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NATURAL ENVIRONMENT

Scoped Environmental Impact Study Eighth Line Road, North Dummer Township of Douro-Dummer

Prepared For:

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Date: Project:

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1. Introduction

Beacon Environmental Limited (Beacon) has been retained by Mr. Michael Gisinsky to prepare a Scoped Environmental Impact Study (EIS) in support establishing a gravel access road on an unopened municipal road allowance for the property located at Eighth Line Road, North Dummer, Part of Lot 17, Concession 7, Township of Douro-Dummer, County of Peterborough (herein referred to as 'study area', **Figure 1**). The study area is approximately 1.5ha (3.7 acres) and is located east of County Road 40 and north of Centre Dummer Road.

The study area is primarily wooded with an All-Terrain Vehicle (ATV) trail through the southern portion. Natural features present on and in the vicinity of the study area include the Center Dummer Bog and Swamp Life Science Area of Natural and Scientific Interest (ANSI), the Dummer Swamp Provincially Significant Wetland (PSW) to the north as well as woodlands and unevaluated wetlands. It is our understanding that Mr. Gisinsky is seeking to construct a gravel access road along the unopened road allowance to facilitate access to his property for recreational activities.

The Growth Plan for the Greater Golden Horseshoe (GPGGH), County of Peterborough and Township of Douro-Dummer Official Plans require the identification of natural heritage features and their functions to confirm there will be no negative impacts on the feature from the proposed unopened road allowance application.

The purpose of this EIS is to identify Key Natural Heritage Features (KNHF) and Key Hydrologic Features (KHF) and functions on or adjacent to the study area, assess impacts of the proposed unopened road allowance and recommend mitigation measures to ensure that there are no negative impacts to the features or their functions.

2. Environmental Policy Framework

2.1 Provincial Policy Statement (2020)

Natural Heritage Policy 2.1 of the *Provincial Policy Statement* (PPS) (MMAH 2020) provides direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features and resources for applications pursuant to the *Planning Act*. It took effect on May 1, 2020 superseding the PPS of 2014. The PPS defines natural heritage features and provides planning policies for each. The key text from the PPS that applies to the study area is reproduced below. The study area is situated in Ecoregion 6E.

2.1.4 *Development and site alteration shall not be permitted in:*

- a) *significant wetlands* in Ecoregions 5E, 6E and 7E; and
- b) *significant coastal wetlands*.

2.1.5 *Development and site alteration shall not be permitted in:*

- a) *significant wetlands* in the Canadian Shield north of Ecoregions 5E, 6E and 7E;

- b) *significant woodlands* in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- c) *significant valleylands* in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- d) *significant wildlife habitat*;
- e) *significant areas of natural and scientific interest*; and
- f) *coastal wetlands* in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b).

Unless it has been demonstrated that there will be no *negative impacts* on the natural features or their *ecological functions*.

2.1.6 *Development and site alteration* shall not be permitted in *fish habitat* except in accordance with *provincial and federal requirements*.

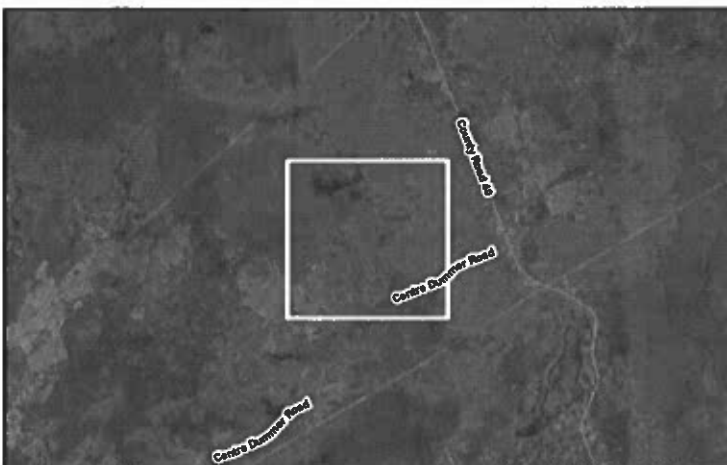
2.1.7 *Development and site alteration* shall not be permitted in *habitat of endangered species and threatened species*, except in accordance with *provincial and federal requirements*.



Of these features, provincially significant wetlands (PSW) and significant ANSIs are identified directly by the Ministry of Natural Resources and Forestry (MNR). Woodlands and other significant features may be identified using MNR criteria or municipal criteria that meet the same standard. In Ontario, Fisheries and Oceans Canada (DFO) manages fish habitat and the MNR manages fisheries. Habitat of endangered and threatened species is mainly governed by the provincial *Endangered Species Act* (2007) (See Section 2.5).

Furthermore, development and site alteration shall not be permitted on "adjacent lands" to the natural heritage features/areas (i.e., within 120 m) addressed in policies 2.1.4, 2.1.5, 2.1.6 and 2.1.7 "unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated [through an EIS] that there will be no negative impacts on the natural features or on their ecological functions." Adjacent lands are defined in the PPS as "those lands contiguous to a specific natural heritage feature or area where it is likely that development or site alteration would have a negative impact on the feature or area." Therefore, it can be assumed that any development or site alteration on lands that lie beyond 120 m of the feature will 1) not have a negative impact and 2) does not require an EIS.

2.2 Growth Plan for the Greater Golden Horseshoe (2020)

The GPGGH has been prepared under the *Places to Grow Act*, 2005. This Plan guides decisions on a wide range of issues such as: transportation, infrastructure planning, land-use planning, urban form, housing, natural heritage and resource protection and builds on the PPS, Greenbelt, Niagara Escarpment and Oak Ridges Moraine Plans.



Site Location		Figure 1
Eighth Line Dummer DD		
		Project: 220044 Last Revised: June 2020
Client:		Prepared by: BD Checked by:
	1:10,800	Inset Map: 1:90,000
Contains information licensed under the Open Government License—Ontario Orthoimagery Baselayer: (Google)		

The GPGGH recognizes the following KNHF:

- Habitat of endangered and threatened species;
- Fish habitat;
- Wetlands;
- Life Science ANSIs;
- Significant valleylands;
- Significant woodlands;
- Significant wildlife habitat (including habitat of special concern species);
- Sand barrens, savannahs, and tallgrass prairies; and
- Alvars.

KHF under the GPGGH are:

- Permanent and intermittent streams;
- Inland lakes and their littoral zones;
- Seepage areas and springs; and
- Wetlands.

Section 4.2.3 states:

Outside of settlement areas, development or site alteration is not permitted in key natural heritage features that are part of the Natural Heritage System for the Growth Plan or in key hydrologic features, except for:

... small-scale structures for recreational uses, including boardwalks, footbridges, fences, docks, and picnic facilities, if measures are taken to minimize the number of such structures and their negative impacts.

Section 4.2.4 states:

Outside settlement areas, a proposal for new development or site alteration within 120 metres of a key natural heritage feature within the Natural Heritage System for the Growth Plan or a key hydrologic feature will require a natural heritage evaluation or hydrologic evaluation that identifies a vegetation protection zone, which:

- *Is of sufficient width to protect the key natural heritage feature or key hydrologic feature and its functions from the impacts of the proposed change;*
- *Is established to achieve and be maintained as natural self-sustaining vegetation; and*
- *For key hydrologic features, fish habitat, and significant woodlands, is no less than 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature.*

Evaluations undertaken in accordance with policy 4.2.4.1 will identify any additional restrictions to be applied before, during, and after development to protect the hydrologic functions and ecological functions of the feature.

2.3 County of Peterborough Official Plan (Office Consolidation 2020)

The County of Peterborough published its latest Official Plan Office Consolidation in March 2020 and recognizes the important contribution that natural systems, natural heritage features and natural resources make to the social, economic, and environmental health of local municipalities. In this regard, the County has identified the following areas to ensure that the appropriate land use and resource management protection policies are applied to them:

- Floodplains;
- Wetlands;
- Endangered and threatened species habitat;
- Fish habitat;
- Wildlife habitat;
- Woodlands;
- Valleylands;
- ANSI's; and
- Oak Ridges Moraine.

Section 4.1.3 states that “development and site alterations within provincially significant wetlands and in significant portions of the habitat of endangered and threatened species is not permitted.” Outside of the Oak Ridge Moraine, development or site alteration such as filling, grading and excavating may be permitted within or adjacent to the remaining natural heritage features listed provided that an environmental impact assessment prepared in accordance with Section 4.1.3.1 demonstrates that there will be no negative impact on the natural features or functions.

2.3.1 Township of Douro-Dummer Official Plan

The County of Peterborough Official Plan functions as the Official Plan for the Township of Douro-Dummer with local policies outlined in Section 6 and 7.

The study area is mapped as Rural within an ANSI Life Science and a PSW to the north on Schedule A4-2 Land Use and Transportation Dummer Ward. All forms of development and site alteration within 120 m of a PSW require the completion of an environmental study.

2.4 Otonabee Region Conservation Authority

2.4.1 Ontario Regulation 167/06 (2006)

ORCA regulates hazard lands, including creeks, valleylands, shorelines, and wetlands under Ontario Regulation 167/06, under the *Conservation Authorities Act*.

For any development proposals located within 30 m of an unevaluated wetland (of any size) or within 120 m of a PSW, ORCA can require that an Environmental Impact Study (EIS) be prepared to the satisfaction of ORCA. The regulation requires the issuance of a permit from ORCA to allow “interference” with a wetland.

2.4.2 Watershed Planning & Regulation Policy Manual (2015)

Policy 2.3.2 (5) and 2.3.2 (6) of the manual refers to any proposed new development within areas of interference of a wetland. New development will be permitted within 120 m of a designated PSW provided that:

- Development will be setback from the wetland boundary by at least 30 m; and
- It can be demonstrated through an EIS that there will be no negative impact on the hydrological function of the wetland.

Section 7.2 (10) states that passive low intensity recreational uses associated with public parks, outdoor recreation and education, trail systems or watercourse access points will be permitted within an area of interference provided that there will be no negative impact on the hydrologic function of the wetland.

Section 7.2 (16) addresses fill placement, excavation and/or grade modifications and states fill placement, excavation and/or grade modifications: associated with existing access roads and driveways; required for the construction of a new access route to serve an existing residential, agricultural, commercial, industrial or institutional use ... will be permitted within an area of interference provided that there will be no negative impact on the hydrologic function of the wetland and inert fill material will be used. The proponent may be required to provide proof of the origin and quality of the fill material to ensure the control of pollution and the conservation of land is not impacted.

2.5 Endangered Species Act (2007)

Ontario's *Endangered Species Act* (2007, ESA) came into effect on June 30, 2008, with over 200 species in Ontario identified as extirpated, endangered, threatened, or of special concern. The Ministry of Environment, Conservation and Parks (MECP) provides oversight of the ESA for the regulation of Species at Risk (SAR) in Ontario. Under the ESA, native species that are in danger of becoming extinct or extirpated from the province are identified as being extirpated, endangered, threatened and special concern. These designations are defined as follows:

- Extirpated - a species that no longer exists in the wild in Ontario but still occurs elsewhere;
- Endangered – a species facing imminent extinction or extirpation in Ontario which is a candidate for regulation under Ontario's *Endangered Species Act*;
- Threatened - a species that is at risk of becoming endangered in Ontario if limiting factors are not reversed; and
- Special Concern (formerly Vulnerable) - a species with characteristics that make it sensitive to human activities or natural events.

Section 9 of the ESA prohibits the killing, harming or harassing of a threatened or endangered species, as well as the destruction of its habitat. Section 10 of the ESA prohibits the damage or destruction of the habitat of all endangered and threatened species. Permitting or approval is required to kill, harm or harass species protected under the ESA or to conduct works within habitat for threatened or endangered species. Species designated as Special Concern require management plans from the MECP but are not directly protected under the ESA. Seasonally appropriate field investigations are typically required to confirm the presence or absence when potentially suitable habitat exists.

3. Study Methodology

To characterize natural heritage resources and functions associated with the study area and adjacent lands, Beacon completed a review of available background information and undertook seasonal field investigations. A summary of the information reviewed, and field investigations completed is provided below.

3.1 Background Review and Agency Scoping

Background information pertaining to the natural resources and physical setting of the study area and environment was gathered and reviewed at the outset of the project. This included the following sources:

- County of Peterborough Official Plan (2020);
- Township Douro-Dummer Official Plan;
- Otonabee Region Conservation Authority (ORCA) Regulations and Policies; and
- MNRF Natural Heritage Information Centre (NHIC).

Other sources of information, such as aerial photography and topographic maps, were also consulted prior to commencing field assessments.

The scope for the EIS was confirmed with ORCA on August 31, 2020 (**Appendix A**).

3.2 Species at Risk Screening

A desktop review of available information sources was undertaken to determine potential species at risk. As part of the desktop screening, the following information sources were reviewed:

- Natural Heritage Information Centre (NHIC) Data via the Make-A-Map application;
- Databases of the Ontario Breeding Bird Atlas (OBBA) project;
- Ontario Reptile and Amphibian Atlas (ORAA);
- SAR range maps <https://www.ontario.ca/environment-and-energy/species-risk-ontario-list>;
- Aquatic SAR maps <http://www.dfo-mpo.gc.ca/species-especes/fpp-ppp/index-eng.htm>;
- High Resolution aerial photography of the property; and
- Natural and physical feature layers from Land Information Ontario (LIO).

The information sources referenced above were reviewed in a Geographic Information System (GIS) mapping environment that Beacon uses to assess the likelihood that sensitive fish habitat or potential SAR present in an area of interest.

3.3 Field Investigations

Beacon ecologists undertook field investigations in the study area and adjacent lands in 2020 and 2021. A summary of the field visits and survey dates are presented in **Table 1**. More detailed survey descriptions are provided in the subsections that follow.

Table 1. Dates of Field Investigations

Survey	Date of Survey(s)
Freshet Condition Review	April 5, 2021
Ecological Land Classification & Floristic Inventory	June 9, 2020, and July 23, 2021
Breeding Bird Surveys	June 9 and 19, 2021
Amphibian Surveys	April 5, May 20, July 6 2021

3.3.1 Ecological Land Classification

Vegetation communities were mapped and described according to the Ecological Land Classification (ELC) system for southern Ontario (Lee *et al.*, 1998), which involved delineating vegetation communities on an aerial photograph of the property and recording pertinent information concerning the structure and composition of the vegetation in each community. At the same time as vegetation community mapping was undertaken, a floral inventory occurred, which consisted of a compilation of a list of plants observed on the property. The vegetation communities were delineated by an OWES and ELC certified Beacon Ecologist.

3.3.2 Breeding Bird Surveys

Breeding bird surveys were undertaken for the entire study area, which will also address the presence/absence of regulated bird species under the ESA. This consisted of two early morning roving surveys in appropriate weather conditions (without rain or excessive wind) in which the entire study area was walked to within 50 m of all portions and all habitats were sampled. All birds heard or observed and showing some inclination toward breeding were recorded as breeding species and recorded in the location observed on an aerial photograph. The site visits were made more than one week apart in accordance with standard southern Ontario breeding bird survey protocols. An annotated species list was compiled indicating provincial breeding status, as well as any provincial and federal endangered and threatened species encountered.

The start times of these investigations were between 5:00 AM and 6:15 AM, while the temperature was within 5° C of normal, it was not raining, nor excessively windy.

3.3.3 Amphibian Breeding Surveys

Breeding amphibian surveys were completed according to Environment Canada's Marsh Monitoring Program protocol and consisted of auditory surveys undertaken during the prime breeding period to record calling males that are present. Three surveys are spread throughout the breeding season in an attempt to include the short temporal peak for each species of interest. Survey dates are spaced so as

to record different amphibian species that call during different times in the spring. These surveys are conducted to record the presence or absence of breeding amphibians in potentially suitable habitat.

Breeding amphibian surveys on the study area were completed after dusk and during suitable temperature conditions. All areas that contained potential breeding amphibian habitat (i.e., wetlands) were surveyed from a distance that would enable calling amphibians to be heard. Survey conditions are provided in **Table 2**; wind conditions are provided using the Beaufort Scale.

Table 2. Breeding Amphibian Survey Conditions

Survey Date	Weather
April 5, 2021	12°C, Wind: 0. Precip.: None
May 20, 2021	27°C, Wind: 1. Precip.: None
July 6, 2021	23°C, Wind: 3. Precip.: None

4. Existing Conditions

The study area is primarily wooded with an ATV trail through the southern portion (**Photograph 1**; **Figure 2**). Per the terms of reference scoped with ORCA the occurrence of pooling water within the unopened road allowance was reviewed under spring conditions on April 5, 2021. During this review within the study area no pooling of standing water or evidence of recent occurrence was present with the road allowance (**Photograph 2**).



Photograph 1. Looking North along Existing Trail (July 23, 2021)



Photograph 2. Dry Conditions Within the Unopened Road Allowance (April 5, 2021)

4.1 Terrestrial Resources

4.1.1 Ecological Land Classification

Vegetation units within the study area were described and mapped on current colour ortho-photography of the lands using the Ecological Land Classification (ELC) system for southern Ontario (Lee et al. 1998) on June 9, 2020. This is the standard method used for describing vegetation communities in southern Ontario. The vegetation units were later confirmed on July 23, 2021. No changes were noted to the pre-existing vegetation communities. The vegetation communities were delineated by an OWES and ELC certified Beacon Ecologist and are illustrated on **Figure 2**.

4.1.1.1 Wetland Communities

Horsetail Mineral Meadow Marsh (MAM2-7)

This community is located at the northern extent of the unopened road allowance. Vegetation is dominated by Water Horsetail (*Equisetum fluviatile*) with Lake Sedge (*Carex lacustris*) and Broad-leaved Cattail (*Typha latifolia*; **Photograph 3**). This wetland is currently unevaluated for provincial significance however based on its proximity to the adjacent PSW if it were to be evaluated it would likely be designated a PSW.



Photograph 3. Horsetail Mineral Meadow Marsh (July 23, 2021)

4.1.1.2 Forest Communities

Fresh-Moist White Cedar Coniferous Forest (FOC4-1)

A small area of FOC4-1 is present within the northern portion of the unopened road allowance. This community is dominated by White Cedar (*Thuja occidentalis*) with all trees less than 50 cm in diameter (**Photograph 4**). The understory and ground flora are sparse, primarily comprised of White Cedar and Balsam Fir (*Abies balsamifera*) saplings.



Photograph 4. Fresh-Moist White Cedar Coniferous Forest (July 23,2021)

Dry-Fresh Sugar Maple Mixed Forest (FOM3-2)

This community has a mixed canopy dominated by Sugar Maple (*Acer saccharum*) with Balsam Fir, Trembling Aspen (*Populus tremuloides*) and Red Oak (*Quercus rubra*). The majority of trees are less than 50 cm in diameter. The understory is dominated by Sugar Maple and Balsam Fir saplings and ground flora includes Wild Sarsaparilla (*Aralia nudicaulis*), Long-stalked Sedge (*Carex pedunculata*) and Canada Yew (*Taxus canadensis*; **Photograph 5**).



Photograph 5. Dry-Fresh Sugar Maple Mixed Forest (July 23,2021)

Dry-Fresh Sugar Maple Deciduous Forest (FOD5-1)

This community is the dominant vegetation type within the study area and is dominated by Sugar Maple with Red Oak and Basswood (*Tilia americana*). The sub-canopy is predominantly Sugar Maple with Ironwood (*Ostrya virginiana*) and White Ash (*Fraxinus americana*). The majority of trees are less than 50 cm in diameter. The understory and ground flora includes Chokecherry (*Prunus virginiana*), Flowering Raspberry (*Rubus odoratus*), Wild Sarsaparilla, Long-stalked Sedge, Blue Cohosh (*Caulophyllum thalictroides*), and Canada Yew (**Photograph 6**).



Photograph 6. Dry-Fresh Sugar Maple Forest (July 23, 2021)

4.1.2 Flora

A total of 42 vascular plant species were recorded within the study area during the July 23, 2021 vegetation survey. Of these approximately 90% of the species recorded are considered native to the region. Collectively the study area supports a moderate level of native species diversity. This can be attributed to the diversity of woodlands and natural wetland vegetation communities associated with, and adjacent to, the study area which includes: mixed, deciduous and coniferous forest and marshes.

No Species at Risk (i.e. provincially endangered, threatened or special concern species) were observed within or directly adjacent to the study area.

A search of the NHIC website revealed Butternut (*Juglans cinerea*) within a 5 km radius of the study area. No Butternut or other rare and/or significant plant species were observed within or directly adjacent to the subject property. A list of the vascular plants identified on the property can be found in **Appendix B**.

4.1.3 Breeding Birds

A total of 38 species of breeding birds were recorded within the study area during the 2021 surveys (**Appendix C**). This avian diversity is reflective of the habitat diversity within the study area discussed in the preceding sections, with a marsh community and forest communities.

The majority of breeding records were common species regularly found in rural fringes and urbanizing areas of south-central Ontario, including the most abundant in descending order: Red-eyed Vireo (*Vireo olivaceus*), Ovenbird (*Seiurus aurocapillus*) and Yellow-bellied Sapsucker (*Sphyrapicus varius*). Other

species observed with more than one breeding territory included Great Crested Flycatcher (*Myiarchus crinitus*), Blue Jay (*Cyanocitta cristata*), Black-capped Chickadee (*Poecile atricapillus*) and Veery (*Catharus fuscescens*).

One wetland specialist was observed, meaning this bird is reliant on wetland habitats to fulfill its life cycle: Swamp Sparrow (*Melospiza georgiana*). This species was found within the meadow marsh at the northern end of the study area, in the forest communities just south of this marsh, and near the unevaluated wetlands to the west and east of the subject property. Additionally, a number of birds typically associated with moist habitats were present, including: Alder Flycatcher (*Empidonax alnorum*), Common Yellowthroat (*Geothlypis trichas*), Winter Wren (*Troglodytes hiemalis*) and Northern Waterthrush (*Parkesia noveboracensis*).

Many species associated with forest habitats were also recorded during the breeding bird surveys and included: Ruffed Grouse (*Bonasa umbellus*), Eastern Wood-Pewee (*Contopus virens*), Black-throated Blue Warbler (*Setophaga caerulescens*) and Ovenbird.

Area-sensitive birds require larger tracts of suitable habitat in which to breed or have higher breeding success in larger areas of suitable habitat. As anticipated, eleven such woodland species were recorded. These species included: Yellow-bellied Sapsucker, Hairy Woodpecker (*Picoides villosus*), White-breasted Nuthatch (*Sitta carolinensis*), Winter Wren, Veery, Hermit Thrush (*Catharus guttatus*), Black-throated Blue Warbler, Black-throated Green Warbler (*Setophaga virens*), Black-and-White Warbler (*Mniotilta varia*), Ovenbird and Scarlet Tanager (*Piranga olivacea*).

Two breeding territories of Eastern Wood-Pewee, a special concern species both federally and provincially, were recorded in the forested habitat in the central and southern portion of the study area. Similarly, two pairs of Wood Thrush (*Hylocichla mustelina*) which is federally threatened and provincially of special concern, were located within the forest community. This species is also subject to the provincial ESA. Two breeding territories were recorded in the forested habitat in the central portion of the study area.

Although none of the species recorded during the breeding bird survey were endangered or threatened, an Eastern Whip-poor-will (*Antrosotmus vociferus*) which is a threatened species, was heard during the amphibian survey of May 20, 2021. Given the time of year, it may be a migrant. However, species-specific surveys are required to confirm the presence/absence of a breeding territory of this species as this species is not captured during standard breeding bird surveys.

No species ranked as S1 through S3 (Critically Imperiled through Vulnerable) by the province were present during the 2021 breeding season.

4.1.4 Breeding Amphibians

The results of the amphibian breeding surveys are summarized in **Table 3** below and survey locations are shown on **Figure 2**.

Surveys for breeding amphibians were conducted on the study area with a focus on the two wetlands to the north and northeastern portions of the property. The study area had little to no background noise and no breeding amphibian habitat is present within the portion of the road allowance proposed to be opened as an access road.

During the first survey, station 1 had a full chorus of Wood Frogs (*Lithobates sylvaticus*) and Spring Peepers (*Pseudacris crucifer*) calling at a code of 3 with two Chorus Frogs (*Pseudacris triseriata*) calling at a code of 1. Station 2 also had a full chorus of Wood Frogs (*Lithobates sylvaticus*) and Spring Peepers (*Pseudacris crucifer*) calling at a code of 3 with one Chorus Frog (*Pseudacris triseriata*) calling at a code of 1.

During the second survey, station 1 had a full chorus of Gray Treefrogs (*Hyla versicolor*) and Spring Peepers calling at a code of 3. Station 2 also had a full chorus of Gray Treefrogs and Spring Peepers calling at a code of 3. With one American Toad (*Anaxyrus americanus*) calling at a code of 1.

During the third survey, stations 1 and 2 had a full chorus of Gray Treefrog calling at a code of 3.

Table 3. Breeding Amphibian Survey Results

Survey Station	Survey Date		
	April 5, 2021	May 20, 2021	July 6, 2021
1	Wood Frog 3 Spring Peeper 3 Chorus Frog 1 ²	Gray Treefrog 3 Spring Peeper 3 American Toad 1 ¹	Gray Treefrog 3
2	Wood Frog 3 Spring Peeper 3 Chorus Frog 1 ¹	Gray Treefrog 3 Spring Peeper 3	Gray Treefrog 3

Chorus Code:

1. individuals of one species can be counted, calls not simultaneous;
2. some calls of one species simultaneous, numbers can be reliably estimated; and,
3. full chorus, calls continuous and overlapping.

Superscript indicates the number of individuals recorded

No threatened or endangered amphibian species were recorded and all those observed are common and abundant in Ontario (NHIC 2021).

4.2 Threatened and Endangered Species

Review of background information and provincial databases has indicated that there are records of 15 endangered and threatened species with potential suitable habitat recorded on or within a 5 km radius of the study area. The results of the endangered and threatened species assessment are based on site review combined with knowledge of the habitat preferences and natural history of the species known to occur within 5 km of the study area (Table 4).

Table 4. Potential Endangered and Threatened Species which may occur on the Study Area

Species	ESA ¹ Status	SARA ² Status	COSEWIC ³ Status	Species /Habitat Present on the Study Area
Eastern Meadowlark <i>Sturnella magna</i>	Threatened	Threatened schedule 1	Threatened	There is no suitable habitat for this species on the study area and was not recorded during breeding bird surveys.
Blanding's Turtle <i>Emydoidea blandingii</i>	Threatened	Threatened schedule 1	Endangered	Potential suitable habitat is present adjacent to the study area within the wetland communities.
Least Bittern <i>Ixobrychus exilis</i>	Threatened	Threatened schedule 1	Threatened	There is no suitable habitat for this species on the study area
Northern Myotis <i>Myotis septentrionalis</i>	Endangered	Endangered schedule 1	Endangered	Potential suitable habitat is present on study area within the woodland communities.
Little Brown Myotis <i>Myotis lucifugus</i>	Endangered	Endangered schedule 1	Endangered	Potential suitable habitat is present on study area within the woodland communities.
Chimney Swift <i>Chaetura pelagica</i>	Threatened	Threatened schedule 1	Threatened	There is no suitable habitat for this species on the study area and was not recorded during breeding bird surveys.
Cerulean Warbler <i>Setophaga cerulea</i>	Threatened	Endangered	Endangered	Not recorded during breeding bird surveys.
Bobolink <i>Dolichonyx oryzivorus</i>	Threatened	Threatened schedule 1	Threatened	There is no suitable habitat for this species on the study area and was not recorded during breeding bird surveys.
Butternut <i>Juglans cinerea</i>	Endangered	Endangered	Endangered	Butternut not present within or immediately adjacent to the study area
Tri-colored Bat <i>Perimyotis subflavus</i>	Endangered	Endangered schedule 1	Endangered	Potential suitable habitat is present on study area within the woodland communities.
Eastern Hog-nosed Snake <i>Heterodon platirhinos</i>	Threatened	Threatened schedule 1	Threatened	Low likelihood of occurrence in woodlands.
Eastern Whip-poor-will <i>Antrostomus vociferus</i>	Threatened	Threatened schedule 1	Threatened	Potential suitable habitat is present on study area within the woodland communities.
Bank Swallow <i>Riparia riparia</i>	Threatened	Threatened schedule 1	Threatened	There is no suitable habitat for this species on the study area and was not recorded during breeding bird surveys.
Barn Swallow <i>Hirundo rustica</i>	Threatened	Threatened schedule 1	Threatened	There is no suitable habitat for this species on the study area and was not recorded during breeding bird surveys.
Eastern Small-footed Myotis <i>Myotis leibii</i>	Endangered	N/A	N/A	Potential suitable habitat is present on study area within the woodland communities.

1-ESA – Endangered Species Act

2-SARA – Species at Risk Act

3-COSEWIC – Committee on the Status of Endangered Wildlife in Canada

4.3 Other Wildlife

Any wildlife species or signs of wildlife (i.e. scat, tracks etc.) observed on the study area during field investigations not considered within the preceding sections of this report were recorded as incidental observations. Signs of Black Bear (*Ursus americanus*), White-tailed Deer (*Odocoileus virginianus*), Red Squirrel (*Sciurus vulgaris*) and Coyote (*Canis latrans*) were noted.

4.4 Significant Wildlife Habitat

Significant Wildlife Habitat designation is the responsibility of the planning authority and determination of it on a site-by-site basis is generally not an appropriate manner in which to determine this function.

The Township of Douro-Dummer Official Plan does not identify Significant Wildlife Habitat. It is possible that the presence of eleven pairs (and numerous pairs of several of those species) of area-sensitive special concern woodland bird species, could constitute significant wildlife habitat for specialised habitats for wildlife (habitat for area-sensitive species). Additionally, the presence of two pairs each of two species of conservation concern (woodland) may also constitute Significant Wildlife Habitat as habitats of species of conservation concern.

4.5 Landscape Connectivity

Landscape connectivity is recognized as an important component of natural heritage planning. A wide range of benefits can be attributed to maintaining connectivity within the natural landscape. Corridors allow organisms to move between areas of high habitat importance. Conservation of distinct habitat types to protect species may be less effective unless the corridors between them are also protected or restored.

From a wildlife perspective, the woodlands within the study area forms part of a larger natural feature corridor comprised of a mosaic of forest and wetland areas which forms part of a terrestrial corridor within the local landscape. This corridor extends beyond the study area to the north, east and west.

5. Summary of Key Natural Heritage Feature Attributes

The findings of the background review and field investigations have been relied upon to confirm whether the study area supports any of the natural heritage components recognized under the PPS, GPPGH, and the regional and municipal Official Plan policies. The Natural Heritage Reference Manual (MNR 2010) were consulted to provide additional technical guidance where required.

The study area is within 120 m of a PSW. Within and adjacent to the unopened road allowance are unevaluated wetlands and an ANSI.

The woodland communities within the study area (FOC4-1 FOM3-2 and FOD5-1) could meet the OMNR criteria for significant woodlands, however they have not been designated as significant by either the

province or the municipality. The woodland communities are in proximity to other KNHF and forms part of a larger woodland greater than 50 ha that extends off the study area limits.

Seasonal field investigations and habitat assessment confirm that there is potential habitat for threatened or endangered within and adjacent to the study area. Should the proposed works have the potential to have an adverse effect to any of the species or habitats identified in **Table 4** as potentially occurring within the study area consultation with the MECP is recommended to ensure compliance with the ESA.

The Planning Authority has not identified Significant Wildlife Habitat within or adjacent to the study area.

6. Proposed Undertaking

The proposed undertaking is comprised of establishing a gravel access road on the unopened municipal road allowance and creating parking/turn around area at the terminus of the access road (**Figure 3**). The intent of the undertaking is to gain access via vehicle to the property at the end of unopened allowance for recreational uses by the landowner. The proposed access road will coincide with an existing ATV trail where present in the study area and will traverse a portion of the Center Dummer Bog and Swamp ANSI and upland woodland. The road allowance is approximately 20 m wide and 800 m in length however the access road is anticipated to only require sufficient width for a single lane (estimated to be approx. 3 m).

7. Impact Assessment and Mitigation Measures

The following section details the anticipated impacts of the proposed undertaking, recommend vegetation protection zones (VPZs) and identify mitigation measures to be utilized to minimize effects of the project.

The proposed creation of a gravel access road on the unopened municipal road allowance is situated in an undeveloped area with KNHF and KHF within and adjacent to the study area. It is recognized that the road allowance is currently used and disturbed by off road vehicles. It is understood that ORCA is supportive of the access road as it will have potential to reduce the impacts to adjacent lands from motorized vehicles.

Given the proposed undertaking and existing natural features and functions potential for negative effects could occur in an unmitigated scenario either during or post establishment of the gravel access road and could include the following:

- Removal of habitat for local wildlife related to loss of woodland communities;
- Changes in hydrological conditions; and
- Erosion and sedimentation impacts.

These are discussed in the following subsections and mitigation recommendations have been included as necessary to reduce or eliminate potential impacts.



Legend

- Study Area
- Ecological Communities
- Wetland (Beacon 2020)
- Provincially Significant Wetlands (PSW) (MNR 2020)
- ANS - Life Science (MNR 2019)
- MAM2-7 + 30 m
- PSW + 30 m
- Estimated Wetland Edge + 30 m
- Proposed Parking/Turnaround

Code	Community Description
Wetland Communities	
MAM2-7	Horseshoe Mineral Meadow Marsh
Forest Communities	
FOC4-1	Fresh - Moist White Cedar Coniferous Forest
FOD5-1	Dry - Fresh Sugar Maple Deciduous Forest
FOM3-2	Dry - Fresh Sugar Maple - Hemlock Mixed Forest
Other Communities	
ANT	Anthropogenic

Proposed Access Road

Figure 3

Eighth Line Dummer DD

BEACON
ENVIRONMENTAL

Project: 220044
Last Revised: August 2021

Client: Frontop
Engineering Limited

Prepared by: BD
Checked by: LW



1:2,700

0

50

100 m

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Orthoreimagery Base Layer: (Google)

Vegetation Protection Zones

As impact avoidance is generally the most effective means of reducing the risk of negative effects on the natural environment, the extent of the undertaking has been minimized and is proposed to be confined to the extent of the unopened road allowance and does not encroach in a 30 m VPZ from the unevaluated wetland communities on and adjacent to the road allowance as well as a 30 m VPZ from the PSW.

Vegetation Removal and Impacts to Adjacent Features and Functions

To accommodate the proposed undertaking some tree and understory removal within a narrow, linear swath of woodland will be required. The area is estimated to be 0.12 ha in an approximate 3 m x 400 m configuration for the road and an approximate 20 m by 30 m area for parking and turnaround area, which occurs primarily within the road allowance (**Figure 3**). A portion of this area coincides with the ANSI. Another 0.12 ha of the proposed access road occurs where an existing ATV trail is located and minimal tree and vegetation removals are anticipated to be required through this portion of the study area.

The study area currently provide habitat for local bird and wildlife communities typical of woodland communities. The removal of these areas are not anticipated to result in a measurable effect on the species that use these areas as the extending communities surrounding the road allowance provides suitable habitat for the locally occurring birds and wildlife species and will persist with the gravel access road.

To address the possibility of hydrological changes the access road is to be constructed of gravel which is permeable and will limit changes in infiltration. The road allowance was reviewed under spring conditions and no standing or flowing water was noted in the alignment for which the road will alter surface flow routes. It is recommended that all materials used to establish the access road be inert materials and proof of origin and quality be provided to ORCA if requested.

To avoid encroachment beyond the limits of the road allowance it is recommended that the alignment be clearly delineated prior to commencing works.

Timing of the tree and vegetation removals will be key in avoiding sensitive life processes of local wildlife. The federal *Migratory Birds Convention Act*, 1994 protects the nests, eggs and young of most bird species from harassment, harm or destruction. Environment Canada considers the "risk period" for breeding birds in southern Ontario to be from the end of March to late August, and so the most cautious approach is to confine approved vegetation and tree removal from September 1 to March 31 to accommodate nesting birds. Bats form maternity roosts and day roosts in treed areas from the early spring to early fall. Bats are protected under the provincial *Fish and Wildlife Conservation Act* and endangered bats are protected provincially under the ESA. To avoid causing harm or harassing bats it is recommended that tree removal occur outside the active bat season of April 1 – September 30.

Sedimentation and Soil Erosion

Activities associated with the removal of vegetation from the road allowance and installation of the gravel access road have the potential to expose soils and transport sediment into the adjacent natural

features. To mitigate it is recommended that an erosion and sediment control (ESC) plan been developed and implemented. Recommended components of the ESC plan include:

- Prior to commencing works, the perimeter of road allowance should be delineated and sediment fencing should be erected to limit the movement of sediment outside the work area;
- Sediment fencing should be checked on a weekly basis and maintained in good condition throughout the duration of construction. Any repairs to the sediment fencing should be completed within 24 hours of being noted;
- Fencing should be removed upon completion of works after exposed soils have been stabilized;
- A spill kit and spill response plan shall be kept on site readily available; and
- Machinery and material staging and storage should be limited to the delineated work area or existing roadway and not occur within the wetlands or their VPZs.

Based on correspondence between the landowner and ORCA it is understood that an ESC plan will be required as part of a submission for a permit under Ontario Regulation 167/06.

8. Policy Conformity

Section 2 of this report provided an overview of the natural heritage policies and regulations of the Provincial Policy Statement, County of Peterborough, Township of Douro-Dummer, ORCA and the *Endangered Species Act*. This section examines conformity with those policies and regulations.

8.1 Provincial Policy Statement

Within the study area natural heritage features identified by the PPS include significant wetlands and Life Science ANSI. The woodland has not been designated as significant by the province or the planning authority.

The Dummer Swamp PSW is considered a component of the natural heritage system. This feature is being protected through the implementation of appropriate VPZ's. No negative impacts are anticipated on the Dummer Swamp PSW.

Tree and vegetation removal within the unopened road allowance from the Dummer Bog and Swamp ANSI will be required to establish the gravel access road. The removal of some trees and vegetation from a narrow linear area within the ANSI is not anticipated to have a negative impact the feature.

A habitat screening assessment has identified the potential for threatened and endangered species and habitat to occur within the study area. Consultation with the MECP is recommended to ensure the undertaking can be completed in compliance with the ESA.

The Planning Authority has not identified Significant Wildlife Habitat within the study area, but field investigations may indicate SWH conditions present (habitat for species of conservation concern and specialised habitat for wildlife [area-sensitive woodland]). These functions will not be negatively impacted by the proposed undertaking.

8.2 Growth Plan for the Greater Golden Horseshoe

The proposed gravel access road is in accordance with the GPGGH as VPZ will be provided to the PSW and unevaluated wetlands which is a sufficient width to protect the features from the proposed undertaking. Consistent with Section 4.2.3 the undertaking is to facilitate recreational uses and measures have been taken to minimize the area and prevent negative impacts to KNHF and KHF.

8.3 County of Peterborough/ Township of Douro-Dummer Official Plan

Key Natural Heritage Features are shown in the OP within and immediately north of the study area. The limits of these features have been determined through this EIS and there will be no negative impacts to these areas. This EIS has recommended appropriate mitigation to ensure no negative impacts on the features or functions of the KNHF and KHF as they occur within and adjacent to the study area.

8.4 Otonabee Region Conservation Authority

The PSW and unevaluated wetlands within and immediately north of the study area are regulated by ORCA. The occurrence of and limits of the unevaluated wetland within the study area were determined in the field by an OWES certified ecologist. The PSW and unevaluated wetlands will be provided VPZs to ensure no adverse impacts from the proposed undertaking. The access road is to be established using gravel to ensure a permeable surface to avoid altering infiltration and avoid hydrological changes to the wetlands. Inert material is recommended to be used for the access road.

As the proposed works are regulated under ORCA and is located within 30 m of unevaluated wetlands (of any size) as well as within 120 m of a PSW, a permit is required under Ontario Regulation 167/06, under the *Conservation Authorities Act*.

8.5 *Endangered Species Act*

A habitat screening assessment has identified the potential for threatened and endangered species and habitat to occur within the study area. Consultation with the MECP is recommended to ensure the undertaking can be completed in compliance with the ESA.

9. Summary

Beacon has conducted a background review and seasonal field investigations in order to prepare this scoped EIS for the proposed establishment of a gravel access road on an unopened road allowance. The proposed gravel access road is in conformance with applicable natural heritage policies as set out in the PPS, GPGGH, County of Peterborough and Township of Douro-Dummer Official Plan. Potential habitat for species protected under the ESA have been identified and consultation with MECP is recommended to ensure compliance with the ESA. Mitigation measures have been recommended to

address any potential negative impacts on the natural heritage features and function, including natural feature protection and VPZs.

ORCA policies and regulations have been addressed and a permit will be required for the gravel access road within the regulated areas.

Report prepared by:
Beacon Environmental



Hayley Brown, B.Sc. (Hons.)
Ecologist

Report reviewed by:
Beacon Environmental



Lindsey Waterworth, B.Sc.
Senior Ecologist

10. References

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- Otonabee Region Conservation Authority. 2006.
Ontario Regulation 167/06.
- Province of Ontario. 2007.
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Appendix A

ORCA Correspondence

January 22, 2021

BEL 220044

Ms. Chait-Hartwig
Temporary CAO/Deputy Clerk
Township of Douro-Dummer
894 South Street
Warsaw, ON K0L 3A0

Mr. Matt Wilkinson
Planner
Otonabee Conservation
250 Milroy Drive
Peterborough, ON K9H 7M9

Re: Terms of Reference for a Scoped Environmental Impact Study– Eighth Line Road, North Dummer, Part of Lot 17, Concession 7, Township of Douro-Dummer

Beacon Environmental Limited (Beacon) is pleased to present you with this Terms of Reference (ToR) for a scoped Environmental Impact Study (EIS) to be prepared in support of a proposed construction of an access road along an unopened municipal road allowance on Eighth Line Road, North Dummer, Part of Lot 17, Concession 7, Township of Douro-Dummer, County of Peterborough (herein referred to as 'study area; **Figure 1**). The study area is approximately 1.5ha (3.7 acres) and is located east of County Road 40 and north of Centre Dummer Road. The study area is designated under the Township of Douro-Dummer Official Plan as Rural within the Centre Dummer Bog and Swamp Life Science Area of Natural and Scientific Interest (ANSI) and the Dummer Swamp Provincially Significant Wetland (PSW) to the north on Schedule A4-2 Land Use and Transportation Dummer Ward. All forms of development and site alteration within 120 m of a PSW require the completion of an environmental study.

A scoped EIS is required due to the proximity to the PSW, ANSI, and potential habitat for threatened or endangered species. A preliminary assessment of the extent of wetland within the unopened road allowance was conducted by Beacon on June 6, 2020. The study area is primarily wooded with an ATV trail through the southern portion. The results of the wetland review were provided to the Otonabee Region Conservation Authority (ORCA) and response was received on August 31, 2020. The response requested a scoped EIS to address the possible hydrological/ecological impacts to the adjacent wetland/natural heritage features and recommend possible mitigation measures.

The following subsections present the proposed ToR to undertake scoped EIS.

Background Review

Available relevant background data will be collected including a review of air photos and mapping in the Township of Douro Dummer Official Plan, occurrence of natural areas from the Ministry of Natural Resources and Forestry (MNRF), review of the MNRF's Natural Heritage Information Centre database, and request for relevant data from ORCA.

Field Investigations

A site survey tasked with characterizing existing vegetation community has been completed on June 6, 2020. During this reconnaissance, vegetation communities were delineated and described using the Ecological Land Classification (ELC) for Southern Ontario (Lee *et al.* 1998). The results of the 2020 site survey will be supplemented by seasonal field investigation in 2021. Beacon will characterize natural heritage features within the study area using a combination of primary and secondary information sources. Proposed field surveys are as follows:

- One site visit during the spring freshet to review extend of water present in the right-of-way;
- Two breeding bird surveys;
- Three breeding amphibian surveys; and
- Detailed flora vegetation inventory, including review for Butternut (*Juglans cinerea*) and American Ginseng (*Panax quinquefolis*).

Site visits will occur between late March and June 2021 during suitable conditions.

Scoped EIS Report

The scoped EIS report will summarize the findings of the background review and field investigations, assess the function of natural heritage features, evaluate impacts of the proposed access road, recommend mitigation and enhancement opportunities, and assess conformity with provincial, municipal, and ORCA policies and regulations. The scoped EIS will be prepared according to the following outline:

Introduction

This section of the report will include introductory remarks regarding the purpose and scope of the study, a general description of the site and the site location, and a brief description of the proposed development.

Policy Review

The report will include a summary of applicable provincial, municipal and conservation authority natural heritage policies and legislation, and their relevance to the property, including the Provincial Policy Statement, Township of Douro-Dummer Official Plan, and ORCA policies and regulations including Otonabee Conservation policies 7.2(10) and (16).

Methodology

This section of the report will include a description of the methods used to characterize the site's natural heritage features and functions. A list of background information sources consulted as well as details of all field work and assessments will be included.

Existing Conditions

The report will provide a detailed description of existing conditions based on the results of the background review and field investigations. We will characterize existing biophysical resources within the study area, using available information from background resources and field work.

Description of Proposed Access Road

This section of the report will provide a description and map of the proposed access road and parking area.

Impact Assessment

An evaluation of potential direct and indirect effects on the natural heritage features and ecological functions on or immediately adjacent to the study area including an impact assessment for the wetland that occur in the vicinity of the road allowance.

Mitigation and Enhancement Recommendations

This section of the report will recommend mitigation measures to prevent, minimize, or offset impacts to natural heritage features from the proposed access road. Mitigation measures may include ESCs and replanting/soil stabilization techniques as applicable to the proposed undertaking.

Policy Conformity

We will review the proposed access road with respect to applicable provincial, municipal and conservation authority policies and regulations, including Otonabee Conservation policies 7.2(10) and (16).

We propose that the approach described above be used to as the ToR for the scoped EIS. Beacon welcomes the opportunity to discuss the proposed ToR and project approach with the Township of Douro-Dummer and ORCA. Should you have any comments or questions, please do not hesitate to contact the undersigned at (705) 243-7251 ext. 403 or lwaterworth@beaconenviro.com.

Prepared by:
Beacon Environmental





Hayley Brown, B.Sc. (Hons.)
Ecologist

Reviewed by:
Beacon Environmental



Lindsey Waterworth, B.Sc.
Senior Ecologist



Site Location		Figure 1
Eighth Line Dummer DD		
		Project: 220044 Last Revised: June 2020
Client:		Prepared by: BD Checked by:
	1:10,800	Inset Map: 1:90,000
Contains information licensed under the Open Government License—Ontario Orthoimagery Baselayer: (Google)		

Appendix B

Plant List

Appendix B

Plant List

Family	Scientific Name	Common Name	COSEWIC	SARO	SRank	Nat Status
Pinaceae	<i>Abies balsamea</i>	Balsam Fir			S5	N
Aceraceae	<i>Acer saccharinum</i>	Silver Maple			S5	N
Aceraceae	<i>Acer saccharum</i>	Sugar Maple			S5	N
Pteridaceae	<i>Adiantum pedatum</i>	Northern Maidenhair Fern			S5	N
Fabaceae	<i>Amphicarpaea bracteata</i>	American Hog-peanut			S5	N
Araliaceae	<i>Aralia nudicaulis</i>	Wild Sarsaparilla			S5	N
Cyperaceae	<i>Carex lacustris</i>	Lake Sedge			S5	N
Cyperaceae	<i>Carex pedunculata</i>	Long-stalked Sedge			S5	N
Cyperaceae	<i>Carex pensylvanica</i>	Pennsylvania Sedge			S5	N
Juglandaceae	<i>Carya cordiformis</i>	Bitternut Hickory			S5	N
Berberidaceae	<i>Caulophyllum thalictroides</i>	Blue Cohosh			S5	N
Apiaceae	<i>Cicuta maculata</i>	Spotted Water-hemlock			S5	N
Onagraceae	<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade			S5	N
Cyperaceae	<i>Dulichium arundinaceum</i>	Three-way Sedge			S5	N
Poaceae	<i>Elymus hystrix</i>	Bottlebrush Grass			S5	N
Orchidaceae	<i>Epipactis helleborine</i>	Broad-leaved Helleborine			SE5	I
Equisetaceae	<i>Equisetum fluviatile</i>	Water Horsetail			S5	N
Equisetaceae	<i>Equisetum hyemale</i>	Common Scouring-rush			S5	N
Oleaceae	<i>Fraxinus americana</i>	White Ash			S4	N
Lamiaceae	<i>Glechoma hederacea</i>	Ground-ivy			SE5	I
Liliaceae	<i>Maianthemum racemosum</i>	Large False Solomon's Seal			S5	N
Betulaceae	<i>Ostrya virginiana</i>	Eastern Hop-hornbeam			S5	N
Oxalidaceae	<i>Oxalis stricta</i>	Upright Yellow Wood-sorrel			S5	N
Salicaceae	<i>Populus tremuloides</i>	Trembling Aspen			S5	N
Rosaceae	<i>Prunus serotina</i>	Black Cherry			S5	N
Fagaceae	<i>Quercus rubra</i>	Northern Red Oak			S5	N
Grossulariaceae	<i>Ribes rubrum</i>	European Red Currant			SE5	I
Rosaceae	<i>Rubus allegheniensis</i>	Allegheny Blackberry			S5	N
Rosaceae	<i>Rubus idaeus</i>	Red Raspberry			S5	N
Rosaceae	<i>Rubus odoratus</i>	Purple-flowering Raspberry			S5	N
Papaveraceae	<i>Sanguinaria canadensis</i>	Bloodroot			S5	N

Family	Scientific Name	Common Name	COSEWIC	SARO	SRank	Nat Status
Asteraceae	<i>Solidago flexicaulis</i>	Zigzag Goldenrod			S5	N
Liliaceae	<i>Streptopus lanceolatus</i>	Rose Twisted-stalk			S5	N
Asteraceae	<i>Symphyotrichum cordifolium</i>	Heart-leaved Aster			S5	N
Taxaceae	<i>Taxus canadensis</i>	Canada Yew			S4	N
Cupressaceae	<i>Thuja occidentalis</i>	Eastern White Cedar			S5	N
Tiliaceae	<i>Tilia americana</i>	Basswood			S5	N
Anacardiaceae	<i>Toxicodendron radicans</i>	Poison Ivy			S5	N
Liliaceae	<i>Trillium erectum</i>	Red Trillium			S5	N
Liliaceae	<i>Trillium grandiflorum</i>	White Trillium			S5	N
Asteraceae	<i>Tussilago farfara</i>	Coltsfoot			SE5	I
Typhaceae	<i>Typha latifolia</i>	Broad-leaved Cattail			S5	N

Appendix C

Breeding Bird List

Appendix C

Common Name	Scientific Name	Status						# Breeding Pairs/ Territories
		National Species at Risk COSEWIC ^a	Species at Risk in Ontario Listing ^a	Provincial breeding season SRANK ^b	TRCA Status ^d	Regional Status	Area- sensitive (OMNR) ^c	
Ruffed Grouse	<i>Bonasa umbellus</i>			S4	L2			2
Mourning Dove	<i>Zenaidura macroura</i>			S5	L5			1
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>			S5	L3			1
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>			S4	L3			1
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>			S5	L3		A	3
Hairy Woodpecker	<i>Picoides villosus</i>			S5	L4		A	1
Northern Flicker	<i>Colaptes auratus</i>			S4	L4			1
Eastern Wood-Pewee	<i>Contopus virens</i>	SC	SC	S4	L4			2
Alder Flycatcher	<i>Empidonax alnorum</i>			S5	L3			1
Eastern Phoebe	<i>Sayornis phoebe</i>			S5	L5			1
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			S4	L4			2
Blue Jay	<i>Cyanocitta cristata</i>			S5	L5			2
Common Raven	<i>Corvus corax</i>			S5	L4			1
Black-capped Chickadee	<i>Poecile atricapillus</i>			S5	L5			2
White-breasted Nuthatch	<i>Sitta carolinensis</i>			S5	L4		A	1
Winter Wren	<i>Troglodytes hiemalis</i>			S5	L3		A	1
Veery	<i>Catharus fuscescens</i>			S4	L3		A	2
Hermit Thrush	<i>Catharus guttatus</i>			S5	L3		A	1
Wood Thrush	<i>Hylocichla mustelina</i>	THR	SC	S4	L3			2
American Robin	<i>Turdus migratorius</i>			S5	L5			1
Gray Catbird	<i>Dumetella carolinensis</i>			S4	L4			1
Red-eyed Vireo	<i>Vireo olivaceus</i>			S5	L4			6
Nashville Warbler	<i>Oreothlypis ruficapilla</i>			S5	L3			1
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>			S5	L3			1
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>			S5	L3		A	2

Common Name	Scientific Name	Status						# Breeding Pairs/ Territories
		National Species at Risk COSEWICa	Species at Risk in Ontario Listing a	Provincial breeding season SRANK b	TRCA Status d	Regional Status	Area-sensitive (OMNR)c	
Black-throated Green Warbler	<i>Setophaga virens</i>			S5	L3		A	1
Black-and-white Warbler	<i>Mniotilta varia</i>			S5	L2		A	1
Ovenbird	<i>Seiurus aurocapillus</i>			S4	L3		A	4
Northern Waterthrush	<i>Parkesia noveboracensis</i>			S5	L3			1
Common Yellowthroat	<i>Geothlypis trichas</i>			S5	L4			1
Scarlet Tanager	<i>Piranga olivacea</i>			S4	L3		A	1
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			S4	L4			2
Indigo Bunting	<i>Passerina cyanea</i>			S4	L4			1
Song Sparrow	<i>Melospiza melodia</i>			S5	L5			2
Swamp Sparrow	<i>Melospiza georgiana</i>			S5	L4			2
White-throated Sparrow	<i>Zonotrichia albicollis</i>			S5	L3			1
Common Grackle	<i>Quiscalus quiscula</i>			S5	L5			1
Purple Finch	<i>Haemorhous purpureus</i>			S4	L4			1

Field Work Conducted On: June 9 & 19, 2021

Number of Species: 38

Number of (provincial and national) Species at Risk: 2 - EWPE and WOTH

Number of S1 to S3 Species: 0

Number of Forest Area-sensitive Species: 11 - YBSA, HAWO, WBNU, WIWR, VEER, HETH, BTBW, BTGW, BAWW, OVEN, SCTA

Number of Grassland Area-sensitive Species: 0

