates clamitans</i>	Green Frog			S4	N
<i>Pseudacris crucifer</i>	Spring Peeper			S5	N
Aves					
<i>Bonasa umbellus</i>	Ruffed Grouse			S5	N
<i>Buteo platypterus</i>	Broad-winged Hawk			S5B	N
<i>Catharus fuscescens</i>	Veery			S5B	N
<i>Catharus guttatus</i>	Hermit Thrush			S5B,S4N	N
<i>Catharus ustulatus</i>	Swainson's Thrush			S5B	N
<i>Certhia americana</i>	Brown Creeper			S5	N
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo			S4B	N
<i>Colaptes auratus</i>	Northern Flicker			S5	N
<i>Contopus virens</i>	Eastern Wood-pewee	SC	SC	S4B	Y
<i>Corvus brachyrhynchos</i>	American Crow			S5	N
<i>Corvus corax</i>	Common Raven			S5	N
<i>Cyanocitta cristata</i>	Blue Jay			S5	N
<i>Dryobates pubescens</i>	Downy Woodpecker			S5	N
<i>Dryocopus pileatus</i>	Pileated Woodpecker			S5	N
<i>Hylocichla mustelina</i>	Wood Thrush	THR	SC	S4B	Y
<i>Piranga olivacea</i>	Scarlet Tanager			S5B	N
<i>Poecile atricapillus</i>	Black-capped Chickadee			S5	N
<i>Quiscalus quiscula</i>	Common Grackle			S5	N
<i>Seiurus aurocapilla</i>	Ovenbird			S5B	N
<i>Setophaga caeruleascens</i>	Black-throated Blue Warbler			S5B	N
<i>Setophaga pensylvanica</i>	Chestnut-sided Warbler			S5B	N
<i>Setophaga ruticilla</i>	American Redstart			S5B	N
<i>Setophaga virens</i>	Black-throated Green Warbler			S5B	N
<i>Sitta carolinensis</i>	White-breasted Nuthatch			S5	N
<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker			S5B,S3N	N
<i>Spinus tristis</i>	American Goldfinch			S5	N
<i>Troglodytes hiemalis</i>	Winter Wren			S5B,S4N	N
<i>Turdus migratorius</i>	American Robin			S5	N
<i>Vireo olivaceus</i>	Red-eyed Vireo			S5B	N
Insecta					
<i>Crambus albellus</i>	Small White Grass-veneer Moth			S4	N
<i>Ischnura verticalis</i>	Eastern Forktail			S5	N
<i>Protoboarmia porcelaria</i>	Porcelain Gray Moth			S5?	N
<i>Renia flavipunctalis</i>	Yellow-spotted Renia Moth			S4	N
<i>Zanclognatha laevigata</i>	Variable Zanclognatha Moth			S4S5	N
Mammalia					
<i>Alces alces</i>	Moose			S5	N
<i>Eptesicus fuscus</i>	Big Brown Bat			S4	N
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	END		S3	Y
<i>Lasiurus borealis</i>	Eastern Red Bat	END		S3	Y
<i>Lasiurus cinereus</i>	Northern Hoary Bat	END		S3	Y
<i>Myotis lucifugus</i>	Little Brown Myotis	END	END	S3	Y



Scientific Name	Common Name	COSEWIC	SARO	S_RANK	Tracked
<i>Odocoileus virginianus</i>	White-tailed Deer			S5	N
<i>Tamias striatus</i>	Eastern Chipmunk			S5	N
<i>Tamiasciurus hudsonicus</i>	Red Squirrel			S5	N
<i>Ursus americanus</i>	American Black Bear	NAR	NAR	S5	N
Lecanoromycetes					
<i>Cladonia caespiticia</i>	Stubby Stalked Lichen			S4	N
<i>Cladonia coniocraea</i>	Common Pixie Powderhorn			SU	N
<i>Evernia mesomorpha</i>	Boreal Oakmoss Lichen			S5	N
<i>Flavoparmelia caperata</i>	Granulated Greenshield Lichen			S5	N
Bryopsida					
<i>Calliergon cordifolium</i>	Heart-leaved Spear Moss			S5	N
<i>Hypnum imponens</i>	Pellucid Plait Moss			S5	N
<i>Neckera pennata</i>	Feathery Neckera			S5	N
<i>Plagiomnium ciliare</i>	Toothed Leafy Moss			S5	N
<i>Ptilium crista-castrensis</i>	Knight's Plume Moss			S5	N
<i>Rhizomnium punctatum</i>	Dotted Leafy Moss			S5	N
Dicotyledoneae					
<i>Acer pensylvanicum</i>	Striped Maple			S4	N
<i>Acer rubrum</i>	Red Maple			S5	N
<i>Acer saccharum</i>	Sugar Maple			S5	N
<i>Achillea millefolium</i>	Common Yarrow			SNA	N
<i>Actaea pachypoda</i>	White Baneberry			S5	N
<i>Actaea rubra</i>	Red Baneberry			S5	N
<i>Agrimonia gryposepala</i>	Hooked Agrimony			S5	N
<i>Anaphalis margaritacea</i>	Pearly Everlasting			S5	N
<i>Apocynum androsaemifolium</i>	Spreading Dogbane			S5	N
<i>Aralia nudicaulis</i>	Wild Sarsaparilla			S5	N
<i>Aralia racemosa</i>	American Spikenard			S5	N
<i>Asclepias syriaca</i>	Common Milkweed			S5	N
<i>Betula alleghaniensis</i>	Yellow Birch			S5	N
<i>Betula papyrifera</i>	Paper Birch			S5	N
<i>Chamaedaphne calyculata</i>	Leatherleaf			S5	N
<i>Chrysosplenium americanum</i>	American Golden-saxifrage			S4	N
<i>Circaea alpina</i>	Small Enchanter's Nightshade			S5	N
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade			S5	N
<i>Clinopodium vulgare</i>	Wild Basil			S5	N
<i>Coptis trifolia</i>	Goldthread			S5	N
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood			S5	N
<i>Cornus canadensis</i>	Bunchberry			S5	N
<i>Corylus cornuta</i>	Beaked Hazelnut			S5	N
<i>Diervilla lonicera</i>	Northern Bush-honeysuckle			S5	N
<i>Epifagus virginiana</i>	Beechdrops			S5	N
<i>Epilobium ciliatum</i>	Northern Willowherb			S5	N
<i>Erigeron strigosus</i>	Rough Fleabane			S5	N
<i>Erythranthe moschata</i>	Musk Monkeyflower			S1S2	Y
<i>Eurybia macrophylla</i>	Large-leaved Aster			S5	N
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod			S5	N
<i>Eutrochium maculatum</i>	Spotted Joe Pye Weed			S5	N



Scientific Name	Common Name	COSEWIC	SARO	S_RANK	Tracked
<i>Fagus grandifolia</i>	American Beech			S4	N
<i>Fallopia cilinodis</i>	Fringed Black Bindweed			S5	N
<i>Fragaria virginiana</i>	Wild Strawberry			S5	N
<i>Fraxinus americana</i>	White Ash			S4	N
<i>Fraxinus nigra</i>	Black Ash	THR	END	S4	Y
<i>Galium odoratum</i>	Sweet-scented Bedstraw			SNA	N
<i>Galium trifidum</i>	Three-petalled Bedstraw			S5	N
<i>Galium triflorum</i>	Three-flowered Bedstraw			S5	N
<i>Gaultheria procumbens</i>	Eastern Teaberry			S5	N
<i>Geranium robertianum</i>	Herb-Robert			S5	N
<i>Hydrocotyle americana</i>	American Water Pennywort			S4S5	N
<i>Hypericum perforatum</i>	Common St. John's-wort			SNA	N
<i>Ilex verticillata</i>	Common Winterberry			S5	N
<i>Impatiens capensis</i>	Spotted Jewelweed			S5	N
<i>Leucanthemum vulgare</i>	Oxeye Daisy			SNA	N
<i>Linaria vulgaris</i>	Butter-and-eggs			SNA	N
<i>Lobelia inflata</i>	Indian-tobacco			S5	N
<i>Lonicera canadensis</i>	Canada Fly Honeysuckle			S5	N
<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil			SNA	N
<i>Lycopus uniflorus</i>	Northern Water-horehound			S5	N
<i>Lysimachia borealis</i>	Northern Starflower			S5	N
<i>Lysimachia terrestris</i>	Swamp Yellow Loosestrife			S5	N
<i>Lysimachia thyrsoiflora</i>	Tufted Yellow Loosestrife			S5	N
<i>Mitchella repens</i>	Partridgeberry			S5	N
<i>Monotropa uniflora</i>	Indian-pipe			S5	N
<i>Mycelis muralis</i>	Wall Lettuce			SNA	N
<i>Nabalus altissimus</i>	Tall Rattlesnakeroot			S5	N
<i>Osmorhiza claytonii</i>	Hairy Sweet Cicely			S5	N
<i>Ostrya virginiana</i>	Eastern Hop-hornbeam			S5	N
<i>Oxalis montana</i>	White Wood-sorrel			S5	N
<i>Oxalis stricta</i>	Upright Yellow Wood-sorrel			SNA	N
<i>Persicaria hydropiper</i>	Marshpepper Smartweed			SNA	N
<i>Pilosella caespitosa</i>	Meadow Hawkweed			SNA	N
<i>Plantago major</i>	Common Plantain			SNA	N
<i>Plantago rugelii</i>	Rugel's Plantain			S5	N
<i>Populus grandidentata</i>	Large-toothed Aspen			S5	N
<i>Populus tremuloides</i>	Trembling Aspen			S5	N
<i>Potentilla norvegica</i>	Rough Cinquefoil			S5	N
<i>Potentilla simplex</i>	Old-field Cinquefoil			S5	N
<i>Prunella vulgaris</i>	Common Self-heal			S5	N
<i>Prunus pensylvanica</i>	Pin Cherry			S5	N
<i>Prunus serotina</i>	Black Cherry			S5	N
<i>Pyrola elliptica</i>	Shinleaf			S5	N
<i>Quercus rubra</i>	Northern Red Oak			S5	N
<i>Ranunculus acris</i>	Common Buttercup			SNA	N
<i>Ranunculus recurvatus</i>	Hooked Buttercup			S5	N
<i>Rhus typhina</i>	Staghorn Sumac			S5	N
<i>Ribes glandulosum</i>	Skunk Currant			S5	N
<i>Rubus allegheniensis</i>	Allegheny Blackberry			S5	N
<i>Rubus canadensis</i>	Canada Blackberry			S5	N
<i>Rubus idaeus</i>	Red Raspberry			S5	N



Scientific Name	Common Name	COSEWIC	SARO	S_RANK	Tracked
<i>Rubus pubescens</i>	Dwarf Raspberry			S5	N
<i>Rumex britannica</i>	Greater Water Dock			S5	N
<i>Salix bebbiana</i>	Bebb's Willow			S5	N
<i>Salix humilis</i>	Prairie Willow			S5	N
<i>Sambucus canadensis</i>	Common Elderberry			S5	N
<i>Sambucus racemosa</i>	Red Elderberry			S5	N
<i>Scutellaria galericulata</i>	Marsh Skullcap			S5	N
<i>Scutellaria lateriflora</i>	Mad-dog Skullcap			S5	N
<i>Silene vulgaris</i>	Bladder Champion			SNA	N
<i>Solidago juncea</i>	Early Goldenrod			S5	N
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod			S5	N
<i>Sorbaria sorbifolia</i>	False Spiraea			SNA	N
<i>Spiraea alba</i>	White Meadowsweet			S5	N
<i>Spiraea tomentosa</i>	Steeplebush			S5	N
<i>Symphyotrichum lateriflorum</i>	Calico Aster			S5	P
<i>Symphyotrichum puniceum</i>	Purple-stemmed Aster			S5	N
<i>Tanacetum vulgare</i>	Common Tansy			SNA	N
<i>Tiarella stolonifera</i>	Heart-leaved Foamflower			S5	N
<i>Tilia americana</i>	Basswood			S5	N
<i>Triadenum fraseri</i>	Fraser's St. John's-wort			S5	N
<i>Trifolium aureum</i>	Yellow Clover			SNA	N
<i>Trifolium pratense</i>	Red Clover			SNA	N
<i>Vaccinium angustifolium</i>	Early Lowbush Blueberry			S5	N
<i>Verbascum thapsus</i>	Common Mullein			SNA	N
<i>Verbena hastata</i>	Blue Vervain			S5	N
<i>Veronica officinalis</i>	Common Speedwell			SNA	N
<i>Viburnum cassinoides</i>	Wild Raisin			S5	N
<i>Viburnum lantanoides</i>	Hobblebush			S5	N
<i>Vicia cracca</i>	Tufted Vetch			SNA	N
<i>Viola canadensis</i>	Canada Violet			S5	N
Equisetopsida					
<i>Equisetum arvense</i>	Field Horsetail			S5	N
<i>Equisetum fluviatile</i>	Water Horsetail			S5	N
<i>Equisetum sylvaticum</i>	Woodland Horsetail			S5	N
Filicopsida					
<i>Adiantum pedatum</i>	Northern Maidenhair Fern			S5	N
<i>Athyrium filix-femina</i>	Common Lady Fern			S5	N
<i>Claytosmunda claytoniana</i>	Interrupted Fern			S5	N
<i>Dennstaedtia punctilobula</i>	Eastern Hay-scented Fern			S4	N
<i>Dryopteris intermedia</i>	Evergreen Wood Fern			S5	N
<i>Dryopteris marginalis</i>	Marginal Wood Fern			S5	N
<i>Gymnocarpium dryopteris</i>	Common Oak Fern			S5	N
<i>Matteuccia struthiopteris</i>	Ostrich Fern			S5	N
<i>Onoclea sensibilis</i>	Sensitive Fern			S5	N
<i>Osmunda regalis</i>	Royal Fern			S5	N
<i>Osmundastrum cinnamomeum</i>	Cinnamon Fern			S5	N
<i>Parathelypteris noveboracensis</i>	New York Fern			S4S5	N
<i>Phegopteris connectilis</i>	Northern Beech Fern			S5	N
<i>Polypodium virginianum</i>	Rock Polypody			S5	N



Scientific Name	Common Name	COSEWIC	SARO	S_RANK	Tracked
<i>Polystichum acrostichoides</i>	Christmas Fern			S5	N
<i>Pteridium aquilinum</i>	Bracken Fern			S5	N
<i>Thelypteris palustris</i>	Marsh Fern			S5	N
Lycopodiopsida					
<i>Dendrolycopodium dendroideum</i>	Round-branched Tree-clubmoss			S5	N
<i>Dendrolycopodium hickeyi</i>	Hickey's Tree-clubmoss			S4	N
<i>Diphasiastrum digitatum</i>	Southern Ground-cedar			S5	N
<i>Huperzia lucidula</i>	Shining Firmoss			S5	N
<i>Spinulum annotinum</i>	Stiff Clubmoss			S5	N
Marchantiopsida					
<i>Conocephalum salebrosum</i>	Cat-tongue Liverwort			S5	N
Monocotyledoneae					
<i>Agrostis gigantea</i>	Redtop			SNA	N
<i>Allium tricoccum</i>	Wild Leek			S4	N
<i>Anthoxanthum odoratum</i>	Sweet Vernalgrass			SNA	N
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit			S5	N
<i>Brachyelytrum aristosum</i>	Northern Shorthusk			S5?	N
<i>Carex crinita</i>	Fringed Sedge			S5	N
<i>Carex disperma</i>	Two-seeded Sedge			S5	N
<i>Carex gracillima</i>	Graceful Sedge			S5	N
<i>Carex houghtoniana</i>	Houghton's Sedge			S5	N
<i>Carex intumescens</i>	Bladder Sedge			S5	N
<i>Carex lurida</i>	Sallow Sedge			S4S5	N
<i>Carex plantaginea</i>	Plantain-leaved Sedge			S5	N
<i>Carex projecta</i>	Necklace Sedge			S5	N
<i>Carex rosea</i>	Rosy Sedge			S5	N
<i>Carex scabrata</i>	Eastern Rough Sedge			S5	N
<i>Carex scoparia</i>	Pointed Broom Sedge			S5	N
<i>Carex trisperma</i>	Three-seeded Sedge			S5	N
<i>Carex vulpinoidea</i>	Fox Sedge			S5	N
<i>Cinna latifolia</i>	Drooping Woodreed			S5	N
<i>Clintonia borealis</i>	Yellow Clintonia			S5	N
<i>Cypripedium acaule</i>	Pink Lady's-slipper			S5	N
<i>Dactylis glomerata</i>	Orchard Grass			SNA	N
<i>Danthonia compressa</i>	Flattened Oatgrass			S4	N
<i>Danthonia spicata</i>	Poverty Oatgrass			S5	N
<i>Dichanthelium lanuginosum</i>	Woolly Panicgrass			S5	N
<i>Epipactis helleborine</i>	Broad-leaved Helleborine			SNA	N
<i>Glyceria melicaria</i>	Slender Mannagrass			S4	N
<i>Glyceria striata</i>	Fowl Mannagrass			S5	N
<i>Lemna minor</i>	Small Duckweed			S5	N
<i>Maianthemum canadense</i>	Wild Lily-of-the-valley			S5	N
<i>Maianthemum racemosum</i>	Large False Solomon's Seal			S5	N
<i>Medeola virginiana</i>	Indian Cucumber-root			S5	N
<i>Polygonatum pubescens</i>	Hairy Solomon's Seal			S5	N
<i>Scirpus atrocinctus</i>	Black-girdled Bulrush			S5	N
<i>Scirpus atrovirens</i>	Dark-green Bulrush			S5	N
<i>Streptopus lanceolatus</i>	Rose Twisted-stalk			S5	N
<i>Trillidium undulatum</i>	Painted Trillium			S4	N



Scientific Name	Common Name	COSEWIC	SARO	S_RANK	Tracked
<i>Trillium erectum</i>	Red Trillium			S5	N
<i>Trillium grandiflorum</i>	White Trillium			S5	N
Ophioglossopsida					
<i>Botrypus virginianus</i>	Rattlesnake Fern			S5	N
Pinopsida					
<i>Abies balsamea</i>	Balsam Fir			S5	N
<i>Picea glauca</i>	White Spruce			S5	N
<i>Pinus resinosa</i>	Red Pine			S5	N
<i>Pinus strobus</i>	Eastern White Pine			S5	N
<i>Thuja occidentalis</i>	Eastern White Cedar			S5	N
<i>Tsuga canadensis</i>	Eastern Hemlock			S5	N
Sphagnopsida					
<i>Sphagnum capillifolium</i>	Northern Peat Moss			S5	N
<i>Sphagnum girgensohnii</i>	Girgensohn's Peat Moss			S5	N
<i>Sphagnum squarrosum</i>	Shaggy Peat Moss			S5	N

