



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix A

Natural Heritage Report

Natural Heritage Report

P 122 Credit Meadows Park Expansion (Former Harris lands), Schedule B Municipal Class Environmental Assessment

**The Corporation of the City of
Mississauga**

**R.J. Burnside & Associates Limited
292 Speedvale Avenue West Unit 20
Guelph ON N1H 1C4 CANADA**

**December 2020
300043764.0000**

Distribution List

No. of Hard Copies	PDF	Email	Organization Name
0	Yes	Yes	CVC
0	Yes	Yes	City of Mississauga

Record of Revisions

Revision	Date	Description
0	February 27, 2020	Draft Submission to CVC
1	August, 2020	Updated Draft Submission
2	December 2020	Final Submission

R.J. Burnside & Associates Limited**Report Prepared By:**Devin Soeting, C.E.T., CAN-CISEC
Ecologist
DS:sd**Report Reviewed By:**Tricia Radburn, M.Sc.(PI), MCIP, RPP
Senior Environmental Planner
TR:sd

Table of Contents

1.0	Introduction.....	1
1.1	Study Area.....	3
2.0	Planning Context	5
2.1	Provincial Policy Statement	5
2.2	Growth Plan for the Greater Golden Horseshoe	5
2.3	Region of Peel Official Plan	6
2.4	City of Mississauga Official Plan	6
2.5	Zoning	6
2.6	Conservation Authority Regulations.....	7
2.7	Provincial Endangered Species Act, 2007	7
2.8	Federal Species at Risk Act, 2002.....	7
2.9	Migratory Birds Convention Act, 1994.....	8
2.10	Federal Fisheries Act, 1985 (as amended in 2019).....	8
3.0	Records Review	9
3.1	Data Sources.....	9
3.2	Records Review Results.....	9
3.2.1	Topography, Soils and Drainage	10
3.2.2	Areas of Natural and Scientific Interest	12
3.2.3	Environmentally Sensitive Areas	12
3.2.4	Significant Wildlife Habitat.....	12
3.2.5	Vegetation.....	12
3.2.6	Fish and Wildlife Species and Habitats	2
4.0	Field Investigations	5
4.1	Field Investigation Methodology.....	5
4.2	Results of Field Investigations	9
4.2.1	Vegetation Communities	9
4.2.2	Breeding Bird Community	16
4.2.3	Incidental Wildlife Observations	17
4.2.4	Aquatic Habitat Characterization	19
5.0	Natural Heritage Features and Systems.....	23
5.1	Methodology for Assessing Feature Significance.....	23
5.2	Significant Wetlands	24
5.3	Significant Woodlands	24
5.4	Significant Valleylands.....	28
5.5	Significant Areas of Natural and Scientific Interest.....	28
5.6	Significant Wildlife Habitat	28
5.6.1	Presence of SWH According to Provincial Criteria	28
5.6.2	Presence of SWH According to Local Criteria	33
5.7	Habitat of Endangered and Threatened Species	34
5.8	Fish Habitat	35
5.9	City of Mississauga Natural Areas	35

5.10 Environmentally-sensitive or Significant Areas.....	35
6.0 Summary of Natural Features Present	36
7.0 References	38

Tables

Table 3.1: Rare Plant Species Recorded Through Historic Inventories.....	1
Table 3.2: Locally and Regionally Rare Plant Species Recorded by CVC	2
Table 3.3: Wildlife Recorded in the Study Area and its Vicinity	3
Table 4.1: Field Study Methodology	7
Table 4.2: ELC Vegetation Communities	10
Table 4.3: Incidental Wildlife Observations in the Study Area	17
Table 5.1: Methodology for Assessing Feature Significance.....	23
Table 5.2: Confirmed and Candidate Habitats of Endangered and Threatened Species	34

Figures

Figure 1.1: Site Location.....	2
Figure 1.2: Study Area.....	4
Figure 3.1: Soils and Topography.....	11
Figure 3.2: Significant Wildlife Habitat	1
Figure 4.1: Breeding Bird Survey Locations.....	6
Figure 4.2: Ecological Land Classification	15
Figure 4.3: Aquatic Habitat	20
Figure 5.1: Significant Woodlands	27
Figure 5.2: Significant Wildlife Habitat and Habitat of Endangered and Threatened Species	32

Appendices

Appendix A Agency Correspondence
Appendix B Background Records
Appendix C Breeding Bird Survey Data
Appendix D Significant Wildlife Habitat Screening
Appendix E Endangered and Threatened Species Habitat Screening

Natural Heritage Report
December 2020

Disclaimer

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.

In the preparation of the various instruments of service contained herein, R.J. Burnside & Associates Limited was required to use and rely upon various sources of information (including but not limited to: reports, data, drawings, observations) produced by parties other than R.J. Burnside & Associates Limited. For its part R.J. Burnside & Associates Limited has proceeded based on the belief that the third party/parties in question produced this documentation using accepted industry standards and best practices and that all information was therefore accurate, correct and free of errors at the time of consultation. As such, the comments, recommendations and materials presented in this instrument of service reflect our best judgment in light of the information available at the time of preparation. R.J. Burnside & Associates Limited, its employees, affiliates and subcontractors accept no liability for inaccuracies or errors in the instruments of service provided to the client, arising from deficiencies in the aforementioned third-party materials and documents.

R.J. Burnside & Associates Limited makes no warranties, either express or implied, of merchantability and fitness of the documents and other instruments of service for any purpose other than that specified by the contract.

1.0 Introduction

R.J. Burnside & Associates Limited (Burnside) has been retained by the City of Mississauga (City) to prepare a Schedule B Municipal Class Environmental Assessment (MCEA) for the development of pedestrian bridges and connecting trails on the former Harris Lands, located at southeast corner of Highway 401 and Creditview Road, as shown on Figure 1.1. These lands have recently been consolidated and are now part of Park 122, Credit Meadows which lies to the south. The proposed development represents Phase 1 development for the park and will include new site access and parking, servicing, a trail system and pedestrian bridge crossings. These elements will create an important trail linkage connecting public spaces along the Credit River.

The purpose of the MCEA is to consider several development options including routing alternatives for the trail and pedestrian bridges through the Study Area. An option to do nothing and not construct the trail and bridges is also being considered. If a decision is made to proceed, construction of Phase 1 may occur in 2022.

As part of the MCEA, this Natural Heritage Report (NHR) has been prepared to assess existing ecology and anticipate potential impacts from proposed works.

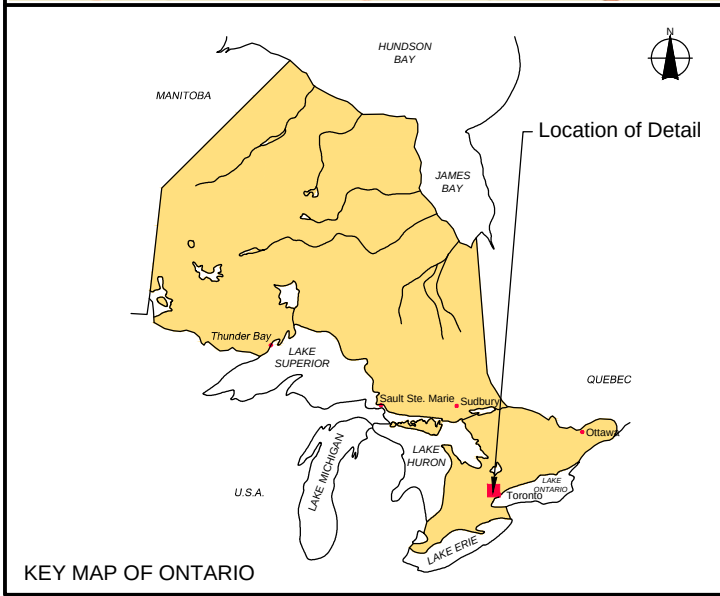
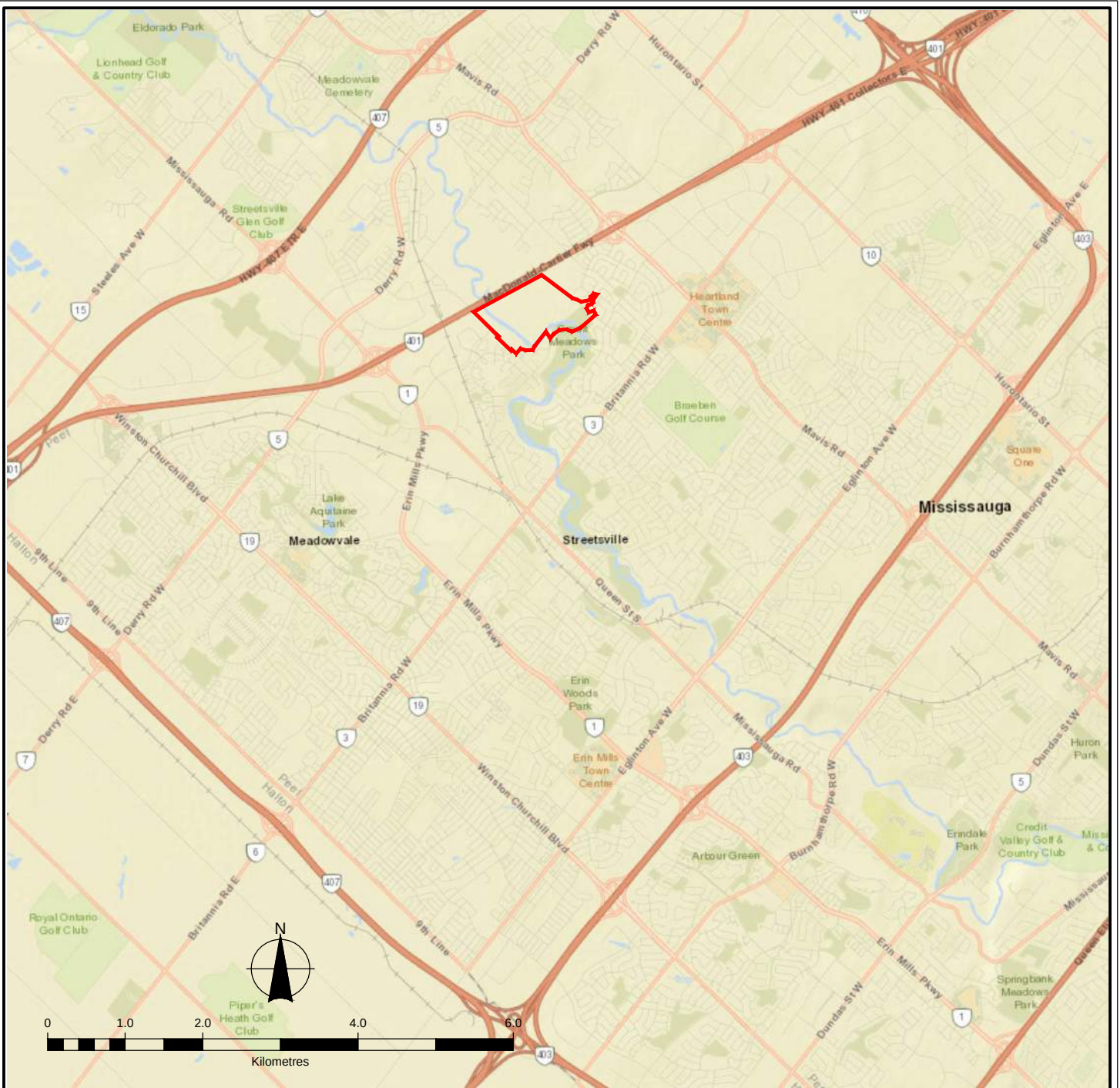
This draft document has been developed for preliminary consultation purposes and is intended to document existing natural features in the Study Area. As such, the report includes:

- A review of applicable environmental policies and regulations affecting the Study Area;
- A review of existing secondary source data to identify any known natural features;
- A summary of field studies completed;
- An analysis of the data collected to determine the significance and sensitivity of any natural features;
- A description of the Alternative Solutions being reviewed; and
- Proposed natural heritage criteria to be used to evaluate the alternatives.

As the project progresses, this report will be updated to include:

- The evaluation of alternatives;
- An assessment of potential impacts resulting from the proposed development; and
- Recommended mitigating measures that will allow development to proceed in a manner that is consistent with local, regional, provincial and federal policies and regulations.

It is noted that the MCEA represents a high-level planning process. The purpose of this study is to support the evaluation of routing alternatives. Detailed design and permitting will be carried out upon completion of the MCEA. Additional fieldwork, studies and permitting will be identified in this report, as required, to further assess impacts to natural features.



			
Client THE CORPORATION OF THE CITY OF MISSISSAUGA			
Figure Title NATURAL HERITAGE REPORT P-122 CREDIT MEADOWS PARK EXPANSION (FORMER HARRIS LANDS), SCHEDULE B MUNICIPAL CLASS EA SITE LOCATION			
Drawn HN	Checked TR	Date 20/08/07	Figure No. 1.1
Scale 1:75,000		Project No. 30043764	

1.1 Study Area

The Study Area, shown on Figure 1.2, is an undeveloped park land property that had been previously used for agricultural purposes. The property is located on the east side of Creditview Road, south of Highway 401, and includes several existing structures as well as a reach of Fletcher's Creek and the Credit River.

The Study Area is broadly bound by:

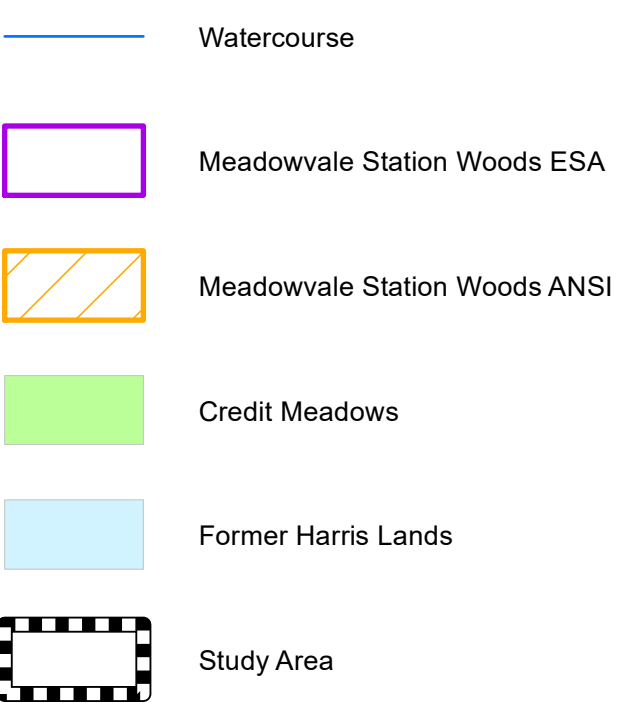
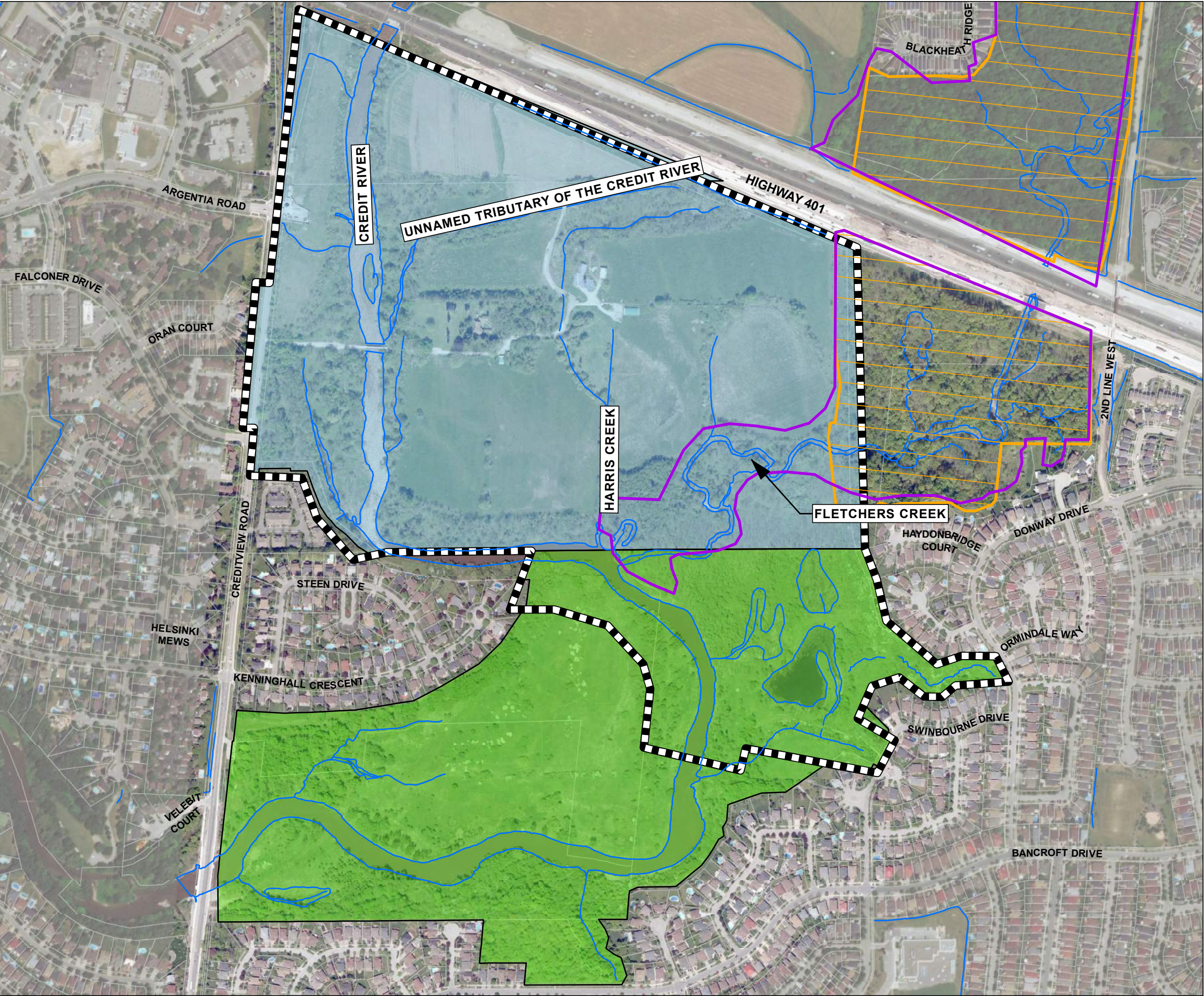
- Creditview Road to the west;
- Highway 401 to the north;
- A natural area and residential neighbourhood to the east; and
- The existing Credit Meadows Park to the south, which includes a variety of open space and natural areas.

Lands within the Study Area include a mix of woodland, wetland, shrub, open meadow, former agricultural areas, floodplain, and the banks and waters of the Credit River, Fletcher's Creek, as well as several other small watercourses.

An old farmhouse and several farm-related buildings are present. An embankment is present along the eastern side of the property where a rail line was once existing. No rail infrastructure remains. Portions of the property and several buildings are currently used by the City for parks-related storage and work areas. The property can be accessed from an entrance off Creditview Road. A small road network is present, including an existing bridge across the Credit River, allowing access to the farmhouse and other buildings on the site.

At the time of this report, the Region of Peel is replacing and expanding sanitary sewer lines in easements that bisect the park in a north-south direction and east-west to the Creditview Road and Argentia Road intersection where a large work area is present.

The Study Area is located entirely within the Credit River watershed and lands regulated by the Credit Valley Conservation Authority (CVC) through O.Reg. 160/06. The Study Area contains an Environmentally Significant Area and a portion of a regional Life Science Area of Natural or Scientific Interest (ANSI) as well as terrestrial and aquatic Species at Risk (SAR). Waters and shoreline areas associated with the Credit River and Fletcher's Creek have also been identified as important habitat for various species of sportfish including migratory salmonids.



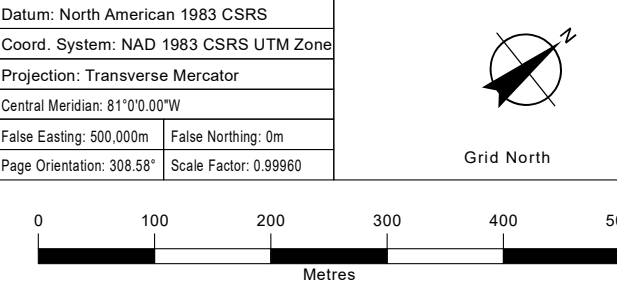
Sources:

1. Ministry of Natural Resources and Forestry, © Queen's Printer for Ontario.
2. Natural Resources Canada © Her Majesty the Queen in Right of Canada.
3. City of Mississauga.

Disclaimer:

R.J. Burnside & Associates Limited and the above mentioned sources and agencies are not responsible for the accuracy of the spatial, temporal, or other aspects of the data represented on this map. It is recommended that users confirm the accuracy of the information represented.

This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions



Client

CITY OF MISSISSAUGA

Figure Title **NATURAL HERITAGE REPORT
P-122 CREDIT MEADOWS PARK
EXPANSION (FORMER HARRIS LANDS),
SCHEDULE B MUNICIPAL CLASS EA
STUDY AREA**

Drawn	Checked	Date	Figure No. 1.2
HN	TR	2020/08/06	
Scale		Project No. 300043764	
H 1:6,500			

2.0 Planning Context

2.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) (MMAH, 2020) provides general policies on land use patterns, resources, and public health and safety that guide development across Ontario. This report will address Section 2.1 (Natural Heritage).

Eight types of natural heritage features are identified in Section 2.1 of the PPS. In summary, development and site alteration are not permitted within:

- Significant wetlands in Ecoregions 5E, 6E and 7E; and
- Significant coastal wetlands.

In addition, development and site alteration are not permitted within, or adjacent to, the following features unless it can be demonstrated that there will be no negative impacts to the feature or its ecological functions:

- Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
- Significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- Significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- Significant Wildlife Habitat (SWH);
- Significant Areas of Natural and Scientific Interest (ANSI); and
- Coastal wetlands in Ecoregions 5E, 6E and 7E.

In addition, development and site alteration on, and adjacent to, fish habitat and the habitat of endangered and threatened species will only be permitted in accordance with provincial and federal regulatory requirements.

The presence or potential presence of some of these features has been identified on, and in the vicinity of, the Study Area.

2.2 Growth Plan for the Greater Golden Horseshoe

The Growth Plan (2019) provides a framework for growth in the Greater Golden Horseshoe (GGH) region. The Plan provides guidance on how and where to grow, how to make efficient use of infrastructure and how to build public transit-friendly communities. The Plan also includes policies on protecting natural and water resources, consistent with the policies under other provincial plans.

Within Settlement Areas, the Growth Plan defers to the PPS for matters related to natural heritage.

2.3 Region of Peel Official Plan

Most of the Study Area is identified as a Core Area within the Region's Greenlands System and contains a River Valley Connection that is described as a selected area of provincial interest. The Core Area designation indicates that the Study Area contains "ecological features, forms and/or functions that provide favourable conditions for uninterrupted natural systems and maximum biodiversity". The Official Plan (OP) prohibits development and site alteration within Core Areas with some exceptions. With respect to the proposed park development, key exemptions include passive recreation, use and expansion of existing buildings and infrastructure authorized under and EA process.

2.4 City of Mississauga Official Plan

The Study Area is identified as being within the City's Green System as shown in Schedule 1a of the OP. The Green System consists of the Natural Heritage System, the Urban Forest, Natural Hazard Lands, and Parks and Open Spaces, and identifies valuable natural environmental lands within the City.

With regard to the Study Area specifically, Schedule 3 – Natural System identifies the woodland areas along the Credit River and Fletcher's Creek and a Significant Natural Area and Natural Green Space. Smaller treed areas and hedgerows around the farmhouse and between old farm fields also have this designation. The Study Area is also identified as a Public Open Space, according to Schedule 4 of the OP.

The Study Area is also classified as Natural Hazard lands within the Greenlands land use designation, as shown in Schedule 10 of the City's OP.

These designations indicate that the lands within the Study Area are considered to serve to support and connect the Natural Heritage System within the City.

Relatively small parcels of Residential - Low Density 1 and Business Employment land use designations were also identified along Creditview Road, in the north-western portion of the Study Area.

2.5 Zoning

The Study Area is currently zoned under a combination of both the current and previous zoning By-law, By-law 0225-2007 and By-law 5500, respectively. The lands located north of the former Harris lands are zoned under by-law 0225-2007 and contain lands zoned as RR – residential, A – agricultural, and G – greenbelt. The City is currently rezoning the former Harris lands to facilitate Phase 1 of the park development. The lands south of the former Harris lands are all identified as G1 – greenlands.

2.6 Conservation Authority Regulations

The CVC regulates development in or around hazard lands (i.e., floodplains, slopes, wetlands) through O.Reg. 160/06.

The Authority *“may grant permission for development in [regulated areas] if, in its opinion, the control of flooding, erosion... or the conservation of land will not be affected by the proposed development.”* (Section 3(1)).

The entire Study Area is regulated by the CVC with much of the Study Area located within the Credit River and Fletcher’s Creek floodplains.

2.7 Provincial Endangered Species Act, 2007

The *Endangered Species Act* 2007 (ESA) provides protection for SAR and their habitat. The ESA, 2007 helps protect the individual species (Section 9) as well as their habitat (Section 10).

Section 9(1)(a) of the ESA states,

“No person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as extirpated, endangered or threatened.”

Section 10(1)(a) of the ESA states,

“No person shall damage or destroy the habitat of a species that is listed on the Species at Risk in Ontario List as an endangered or threatened species.”

There is potential for SAR to be present within the Study Area including known regulated habitat for Redside dace (*Clinostomus elongatus*) and American eel (*Anguilla rostrata*), provincially endangered fish species.

2.8 Federal Species at Risk Act, 2002

The *Species at Risk Act* 2002 (SARA) provides protection for SAR. The SARA, 2002 affords protection to the individual wildlife species that are extirpated, endangered, or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened. Section 32 (1) of the SARA states,

“No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.”

There is potential for SAR to be present within the Study Area including known regulated habitat for Redside Dace (*Clinostomus elongatus*), a federally endangered species of fish.

2.9 Migratory Birds Convention Act, 1994

The *Migratory Birds Convention Act, 1994* (MBCA) and the *Migratory Bird Regulations* (MBR) are federal legislative requirements that are binding on members of the public and all levels of government, including federal and provincial governments. The legislation protects certain species¹, controls the harvest of others, and prohibits commercial sale of all species.

One key responsibility under the MBCA is described in Section 6 of the associated MBR:

“Subject to subsection 5(9), no person shall

- Disturb, destroy or take a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird, or*
- Have in his possession a live migratory bird, or a carcass, skin, nest, or egg of a migratory bird except under authority of a permit therefor.”*

It is anticipated that migratory birds are present on the Site.

2.10 Federal Fisheries Act, 1985 (as amended in 2019)

The Federal *Fisheries Act* was amended in June, 2019 and is administered by Fisheries and Oceans Canada (DFO). The Act provides protection for fish and fish habitat across Canada. Activities that have the potential to impact fish or fish habitat must be completed and operated in compliance with the Federal *Fisheries Act*. If the “*death of a fish by means other than fishing*”, or the “*harmful alteration, disruption or destruction of fish habitat*” is likely to occur as a result of the activity, the proponent responsible for the activity is required to obtain an *Authorization* from the DFO as per Paragraph 34.4(2) and 35(2)(b) of the *Fisheries Act*.

Fish habitat has been identified within the Study Area in association with the Credit River and Fletcher’s Creek.

¹ Bird species not regulated under the Act include: Rock Dove, American Crow, Brown-headed Cowbird, Common Grackle, House Sparrow, Red-winged Blackbird, and European Starling. In addition, raptors are not regulated under the MBCA. However, they are protected under provincial legislation which restricts and regulates the taking or possession of eggs and nests. Furthermore, if the species identified is protected under Ontario’s *Endangered Species Act, 2007* additional restrictions may apply.

3.0 Records Review

3.1 Data Sources

A comprehensive desktop assessment was completed to compile and review existing natural heritage information available for the Study Area. All areas within 120 m of the Study Area were reviewed as part of the high-level assessment in order to identify significant natural heritage features located within or directly adjacent to the subject lands that may be impacted by the proposed works. Information acquired through this screening process was used to help guide field efforts and evaluate the significance of on-site observations. Information was reviewed from the following sources:

- Aerial photographic imaging and 1:10,000 Ontario Base Mapping (OBM);
- Ontario Hydrology Network (OHN) mapping;
- Ministry of Natural Resources and Forestry (MNRF) Aquatic Resource Area mapping (2015);
- MNRF Natural Heritage Information Centre (NHIC) database for significant species and designated natural features within 120 m of the Study Area;
- Ontario Breeding Bird Atlas (OBBA) database for avian species records within the area;
- Ontario Reptile and Amphibian Atlas (ORAA) database for herpetofaunal species records within the area;
- MNRF Land Information Ontario (LIO) database;
- CVC regulated features, mapping and information;
- Credit River Fisheries Management Plan (2002);
- Ministry of Agriculture, Food, and Rural Affairs Mapping (2017);
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk mapping (2018);
- Mississauga Natural Areas Inventory (NAI) Area #3709, #3728, Meadowvale Station Woods Summary;
- Mississauga Natural Areas Survey (NAS) Fact Sheet CRR2;
- Mississauga Arboretum and Memorial Forest Master Plan Report (MBTW, 2018); and,
- Species records provided by CVC.

The MNRF, Ministry of Environment, Conservation and Parks (MECP) and CVC were also contacted for records of rare species and SWH in the Study Area. Correspondence is provided in Appendix A.

3.2 Records Review Results

Through the background data review, multiple natural heritage records were identified on, and in the vicinity of, the Study Area. A summary of findings is presented below.

3.2.1 Topography, Soils and Drainage

The Study Area includes portions of the Credit River and Fletcher's Creek. Two smaller watercourses are also present. One, locally referred to as "Harris Creek"² flows through the centre of the Study Area and discharges to the Credit River. The second is an unnamed tributary which flows through a wetland in the northern portion of the Study Area and enters the Credit River near the existing bridge.

Topography is relatively flat to gently sloping with the exception of the relatively steep embankments along the watercourses and the historic rail line located along the eastern edge of the Study Area. The relatively steep watercourse embankments are attributed to high flows, likely experienced during the seasonal ice-out and spring freshet conditions as well as significant storm events.

The Site is characterized by soils that are heavy textured till, formed by shale and limestone sediments of the Chinguacousy Series. These soils are described as imperfectly drained comprised of silt loam with silt loam over clay parent material. Drainage is variable, and soils are generally stone free (Hoffman and Richards, 1953). The soils adjacent to the watercourses are similar to those throughout the site and are identified as consisting of soils of the Oneida Series, characterized by clay loam, with few stones. Soil characteristics and topography are shown on Figure 3.1.

² This unofficial name is used throughout this report for clarity when distinguishing between this creek and the other unnamed tributary.



LEGEND:

- SOILS:**
-  SANDY LOAM
 -  CLAY LOAM
 -  EXISTING CONTOUR
 -  STAKED TOP OF BANK (OCT, 2019)
 -  STAKED TOP OF BANK (JULY, 2011)
 -  STUDY AREA



Client			
THE CORPORATION OF THE CITY OF MISSISSAUGA			
Figure Title			
NATURAL HERITAGE REPORT P-122 CREDIT MEADOWS PARK EXPANSION (FORMER HARRIS LANDS), SCHEDULE B MUNICIPAL CLASS EA TOPOGRAPHY & SOILS			
Drawn	Checked	Date	Figure No. 3.1
HN	NP	20/08/07	
Scale	Project No.		
H 1:5000	30043764		

3.2.2 Areas of Natural and Scientific Interest

The Meadowvale Station Woods Life Science Area of Natural and Scientific Interest (ANSI) is located along the northeastern boundary of the property, as shown on Figure 1.2. A small portion of the ANSI is present on the site and is of regional significance.

3.2.3 Environmentally Sensitive Areas

A portion of the site is identified as the Meadowvale Station Woods ESA. The ESA boundaries are similar to the ANSI and also include lands along Fletcher's Creek, as shown in Figure 1.2.

3.2.4 Significant Wildlife Habitat

The CVC has provided mapping that identifies Significant Wildlife Habitat (SWH) within the Study Area. CVC SWH mapping for the project area includes the following:

- Confirmed Rare Vegetation Communities (FOD4-7), which is an S2S3 species and meets ecoregion 7E criteria in addition to the Peel-Caledon B1 criteria for other rare vegetation communities;
- Confirmed Deer Wintering Congregation Areas have been mapped throughout the project area in consultation with MNRF. The woodlands in the project area are confirmed deer wintering SWH under ecoregion 7E criteria;
- Confirmed Highly Diverse Areas – the communities within the project area meet Peel-Caledon criteria B5;
- Seeps and Springs – CVC has confirmed locations of seeps and springs in the project area that meet ecoregion 7E criteria; and
- Confirmed Terrestrial Crayfish – CVC has confirmed mapping for terrestrial crayfish that meets ecoregion 7E criteria.

Mapping for the above features, as provided by CVC is illustrated on Figure 3.2.

3.2.5 Vegetation

The Study Area is located within the City's Natural Areas Inventory area #3709 and 3728. City staff have not surveyed the area; however, data has been compiled from a variety of sources. Consultants completed vegetation surveys as part of the Mississauga Natural Areas Survey between 1996 and 2003.

A total of 254 vascular plants were recorded in the area, of which 160 (63%) are native. Ten regionally rare species were observed (Kaiser, 2001), as listed in Table 3.1. Spring ephemeral species, including May apple (*Podophyllum peltatum*), Claytonia spring beauty (*Claytonia virginica*) and Bloodroot (*Sanguinaria canadensis*) are abundant. Historic records indicate that the nationally and provincially Endangered Butternut (*Juglans cinerea*) is present.

Table 3.1: Rare Plant Species Recorded Through Historic Inventories

Scientific Name	Common Name	S-Rank
<i>Carex grayi</i>	Asa gray sedge	S4
<i>Collinsonia canadensis</i>	Canada horse balm	S4
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5
<i>Lysimachia terrestris</i>	Swamp Loosestrife	S5
<i>Physocarpus opulifolius</i>	Eastern Ninebark	S5
<i>Platanus occidentalis</i>	Sycamore	S4
<i>Polygonum punctatum</i>	Dotted Smartweed	S5
<i>Quercus bicolor</i>	Swamp White Oak	S4
<i>Salix nigra</i>	Black Willow	S4?
<i>Symphyotrichum pilosum</i> var. <i>pilosum</i>	White Heath Aster variety	S5

The CVC also provided a list of species recorded in the Study Area and its vicinity. The CVC species list identified records of 163 plant species. Butternut, an Endangered species was listed. In addition, several locally and regionally rare species were identified. Local and regional rarity were identified according to a number of sources and rarity ranking systems.

CVC has developed a species ranking system to denote the relative rarity of species in the watershed. Under this system, a ranking of 1 refers to a Species of Conservation Concern, a ranking of 2 refers to a Species of Interest and a ranking of 3 refers to a Species of Urban Interest.

In addition to these rankings, the CVC species list also shows rarity rankings from two different sources of plant inventories: *The Vascular Plant Flora of the Region of Peel and the Credit River Watershed* (Kaiser 2001) and *Distribution and Status of the Vascular Plants of the Greater Toronto Area* (Varga et al., 2000). Kaiser (2001) has both local and regional rarity rankings.

The number of plants identified under each ranking system are summarized in Table 3.2. A full list of species recorded by CVC is provided in Appendix A.

Table 3.2: Locally and Regionally Rare Plant Species Recorded by CVC

Ranking System/Rarity	Number of Species
Endangered or Threatened Species	1
Species with CVC Watershed Rank 1-3	46
Locally Rare Species (Kaiser, 2001)	16
Regionally Rare Species (Kaiser, 2001)	9
Locally Rare Species (Varga <i>et. al.</i> , 2000)	26

3.2.6 Fish and Wildlife Species and Habitats

The Study Area provides several significant habitat features, including woodlands which provide interior forest habitat and linkages along the Credit River and Fletcher's Creek corridors. Vernal pools, supporting amphibian species are known to be present. Colonial nesting birds, waterfowl and raptors are also present. The area supports bullfrogs and may provide turtle nesting. Terrestrial crayfish have also been identified (NAI, 2012).

The Credit River, and to a lesser degree Fletcher's Creek, are well-known and productive sportfish fisheries, providing habitat to several sought-after sportfish species including brown and rainbow trout, Pacific salmon, as well as smallmouth bass. These, as well as other sportfish species, are managed within the Study Area as per the Credit River Fisheries Management Plan. According to the Credit River Fisheries Management Plan, the length of the Credit River within the Study Area is classified as providing habitat to a mixed cool/warmwater fish community and is to be managed as a warmwater fishery. While the length of Fletcher's Creek within the Study Area is classified as providing habitat to a mixed cool/warmwater fish community and is to be managed as a mixed cool/coldwater fishery.

Records of birds, mammals, reptiles, amphibians, insects, fish and other wildlife were reviewed. Several Endangered and Threatened species are known to be present and a wide variety of other provincially and locally rare species have been recorded, as summarized in Table 3.3. This table identifies species according to their provincial status and by the CVC's watershed rarity ranking system, described previously in Section 3.2.5. A copy of each of the records reviewed is provided in Appendix A.

Although not identified in any records or databases, there are four bat species in Ontario which are listed as Endangered due to an emergent pathogenic fungus affecting bat populations across North America. The distribution of these species (Eastern Small footed Myotis – *Myotis leibii*; Little Brown Myotis – *Myotis lucifugus*; Northern Myotis – *Myotis septentrionalis*; Tri-colored Bat – *Perimyotis subflavus*) is generally poorly understood. Based on aerial photo interpretation, it appears as though the wooded areas within the Study Area may provide suitable roosting habitat for these species.

Table 3.3: Wildlife Recorded in the Study Area and its Vicinity

Designations/ Rarity Rankings	Birds	Mammals	Reptiles and Amphibians	Insects and Arthropods	Fish
Total Number of Species Recorded	84 (OBBA ³) 71 (NAI ⁴) 66 (CVC ⁵)	11(NAI) 6(CVC)	25 (ORAA ⁶) 12(NAI)	21 (CVC)	24 (NAI) 28(CVC)
Endangered and Threatened Species	- Barn Swallow – <i>Hirundo rustica</i>; - Bank Swallow – <i>Riparia riparia</i>; - Bobolink – <i>Dolichonyx oryzivorus</i>; - Chimney Swift – <i>Chaetura pelagica</i>; and - Eastern Meadowlark – <i>Sturnella magna</i>.	None	- Blanding’s Turtle – <i>Emydoidea blandingii</i>; and - Jefferson Salamander – <i>Ambystoma jeffersonianum</i>.	None	- American eel; and - Redside dace, <i>Clinostomus elongatus</i>.
Species of Conservation Concern (Special Concern and Species with S-Rank 1-3 ⁷ and federally listed species)	- Purple Martin – <i>Progne subis</i>; - Common Nighthawk – <i>Chordeiles minor</i>; - Eastern Wood-pewee – <i>Contopus virens</i>; - Wood Thrush - <i>Hylocichla mustelina</i>; and - Peregrine Falcon – <i>Falco peregrinus</i>	None	- Snapping Turtle – <i>Chelydra serpentine</i>; - Northern Map Turtle – <i>Graptemys geographica</i>; - Eastern Ribbonsnake – <i>Thamnophis sauritus</i>; and - Western Chorus Frog	Monarch, <i>Danaus plexippus</i>	None
Species with CVC Watershed Rank 1-3	- Cooper's Hawk, <i>Accipiter cooperii</i>; - Sharp-shinned Hawk, <i>Accipiter striatus</i>; - Wood Duck, <i>Aix sponsa</i>; - Ruby-throated Hummingbird, <i>Archilochus colubris</i>; - Great Blue Heron, <i>Ardea Herodias</i>; - Cedar Waxwing, <i>Bombycilla cedrorum</i>; - Great Horned Owl, <i>Bubo virginianus</i>; - Green Heron, <i>Butorides virescens</i>; - Turkey Vulture, <i>Cathartes aura</i>; - Brown Creeper, <i>Certhia americana</i>; - Killdeer, <i>Charadrius vociferous</i>; - Northern Harrier, <i>Circus hudsonius</i>; - Northern Flicker, <i>Colaptes auratus</i>; - Eastern Wood-pewee, <i>Contopus virens</i>; - Pileated Woodpecker, <i>Dryocopus pileatus</i>;	- American Mink, <i>Neovison vison</i>; - Coyote – <i>Canis latrans</i>; - Beaver – <i>Castor canadensis</i>; and, - White-tailed Deer – <i>Odocoileus virginianus</i>.	- Jefferson Salamander; - Snapping Turtle; - Spotted Salamander – <i>Ambystoma maculatum</i>; - Wood Frog – <i>Lithobates sylvaticus</i>; - Dekay’s Brownsnake – <i>Storeria dekayi</i>); - American Toad – <i>Anaxyrus americanus</i>; - Gray Treefrog – <i>Hyla versicolor</i>; - Green Frog – <i>Lithobates clamitans</i>; and - Eastern Red-backed Salamander – <i>Plethodon cinereus</i>).	None	None

³ Ontario Breeding Bird Atlas
⁴ Natural Areas Inventory Summary for Meadowvale Station Woods Areas #3709, 3728
⁵ Species List provided by CVC
⁶ Ontario Reptile and Amphibian Atlas
⁷ Rarity based on NatureServe rankings for provincial/state rarity (SRank).

Designations/ Rarity Rankings	Birds	Mammals	Reptiles and Amphibians	Insects and Arthropods	Fish
	• Gray Catbird, <i>Dumetella carolinensis</i>; • Mourning Warbler, <i>Geothlypis Philadelphia</i>; • Barn Swallow, <i>Hirundo rustica</i>; • Wood Thrush, <i>Hylocichla mustelina</i>; • Baltimore Oriole, <i>Icterus galbula</i>; • Dark-eyed Junco, <i>Junco hyemalis</i>; • Ring-billed Gull, <i>Larus delawarensis</i>; • Belted Kingfisher, <i>Megaceryle alcyon</i>; • Red-bellied Woodpecker, <i>Melanerpes carolinus</i>; • Common Merganser, <i>Mergus merganser</i>; • Black-and-white Warbler, <i>Mniotilta varia</i>; • Great Crested Flycatcher, <i>Myiarchus crinitus</i>; • Tennessee Warbler, <i>Oreothlypis peregrina</i>; • Indigo Bunting, <i>Passerina cyanea</i>; • Cliff Swallow, <i>Petrochelidon pyrrhonota</i>; • Rose-breasted Grosbeak, <i>Pheucticus ludovicianus</i>; • Hairy Woodpecker, <i>Picoides villosus</i>; • Scarlet Tanager, <i>Piranga olivacea</i>; • Eastern Phoebe, <i>Sayornis phoebe</i>; • Ovenbird, <i>Seiurus aurocapilla</i>; • American Redstart, <i>Setophaga ruticilla</i>; • Black-throated Green Warbler, <i>Setophaga virens</i>; • White-breasted Nuthatch, <i>Sitta carolinensis</i>; • Tree Swallow, <i>Tachycineta bicolor</i>; and • Eastern Kingbird, <i>Tyrannus tyrannus</i>.				

4.0 Field Investigations

4.1 Field Investigation Methodology

Field investigations were conducted in the summer and fall of 2019. The purpose of field investigations was to verify whether the features identified in the desktop assessment are present and, if so, to confirm their boundaries. The purpose was also to identify any other natural features not previously documented.

Field investigations were conducted on the dates and times and using the methodologies indicated in Table 4.1.

The location of each bird survey station is shown on Figure 4.1. For the bird surveys, various meadow, riparian, woodland and hedgerow habitat units were identified. Survey stations were located to ensure coverage of each habitat unit. Breeding bird surveys were conducted three times at each station location in meadow, woodland, riparian and hedgerow habitats. Grassland areas were surveyed at stations with a fixed radius of 200 m, in accordance with the *Survey Protocol for Eastern Meadowlark in Ontario* (MNR, 2013). Transects were not required based on the small size of the suitable survey area. Each point count location was chosen based on good visibility of the surrounding fields/open areas.

All field data was collected using a mobile data collection application (Fulcrum) on an iOS device.



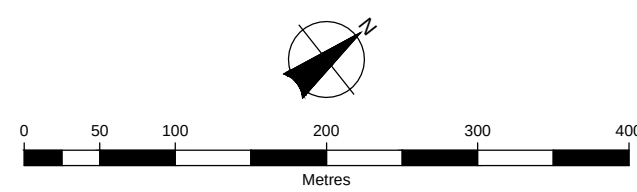
LEGEND:

 EAME/BOBO = EASTERN MEADOWLARK/ BOBOLINK POINT COUNT STATION

 BREEDING BIRD HABITAT UNIT

 STUDY AREA

BREEDING BIRD HABITAT UNIT DESCRIPTIONS:
H1, H2 = HEDGEROW
M1 – M12 = CULTIVATED MEADOW/THICKET
R1 = RESIDENTIAL
RIP1, RIP2, RIP3 = RIPARIAN HABITAT
W1, W2, W3, W4, W5 = WOODLOTS



Client
THE CORPORATION OF THE CITY OF MISSISSAUGA

Figure Title
**NATURAL HERITAGE REPORT
P-122 CREDIT MEADOWS PARK EXPANSION
(FORMER HARRIS LANDS), SCHEDULE B
MUNICIPAL CLASS EA
BREEDING BIRD HABITAT UNITS/EASTERN
MEADOWLARK AND BOBOLINK SURVEYS**

Drawn HN	Checked NP	Date 20/08/07	Figure No. 4.1
Scale H 1:5000		Project No. 30043764	

Table 4.1: Field Study Methodology

Field Study	Methodology	Staff Involved	Date(s)	Time of Day	Weather Conditions		
					Precipitation / Cloud Cover	Temperature (°C)	Wind (Beaufort Wind Scale) ¹
Ecological Land Classification	Ecological Land Classification for Southern Ontario (Lee et al., 1998) of entire property.	Stewart Gibson	September 18, 2019	0830 - 1730	No precipitation Partly cloudy	15°C on arrival 22°C on departure	2 - Slight Breeze
			August 27, 2019	0830 – 1430	Moderate to High precipitation 100% cloud cover	19°C on arrival 27°C on departure	4 – Moderate Breeze
Wetland Boundary Delineation	Ontario Wetland Evaluation System (OWES) (MNRF, 2014)	Stewart Gibson	September 5, 2019	0830 – 1530	No precipitation Sunny with sparse clouds	13°C on arrival 21°C on departure	2 – Slight Breeze
Significant Woodland Delineation	Visual delineation with boundary identified by walking and staking dripline of forested areas with CVC and City of Mississauga staff.	Stewart Gibson Tricia Radburn	September 5, 2019	0830 – 1530	No precipitation Sunny with sparse clouds	13°C on arrival 21°C on departure	2 – Slight Breeze
			October 3, 2019	0900 - 1600	Minor precipitation 100% cloud cover	8°C on arrival 12°C on departure	4 - Moderate Breeze
Top of Bank Delineation	Visual delineation with boundary identified by walking and observing topography along the top of valley, with CVC staff.	Tricia Radburn	September 5, 2019	0830 – 1530	No precipitation Sunny with sparse clouds	13°C on arrival 21°C on departure	2 – Slight Breeze
Aquatic Habitat Assessment	Ontario Ministry of Transportation (MTO) Fisheries Protocol - Environmental Guide for Fish and Fish Habitat (June, 2009)	Chris Pfohl, Aquatic Ecologist	April 17, 2019	1430 – 1600	No precipitation, sunny	9°C on arrival 8°C on departure	1 – Light Air
		Devin Soeting, Aquatic Ecologist	October 24, 2019	1030 – 1500	No precipitation, sun-cloud mix	10°C on arrival 17°C on departure	
Spring Breeding Bird Survey	Three surveys over two days each survey period (to cover the entire site) at least 10 days apart using the method in the Ontario Breeding Bird Atlas Guide for Participants (BSC, March, 2001) and the MNRF’s <i>Survey Protocol for Eastern Meadowlark in Ontario</i> (August 2013).	Nadine Price, Terrestrial Ecologist	June 6, 2019	06:28-11:58	No precipitation 100% cloud cover	15°C on arrival 19°C on departure	2 – Slight breeze
			June 7, 2019	06:26-11:28	No precipitation No cloud cover	13°C on arrival 22°C on departure	0 – Calm
			June 18, 2019	06:11-11:12	No precipitation 100% cloud cover	17°C on arrival 21°C on departure	0 – Calm
			June 19, 2019	06:07-09:59	No precipitation Partly cloudy	17°C on arrival 20°C on departure	0 – Calm
			June 28, 2019	06:17-11:03	No precipitation Partly cloudy	20°C on arrival 26°C on departure	0 – Calm
			July 3, 2019	06:16-09:54	No precipitation 100% cloud cover	19°C on arrival 22°C on departure	1 – Light Air

Field Study	Methodology	Staff Involved	Date(s)	Time of Day	Weather Conditions		
					Precipitation / Cloud Cover	Temperature (°C)	Wind (Beaufort Wind Scale) ¹
Search for potential wildlife habitats	Meandering survey throughout property. Search for features which could provide habitat for wildlife or Species at Risk Habitat such as: Nests, reptile hibernacula, old barns, structures, uncapped chimneys, foundations, mature forest areas with cavities or other features suitable for bat roosting, turtle nesting or overwintering sites along the Credit River etc.	All staff, all visits	All visits as noted above.	All visits as noted above.	All visits as noted above.	All visits as noted above.	All visits as noted above.
Incidental flora and fauna observations	Visual observations of animals, tracks or scat and compilation of a plant inventory during all site visits.	All staff, all visits	All visits as noted above.	All visits as noted above.	All visits as noted above.	All visits as noted above.	All visits as noted above.

¹ Beaufort Wind Scale0 = calm, smoke rises vertically (0-2 km/hr); 1 = light air movement, smoke drifts (3-5); 3 = gentle breeze, wind felt on face; leaves rustle (6-11); 4 = moderate breeze, small branches moving, raises dust & loose paper (20-30); 5 = fresh breeze, small trees begin to sway (31-39); 6 = strong breeze, large branches in motion (40-50)

4.2 Results of Field Investigations

The results of the various field investigations are presented in the following sections.

4.2.1 Vegetation Communities

The Study Area is approximately 83 ha in size and includes a mix of meadow, thicket, deciduous forest, cultural woodlands, treed hedgerows, swamps, open aquatic and marsh ecosites as summarized in Table 4.2. The results of the Burnside's Ecological Land Classification (ELC) vegetation community delineation is shown on Figure 4.2. ELC communities delineated beyond the limits of the Study Area were provided by CVC and have not been adjusted for this investigation.

Several possible Butternut trees were identified in the cultural woodland near the farmhouse. Genetic testing was completed through the Forest Gene Conservation Association. Of the trees tested, only a single true Butternut was confirmed within this ecosite. All others were confirmed Hybrid Butternuts. Further information regarding Butternut is provided in Section 5.6.2.

Table 4.2: ELC Vegetation Communities

ELC Code	Vegetation Type	Species Association Comments
CUW	Cultural Woodland	Two cultural woodlands are present within the study area and are present east of the existing residence as well as north west of the Open Aquatic Storm Water Pond. Both ecosites consist of species that suggest a cultural legacy of plantings. Black Walnut, Green Ash, Norway Spruce, White Spruce, Scots Pine, and Manitoba Maple are present and variably dominant within these cultural woodlands. The CUW in the north has an understory dominated by more invasive ground cover including Garlic Mustard and Virginia Stickseed while the ground cover in the CUW north of the OAO ecosite is dominated by native graminoid meadow species. A single SAR, Butternut (<i>Juglans cinerea</i>) was identified within this ecosite. Multiple Hybrid Butternuts were identified within this ecosite and have had hybridity confirmed through genetic testing at the Forest Gene Conservations Association.
CVC	Commercial and Institutional	The CVC ecosite represents the area used as a storage yard for municipal staff. Recycling containers and park benches are stored here in addition to other park maintenance materials within three large storage shelters. Manicured turf grass and unmaintained Reed Canary Grass dominated meadow surround the storage areas with Black Walnut providing limited canopy along the western boundary of the ecosite.
CVR	Residential	The CVR ecosite surrounds the inactive residential property west of the northern CUW ecosite. Vegetation in the CVR ecosite is primarily mature open grown trees with a manicured turf grass understory.
FOCM5	Naturalized Coniferous Hedge-row	North of the CVR ecosite, the coniferous hedge row is dominated by Scott's pine, with minor black walnut, wild grape and Virginia creeper dominating shrub and sub-canopy layer. Manitoba Maple, Red Raspberry, Reed Canary Grass dominate the understory.
FODM11	Naturalized Deciduous Hedge-row	West of the Meadowvale Station Woods ANSI, the FODM11 ecosite is dominated by black walnut with occasional White Oak, American Basswood, and Norway Maple. Understory is dominated by

ELC Code	Vegetation Type	Species Association Comments
		Red Raspberry and Virginia Creeper with a Graminoid under layer dominated by Reed Canary Grass.
FODM5	Dry-Fresh Sugar Maple Deciduous Forest	West of the Credit River, the FODM5 ecosite is co-dominated by Sugar Maple and Black Walnut. Other canopy species include Black Cherry and Norway Maple. This ecosite is present on a steep slope west toward the Credit River with a lowland Black Walnut and White Willow stand at the base of the slope. European Buckthorn and Red Raspberry with mixed meadow species dominate the sparse understory.
FODM7	Fresh-Moist Lowland Deciduous Forest	This ecosite is similar to FOD7-4, but with a more variable canopy. Black Walnut was not the dominant tree species, as the canopy received higher contributions from species such as Manitoba Maple, Sugar Maple (<i>Acer saccharum</i>), Hackberry (<i>Celtis occidentalis</i>), American Beech (<i>Fagus grandifolia</i>) and White Willow (<i>Salix alba</i>).
FODM7-3	Fresh-Moist Willow Lowland Deciduous Forest	The FODM7-3 ecosite runs adjacent to Harris Creek and is dominated almost entirely by White Willow with minor presence of Little-leaf Linden, and Manitoba Maple. The understory is largely dominated by Reed Canary Grass with associate meadow species including Queen Annes Lace, New England Aster, Purple Stemmed Aster present in areas with drier substrate within the FODM7-3 ecosite.
FODM7-4	Fresh-Moist Black Walnut Lowland Deciduous Forest	The FODM7-4 ecosite describes the primary vegetation form in the Study Area. These forests are typically associated with riparian zones and floodplains in Ontario. Varying vegetation compositions are found throughout the FODM7-4 ecosite but are generally described as being dominated by Black Walnut with associate species including Manitoba Maple, White Willow, Sugar Maple, Balsam Poplar, Trembling Aspen, Green Ash, and White Ash. The sub-canopy is comprised of similar tree species with the ground layer having a dense composition of Red Raspberry, Virginia Stickseed, Virginia Creeper, Wild Grape, European Buckthorn and mixed meadow species. This ecosite is identified as an S2S3 ecosite as per Appendix M of the Significant Wildlife Technical Guide. Several FODM7-4 ecosites have been previously mapped within the subject property by

ELC Code	Vegetation Type	Species Association Comments
		CVC. The FODM7-4 represents the most up-to-date delineation of the ecosite based on the findings of Burnside's field investigations.
MAMM1	Graminoid Mineral Meadow Marsh	A small MAMM1 ecosite is located west of the CVI area. The construction access road west of the MEMM1 ecosite is impeding natural drainage allowing for moist substrate for the Phragmites, Narrow-leaf Cattail, and Reed Canary Grass co-dominated ecosite. Canopy within this wetland is less than 25% and is dominated by White Willow with minor presence of Russian Olive. Associate ground layer species include other hydrophytic species; Purple Loosestrife, Purple Stemmed Aster, and Spotted Jewelweed.
MAMM1-2	Cattail Graminoid Mineral Meadow Marsh	The Narrowleaf Cattail dominated MAMM1-2 ecosite surrounds the Storm Water Management Pond in the southern portion of the Study Area. This ecosite is almost exclusively dominated by Narrowleaf Cattail with no canopy coverage. Standing water (<1 m) was present during all site inspections. Other associate species found in minor amounts throughout the ecosite include Phragmites, Reed Canary Grass, Virginia Stickseed, and Fleabane Sp.
MEFM1	Dry-Fresh Forb Meadow	A meadow predominantly comprised of forb species is present in the portion of the Study Area south of the Credit River. Common species identified throughout this ecosite include Canada and Tall Goldenrod, New England Aster, Queen Annes Lace, Common Milkweed, Spotted Joe Pyeweed, and Reed Canary Grass. Manitoba Maple and White Willow are present in limited amounts (<10%).
MEGM3	Dry-Fresh Graminoid Meadow	Several MEGM3 ecosites are present on site and are historically identified as agricultural areas. The common species identified throughout these areas include grasses such as Kentucky Bluegrass, Timothy, Smooth Brome, Orchard Grass and to a lesser extent, forb species including Canada/Tall Goldenrod and Alfalfa. Common weedy species Black Medic (<i>Medicago lupulina</i>), Teasel (<i>Dipsacus fullonum</i>), Common Dandelion (<i>Taraxacum officinale</i>), and Red Clover (<i>Trifolium pretense</i>) are found in varying amounts throughout these ecosites.
MEMM4	Fresh-Moist Mixed Meadow	Similar to the MEGM3 ecosite, the MEMM4 ecosite contains limited canopy coverage (<25%). A mix of graminoid and forb species dominate this ecosite with a variety of common weed species found throughout. Common forb species in the ecosites include Canada Goldenrod, Tall

ELC Code	Vegetation Type	Species Association Comments
		Goldenrod, New England Aster, Alfalfa, and Cow Vetch with a mix of graminoid species including Smooth Brome, Reed Canary Grass, Timothy, and Orchard Grass. A portion of the northern MEMM4 ecosite is undergoing active forest restoration activities.
OAO	Open Aquatic	Two OAO ecosites are within the Study Area and are identified as the Credit River and the Storm Water Management Pond in the southern portion of the Study Area. A detailed description of the Credit River's conditions is provided in Section 4.2.6 (Aquatic Habitat Characterization). The SWM pond is surrounded by the MAMM1-2 ecosite and has some submergent vegetation growth around the margins of the ecosite.
SWD	Deciduous Swamp	Along the northern boundary of the Study Area, a deciduous swamp with pockets of graminoid marsh is present. Throughout the ecosite, canopy cover exceeds 25% with Green Ash, White Willow, and Silver Maple being the dominant species. Other species within and on the margins of the ecosite include Black Walnut, American Basswood, and Manitoba Maple. Pockets of Cattail dominated marshes are present within the ecosite. Reed Canary Grass, Red Osier Dogwood, Red Raspberry, Phragmites, Late Goldenrod, Sensitive Fern are present within the understory. Areas of standing water are also found within the ecosite and are generally unvegetated with Duckweed sp. identified in limited amounts.
SWT	Thicket Swamp	North of the Storm Water Management Pond, a Thicket Swamp is described as being dominated by deciduous shrub species with a severely depleted canopy dominated by Ash species. A large portion of the canopy has fallen, providing a large number of standing and fallen dead snags. The open canopy has provided suitable habitat for shrub species such as Manitoba Maple, Willow sp., Dogwood sp., and European Buckthorn to dominate. Remaining canopy is dominated by Manitoba Maple, White Willow and Green Ash. Reed Canary Grass is the dominant graminoid found throughout the swamp, typically along the boundary of the ecosite, with other associate ground layer species including narrow Leaf Cattail, Phragmites, Purple Loosestrife, and Purple Stemmed Aster.
THDM2	Dry-Fresh Deciduous	West of the Credit River and east of Creditview Road, the THDM2 ecosite is located on a steep slope. A thick shrub layer of European Buckthorn, Hawthorn Sp., Wild Grape, Virginia Creeper, and

ELC Code	Vegetation Type	Species Association Comments
	Shrub Thicket	young Green Ash dominate this ecosite. A limited canopy (<10%) is comprised of dying Green Ash, Red Oak, Black Walnut, and Sugar Maple. A declining Green Ash population has provided suitable habitat for regrowth and thicket species to persist within open areas identified in this ecosite.
WODM4	Dry-Fresh Deciduous Woodland	The WODM4 ecosite is comprised of similar species as the FODM7 ecosite although the canopy cover is more sparse (25%-50%). Black Walnut, White Willow, and Manitoba Maple are the primary canopy species with a Reed Canary Grass dominant understory.

4.2.2 Breeding Bird Community

A total of 46 summer resident bird species exhibiting some level of breeding evidence (possible, probable or confirmed) were observed on the site during targeted breeding bird surveys. A full list of species recorded is provided in Appendix B.

Two species were observed on the site during the breeding bird window but no breeding evidence (i.e., suitable breeding habitat or breeding behavior) was recorded: Great Blue Heron and Ring-billed Gull.

- Eight Great Blue Heron were seen flying over the site. This species prefers to nest in colonies in wet or dry forest, sparsely treed islands, beaver ponds or marshes (Cadman *et al* 2007). Although forests are present on the site, no known heronries were observed.
- Ten Ring-billed Gull were seen flying over the site. This species typically nests on urban islands and peninsulas (Cadman *et al* 2007). There is therefore no suitable nesting habitat for this species on the site.

According to MNRF's Significant Wildlife Habitat Technical Guide (Appendix G) (OMNR 2000), some species require large areas of suitable habitat for long term population survival. Fragmentation of essential habitats can result in overall declines in populations.

Four "area-sensitive" bird species, as defined by the MNRF, were observed on the site during the breeding bird surveys: Bobolink, Red-breasted Nuthatch (*Sitta canadensis*), Savannah Sparrow (*Passerculus sandwichensis*) and White-breasted Nuthatch (*Sitta carolinensis*).

Bobolink is most abundant in large, open expansive grasslands with dense ground cover (OMNR 2000). It can also be found in hayfields, meadows or fallow fields and marshes (OMNR 2000). They typically require over 50 ha of grassland (OMNR 2000). Although the site did not provide over 50 ha of suitable grassland habitat, it is possible that this species was nesting in the area.

Red-breasted Nuthatch is most abundant in mixed or coniferous forests where decaying trees of at least 12 cm dbh are available for nesting in. They typically require at least 10 ha of continuous forest (OMNR 2000) and in southern Ontario will also nest in conifer plantations (Cadman *et. al.*, 2007). The site has at least 10 ha of forested habitat providing suitable nesting habitat for this species.

Savannah Sparrow is most abundant in hayfields, pastures, fields and meadows with dense ground vegetation of grasses and other vegetation of moderate height (OMNR 2000). According to Cadman *et. al.*, 2007, the Savannah Sparrow often chooses habitat which includes scattered small trees or shrubs. While this species

thrives in tracts of grassland greater than 50 ha (OMNR 2000), it is often found in smaller habitat patches where the availability of more suitable, alternative nesting opportunities is in short supply, particularly in Southern Ontario. The limits of the site are mainly comprised of cultivated meadow, riparian habitat and deciduous woodlots. The cultivated meadow found at the site may support nesting habitat.

White-breasted Nuthatch is most abundant in woodland habitats where natural cavities in hardwood trees greater than 30 cm dbh are present (OMNR 2000). They typically require at least 10 ha of continuous forest, although are often found in smaller habitat patches in parts of Southern Ontario where forests have been highly fragmented due to agricultural practices and urban development (Cadman, M.D., *et. al.*, 2007). They can also be found in shade trees in urban areas. The individuals on the site were found in small woodlots and riparian habitat. These areas and the larger woodlot on the site may support nesting habitat for this species.

Three bird species listed as both provincially and federally significant were observed on the site during breeding bird surveys: Barn Swallow (Threatened), Bobolink (Threatened) and Eastern Wood-pewee (Special Concern). Barn Swallow was recorded as a possible breeder, Bobolink was recorded as a probable breeder and Eastern Wood-pewee was recorded as a possible breeder. The significance of these species is discussed in more detail in Section 5.6.2 of this Report.

4.2.3 Incidental Wildlife Observations

Incidental observations of wildlife, including Lepidoptera, were collected during field investigations. Observations were documented to provide a general characterization of the habitat functions of the site. Examples include tracks, scat, carcasses, live sightings, etc.

With the exception of Monarch, the species observed are generally common, widespread and abundant in the province. Refer to Table 4.3 for a summary of incidental observations.

Table 4.3: Incidental Wildlife Observations in the Study Area.

Common Name	Scientific Name	Number Observed in Study Area	S-Rank ⁸	Comments
Mammals				
Eastern Grey Squirrel	<i>Sciurus carolinensis</i>	1	S5	Observed by trail at south end of subject lands.

⁸ Rarity based on NatureServe rankings for provincial/state rarity (SRank).

Natural Heritage Report
December 2020

Common Name	Scientific Name	Number Observed in Study Area	S-Rank ⁸	Comments
White-tailed Deer	<i>Odocoileus virginianus</i>	>10	S5	Observed throughout subject lands in almost every habitat unit.
Herpetofauna				
American Toad	<i>Anaxyrus americanus</i>	4	S5	Observed in a few different habitat units.
Green Frog	<i>Lithobates clamitans</i>	3	S5	Heard calling in a few different habitat units.
American Bullfrog	<i>Lithobates catesbeianus</i>	2	S4	Heard calling in two different habitat units.
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	1	S4	Observed basking on trail at south end of subject lands.
DeKay's Brown Snake	<i>Storeria dekayi</i>	1	S5	Observed slithering through grasses in large meadow on western side of subject lands.
Invertebrates				
Chimney Crayfish	<i>Fallicambarus fodiens</i>	9	S4	Observed crayfish burrows along western edge of meadow on eastern side of subject lands.
Monarch	<i>Danaus plexippus</i>	4	S2N, S4B	Observed in meadow habitat on subject lands.
Fish				
Largemouth Bass	<i>Micropterus salmoides</i>	1	S5	Observed in Credit River on April 17, 2019.
Pacific Salmon	<i>Oncorhynchus sp. pop. 2</i>	Credit River – 1 live, 18 dead; Fletcher's Creek – 2 live, 2 dead	SX	Observed in Credit River and Fletcher's Creek swimming upstream toward spawning grounds (October 24, 2019). Salmonids that had presumably died after spawning also observed in these watercourses.

4.2.4 Aquatic Habitat Characterization

The Study Area contains a relatively diverse assemblage of aquatic habitat, ranging from relatively small, intermittently flowing drainage features to large riverine habitat. Burnside conducted an on-site assessment of the subject watercourses on April 17 and October 24, 2019. Each of the watercourses were assessed for form, function, morphology, and fish habitat. Weather conditions during each of the assessments were dry, with calm winds, however there was some precipitation within the 24-hours prior to the site visit conducted in October.

The Credit River and Fletcher's Creek, the two largest and permanently flowing aquatic features within the Study Area, generally flow from north to south prior to forming a confluence near the approximate center of the site. In addition to these two watercourses, two intermittent features (unnamed tributary to the Credit River and Harris Creek, respectively) were also assessed and were observed to originate from small, low-lying wetted areas near Highway 401.

Due to the relatively vast Study Area, the watercourses were generally assessed throughout the property with targeted focus on potential pedestrian crossing locations. Aquatic habitat features throughout the Study Area are shown on Figure 4.3.

Upstream of Crossing #1

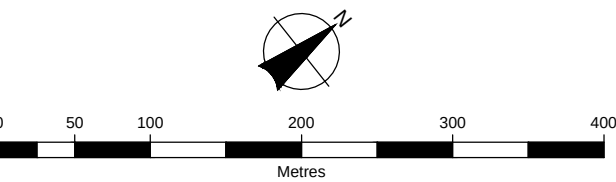
Along the western portion of the Study Area, the Credit River flows from north to south, parallel to Creditview Road for approximately 750 m prior to flowing east and through a section proposed for a potential pedestrian crossing (Crossing #1). In a general sense, the Credit River is relatively uniform in its morphology throughout the Study Area in that it maintains a similar width to depth profile along its linear reaches through a series of runs and riffles, though tends to vary along its meander bends. Bank scour was evident and considered significant in some locations, most notably along the eastern bank, south of the existing driveway. These eroded areas formed scour pools (some as deep as approximately 1.3 m) providing deep water refuge habitat to fish. The channel width of the Credit River along the relatively linear reach in the area of the existing driveway was generally between 30-40 m with depths ranging from approximately 0.1 m in the riffles to approximately 1.3 m in the scour pools along the eastern bank.

Existing bank stability measures (boulder revetments and gabion basket retaining walls) were observed along the western/southern bank to mitigate the erosive energy of the river and minimize potential property loss associated with the residential subdivision to the south. Several salmonids were observed spawning in two relatively broad locations along these reaches, the locations of which are shown on Figure 4.3.



LEGEND:

- REGULATED REDSIDE DACE HABITAT
- ACTIVE BANK SCOUR
- BANK STABILITY MEASURES
- RIFFLE
- RUN
- POOL
- GROUNDWATER SEEP
- WATERCOURSE
- STUDY AREA



Client
**THE CORPORATION OF THE CITY OF
MISSISSAUGA**

Figure Title
**NATURAL HERITAGE REPORT
P-122 CREDIT MEADOWS PARK EXPANSION
(FORMER HARRIS LANDS), SCHEDULE B
MUNICIPAL CLASS EA
AQUATIC HABITAT**

Drawn HN	Checked DS	Date 20/08/07
Scale H 1:5000	Project No. 30043764	

Figure No.
4.3

Area of Crossing #1

Downstream of the bank stability measures, the Credit River flows through a relatively linear, riffle-run morphology prior to the channel bending to the south and forming a confluence with Fletcher's Creek. Crossing #1 is proposed to be constructed across an extended riffle sequence within this section. The watercourse in this location is characterized as containing relatively gently sloped banks (1:2 slope) which are vegetated with forbs and shrubs, followed by an inland band of riparian trees consisting willow, maple, and oak species. The substrate was observed to consist of a mix of cobble, gravel, sand, and silt, with a trace amount of boulders. Channel width and depth was approximately 30 m and 0.6 m, respectively while wetted depths ranged from approximately 0.1 to 0.3 m. Previous salmonid activity was observed within this area with several locations noted as being cleared of fine sediment and vegetation and were likely used as staging areas for salmon as they travelled further upstream to spawn. The bank south of the river was cleared of vegetation and contained an existing manicured trail that is part of Credit Meadows. Several deceased salmonids were observed within this area, having died likely after spawn, while one live salmonid was observed migrating upstream.

Area of Crossing #2

The Credit River generally flows south within this section through a run-type morphology within a gently meandering channel. This reach of watercourse was noticeably deeper than that in the area of Crossing #1, especially along the eastern bank where scouring was observed along the outside meander. The watercourse was approximately 25 m wide with depths ranging from approximately 0.15 m along the western bank, to approximately 1.8 m along the eastern bank. The substrate was primarily comprised of gravel and cobble, with sand, and silt overlying the larger material in the slower moving areas.

Though no fish or potential spawning areas were observed in this section, the watercourse is considered to provide direct habitat to fish, including migratory salmonids.

Area of the Fletcher's Creek Crossing

The Fletcher's Creek is proposed to be located in the area of a historic rail crossing. The historic rail crossing location does not currently contain a crossing structure, and though overgrown with vegetation, the ballasts have remained relatively in-tact. Ballast stone has slumped and deposited in the watercourse, forming a narrowing of the channel and a riffle-pool sequence. The banks of Fletcher's Creek were observed to be moderately unstable with erosion being noted along both banks. Based on the observed erosion, it is likely that the watercourse experiences periods of high flow, likely exacerbated by flow contribution from upstream stormwater management systems.

However, at the time of the site visit in October 2019, the watercourse was observed to be under moderate flow conditions.

The watercourse itself is moderately meandering with a relatively dense riparian buffer comprised of vegetation belonging to the Meadowvale Station Woods. The flow morphology of Fletcher's Creek in the area of the proposed crossing was identified as a run and pool upstream of the proposed crossing to a riffle in the area of the crossing, and into a pool downstream. Downstream of the pool, the watercourse flows through a relatively prolonged flat section. The substrate was observed to consist of a combination of gravel, sand, and silt, with cobble and boulders noted in the area of the ballast. Several cyprinids and a dead salmonid were observed within this section of the watercourse indicating that it provides direct fish habitat, though no indications of spawning in the area of the crossing were observed.

Harris Creek

Harris Creek was observed to be generally aligned from north to south through the farm property and is crossed by roadways at two locations on the property. The watercourse flows southwest from a low-gradient, small wetland area south of Highway 401 prior to flowing south through a historically channelized drainage feature. The watercourse was observed to contain intermittent pools of stagnant water and was densely vegetated with grasses, forbs, cattails, and phragmites throughout most of its length. At the southernmost driveway crossing, the culvert structure was noted to be significantly infilled with sediment which would likely impede water conveyance through the structure.

The conditions observed within the watercourse during the site visit indicated that the watercourse did not appear capable of providing direct fish habitat due to the limited water quantity and dense vegetation growth.

Unnamed Tributary of the Credit River

An unnamed tributary of the Credit River is located north of Harris Creek and is aligned from northeast to southwest toward the Credit River, discharging to the Credit River south of the driveway bridge. Similar to Harris Creek, this feature was intermittent, containing small pools of stagnant water in various locations along its length and was densely vegetated with grasses, forbs, cattails, and phragmites. The watercourse also appears to be historically channelized and consists of a primarily linear channel. Based on the reviewed background information and site assessment, the watercourse is considered incapable of providing direct habitat to fish.

5.0 Natural Heritage Features and Systems

Natural Heritage Features and Systems are the ecological features, functions and linkages protected through the policies described in Section 2.0. These include features of federal, provincial and municipal significance. The findings of the records review and field investigations were analyzed in the following sections to confirm the boundaries and significance of each feature.

5.1 Methodology for Assessing Feature Significance

The boundaries and significance of various features was assessed using the guidance documents listed in Table 5.1.

Table 5.1: Methodology for Assessing Feature Significance

Natural Feature	Guidance Document/Methodology Used
Significant Wetlands	Ontario Wetland Evaluation System (OWES) (boundary delineation only; wetland significance was not determined)
Significant Valleylands	Natural Heritage Reference Manual, 2nd Edition (MNR, 2010)
Significant Woodlands	- Natural Heritage Reference Manual, 2nd Edition (MNR, 2010) - City of Mississauga Official Plan - Peel-Caledon Significant Woodlands and Significant Wildlife Habitat Study (2009) - Greenbelt Plan 2005, Technical Definitions and Criteria for Key Natural Heritage Features in the Natural Heritage System of the Protected Countryside, Appendix B (OMNRF, 2012)⁹
Significant Wildlife Habitat	- Significant Wildlife Habitat Technical Guide (MNR, 2000) - Ecoregion 7E Criteria Schedule (MNRF, 2015) - Peel-Caledon Significant Woodlands and Significant Wildlife Habitat Study (2009)
Redside Dace Habitat	- O.Reg. 242/08 - General Habitat Description for Redside Dace (MNRF)
Bobolink Habitat	- O.Reg. 242/08 - General Habitat Description for Bobolink (MNRF)

⁹ The Study Area is not located within the Greenbelt Plan. At the request of CVC, Appendix B of this document was used to refine the boundaries of Significant Woodlands.

5.2 Significant Wetlands

No previously evaluated wetlands are present. The wetlands identified through this study were not evaluated. The boundaries of the deciduous swamp (SWD) in the northern portion of the Study Area along Highway 401 were staked with the CVC in accordance with OWES protocols. Wetlands in the southern portion of the Study Area in the vicinity of the SWM pond were not staked. CVC staff concurred that staking in this area was not required.

As such, all wetlands identified are unevaluated and subject to the policies and regulations of the City and CVC. Staked wetland boundaries are presented on Figure 5.1.

5.3 Significant Woodlands

Section 6.3.12 of the City's OP indicates that significant woodlands are those that meet one or more of the following criteria:

- Woodlands, excluding cultural savannahs, greater than or equal to 4 hectares (ha);
- Woodlands, excluding cultural woodlands and cultural savannahs, greater than or equal to two ha and less than four ha;
- Any woodland greater than 0.5 ha that:
 - Supports old growth trees (greater than or equal to 100 years old);
 - Supports a significant linkage function as determined through an Environmental Impact Study approved by the City in consultation with the appropriate conservation authority;
 - Is located within 100 m of another Significant Natural Area supporting a significant ecological relationship between the two features;
 - Is located within 30 m of a watercourse or significant wetland; or
 - Supports significant species or communities.

The Peel-Caledon Significant Woodlands and Significant Wildlife Habitat Study (2009) recommends similar criteria to identify Significant Woodlands in Mississauga.

Wooded areas were staked in October 2019 with City and CVC staff. The woodland boundaries were then refined via desktop analysis. The Significant Woodland identified on Figure 5.1 combines the results of the woodland staking as well as the desktop evaluation of wooded areas against the criteria above. A brief justification for areas to be included (e.g., IN-1) or excluded (e.g., EX-1) within the Significant Woodland is provided below and are illustrated on Figure 5.1.

Inclusion Areas

ID	Justification
IN-1	East of the Credit, IN-1 is identified as a wooded area greater and 0.5 ha within 30 m of a watercourse and therefor meets criteria identified within Section 6.3.12 of the City's OP. It is noted that the feature does not meet the delineation criteria for connecting features since the length exceeds three times the average width. However, considered as an independent feature, it meets the OP criteria above and is considered part of the Significant Woodland.
IN-2	IN-2 is a wooded area with a total area of 2.6 ha which exceeds the minimum size requirement provided in the City's OP (> 2.0 ha). As such, this woodland is considered part of the on-site Significant Woodland.
IN-3	IN-3 was identified during the October 2019 field investigation as a potential separation area between two wooded areas. A desktop assessment was completed to measure the distance between canopies. The assessment concluded that the distance did not exceed 20 m and is therefor not considered a gap between woodlands.
IN-4	South of the Credit, IN-4 is identified as a wooded area greater and 0.5 ha within 30 m of a watercourse and therefor meets criteria identified within Section 6.3.12 of the City's OP. The dripline of this feature was mapped using aerial interpretation. Gaps within canopy breaks have been identified within this feature but were determined to be less than 20 m and therefor are not considered a separation between two woodlands.
IN-5	East of the Credit River, IN-5 was identified as a potential separation in canopy between two wooded areas. A desktop assessment was completed to measure the distance between canopies. The assessment concluded that the distance did not exceed 20 m and is therefor is not considered a gap between woodlands. As such, the Significant Woodland has been determined to extend into the southern portion of the Study Area. This features proximity to a watercourse and wetland also contribute to its evaluation.
IN-6	West of the Credit River, the IN-6 area was included within the Significant Woodland delineation due to the total area (5.5 ha) delineated west of the Credit River. The Credit River is considered a separation between the Significant Woodland east of the Credit River as it exceeds 20 m between crowns.

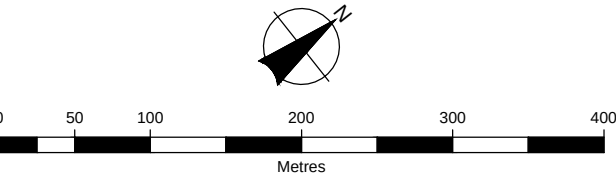
Exclusion Areas

ID	Justification
EX-1	EX-1 is a linear vegetated feature west of the Credit River in the northern portion of the Study Area. ELC determined that this feature is dominated by non-native shrub species (i.e., Buckthorn) and is considered a deciduous thicket. It does not contain sufficient continuous canopy to be determined a forest or woodland and is therefor not included in the Significant Woodland.
EX-2	EX-2 is a linear woodland east of the Credit River. The woodland dripline was staked and surveyed during the October 2019 investigation with agency staff. Based on the surveyed limits, the length of this feature (94.2 m) exceeds three times the average width (23.8 m) and therefor is not included in the Significant Woodland delineation.
EX-3	EX-3 is a linear woodland east of the Credit River. The woodland dripline was staked and surveyed during the October 2019 investigation with agency staff. Based on the surveyed limits, the length of this feature (102.3 m) exceeds three times the average width (17.33 m) and therefor is not included in the Significant Woodland delineation.
EX-4	EX-4 is a cultural woodland east of the existing residence within the Study Area. Considered an isolated wooded feature, the total area (0.99 ha) does not meet the minimum size requirement provided in the City's OP (>2.0 ha). As such, this woodland is not considered part of the Significant Woodland.
EX-5	EX-3 is a linear extension of the larger Significant Woodland in the east portion of the Study Area. The dripline of this feature was mapped using aerial interpretation. Lands to the east of this finger are dominated by non-native, invasive shrub species (i.e., Buckthorn and Russian Olive) and are therefor not included in the linear wooded area. Based on the surveyed limits, the length of this feature (116.4 m) exceeds three times the average width (31.2 m) and therefor is not included in the Significant Woodland delineation.



LEGEND:

- DRIP-LINE STAKING (OCT, 2019)
- SIGNIFICANT WOODLAND DELINEATION BASED ON AERIAL INTERPRETATION AND ELC MAPPING
- STUDY AREA



Client
**THE CORPORATION OF THE CITY OF
MISSISSAUGA**

Figure Title **NATURAL HERITAGE REPORT
P-122 CREDIT MEADOWS PARK EXPANSION
(FORMER HARRIS LANDS), SCHEDULE B
MUNICIPAL CLASS EA
SIGNIFICANT WOODLANDS**

Drawn HN	Checked SG	Date 20/08/07
Scale H 1:5000	Project No. 30043764	

Figure No.
5.1

5.4 Significant Valleylands

Section 6.3.12 of the City's OP indicates that significant valleylands are associated with the main branches, major tributaries and other tributaries and watercourse corridors draining directly to Lake Ontario including the Credit River, Etobicoke Creek, Mimico Creek and Sixteen Mile Creek. As such, it was assumed that valleys associated with the Credit River and Fletcher's Creek are significant.

A portion of the top of bank associated with the west bank of the Credit River was staked and surveyed with the CVC on July 30, 2007. The remainder of the bank from just north of Argentia Road to Highway 401 was staked with the CVC on September 5, 2019 and is shown in Figure 5.1.

The eastern boundary is assumed to extend to the extent of the residential communities on Swinbourne Drive to the east and on Kenninghall Crescent to the south.

5.5 Significant Areas of Natural and Scientific Interest

As noted in Section 3.2.2, the Meadowvale Station Woods Life Science ANSI is located along the northeastern boundary of the property. The ANSI is a regional ANSI only and does not meet the criteria for provincial significance.

5.6 Significant Wildlife Habitat

Criteria to identify Significant Wildlife Habitat (SWH) has been identified by the province in the Natural Heritage Reference Manual (MNR, 2010), Significant Wildlife Habitat Technical Guide (MNR, 2000) and Ecoregion 7E Criterion Schedule (MNR, 2015).

At the local level, The Region of Peel, City of Mississauga and Town of Caledon developed their own criteria for identifying SWH in the Peel-Caledon Significant Woodlands and Significant Wildlife Habitat Study (2009).

The following sections assess the presence of SWH based on the provincial criteria and the Peel-Caledon criteria.

5.6.1 Presence of SWH According to Provincial Criteria

According to the Natural Heritage Reference Manual (MNR, 2010) and Significant Wildlife Habitat Technical Guide (MNR, 2000), there are four types of Significant Wildlife Habitat ("SWH"), as follows:

- Habitats of Seasonal Concentrations of Animals;
- Rare Vegetation Communities / Specialized Habitats;
- Habitats of Species of Conservation Concern; and
- Animal Movement Corridors.

Significant Wildlife Habitat (SWH) is designated at the local planning level (i.e., municipality). Local designations occur because conditions and features vary widely between municipalities and what is important and unique in one area may be common and secure in another.

The results of field investigations were screened against the criteria listed in the Ecoregion 7E Criterion Schedule. The screening is presented in Appendix C.

The types of habitats which are, or may be, present in the Study Area and its vicinity are described below. “Confirmed” SWHs are habitats which fully meet all habitat requirements, and which have been subject to a field investigation which has confirmed that the habitat is being used by the requisite species and populations. “Candidate” SWHs are habitats which meet habitat requirements, but which have not been fully studied, thus the presence of this habitat cannot be ruled out. SWH findings from a previous CVC investigation have also been used to identify Candidate and Confirmed SWH.

Confirmed SWH in the Study Area include:

- Terrestrial Crayfish;
- Rare Vegetation Community;
- Deer Wintering Congregation;
- Seeps and Springs; and
- Special Concern and Rare Wildlife Species.

The Terrestrial Crayfish habitat is present in a small roadside area west of the City parks operations yard and at the base of a ridge in the southwestern most field. Several other crayfish chimneys were noted in the Meadowvale Station Woods ANSI in the records provided by the CVC (see Figure 5.2).

The Rare Vegetation Community, a Fresh-Moist Black Walnut Lowland Deciduous Forest (FOD7-4 ecosite), was identified by CVC and confirmed during Burnside’s field investigations. The updated delineation can be found on Figure 5.2. See Section 4.2 for a complete description of the ecosite.

Deer Wintering Congregation areas were identified within the Study Area by CVC. Targeted field investigations were not completed for this SWH feature. However, CVC data identifies this habitat as Confirmed and as such, the wooded areas identified by CVC as Deer Wintering Congregation areas (Figure 5.2) are considered Confirmed SWH.

Seeps and Springs were identified beyond the eastern limits of the Study Area by CVC. These areas are illustrated on Figure 5.2 but have not been confirmed by Burnside.

Although targeted surveys were not conducted, no seeps and springs were observed during Burnside's field investigations.

The Special Concern and Rare Wildlife Species habitat is present in several locations of the Study Area. Habitat for Eastern Wood-pewee (Special Concern) is found in the woodlot on the western edge of the Study Area along the western side of the Credit River and in the woodlots on the east side of the Study Area by Fletcher's Creek (see Figure 5.2). Habitat for Monarch (*Danaus plexippus* – Special Concern) is located in three separate meadows within the Study Area, two of which are on the west side and one is in the southeast corner of the Study Area (see Figure 5.2).

Candidate SWH in the Study Area include:

- Bat Maternity Colonies
- Raptor Wintering Area
- Reptile Hibernacula
- Amphibian Breeding Habitat (Woodland)
- Marsh Breeding Bird Habitat
- Turtle Wintering Areas

There is Bat Maternity Colony candidate habitat throughout the Study Area wherever there is deciduous forest habitat and deciduous swamp habitat (see Figure 5.2). This also includes forested habitat in the adjacent Meadowvale Station Woods ANSI on the east side of the Study Area.

There is moderate potential for suitable Candidate Raptor Wintering Areas within the Study Area. The upland habitats provide suitable habitat for foraging and overwintering. Targeting winter surveys for this Candidate SWH were not completed. However, based on the site conditions and moderate potential for its presence, it is considered present on-site and is described as all FOD, MEM, MEGM, SWD, CUT, and CUW Ecosites as delineated on Figure 5.2.

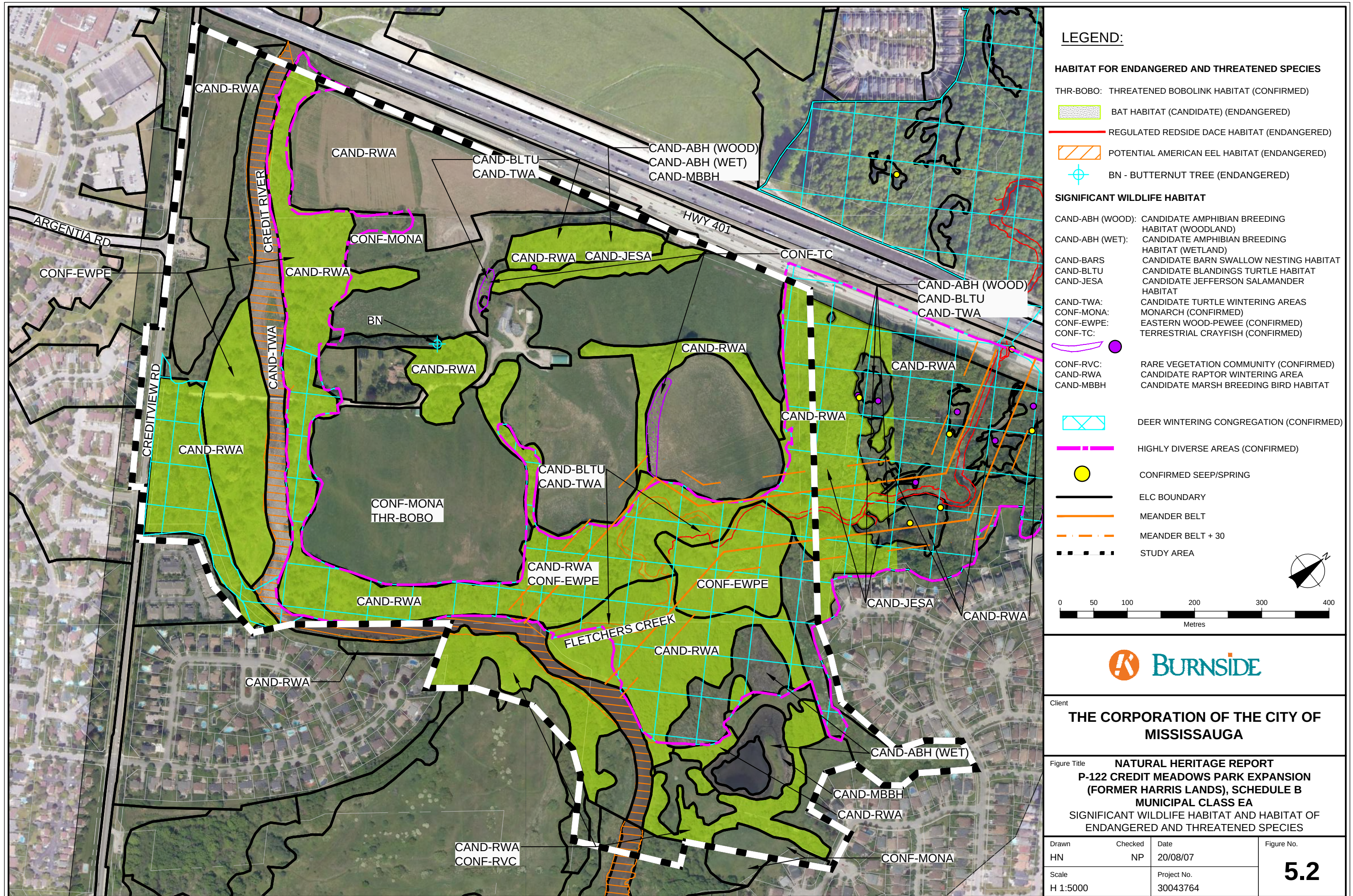
Moderate potential exists for suitable Reptile Hibernacula within the Study Area. These features include animal burrows, or micro features on the landscape that go below the frost line, such as rock piles or slopes, rotting logs and the foundations of old buildings. In the Study Area, reptile hibernacula could potentially be present below the foundations of the site's many old farm structures. Other suitable hibernacula features could be present in wooded areas; however, none were observed along potential trail routes.

Moderate potential exists for Candidate Marsh Breeding Bird Habitat. Wetland habitat with shallow water and emergent aquatic vegetation is present in the Study Area surrounding the SWM pond as well as within the SWD ecosite south of the 401. In addition, SWD and MEM ecosites are present for Green Heron habitat.

Natural Heritage Report
December 2020

Amphibian Breeding Habitat (Woodland) is located in a wetland at the north end of the Study Area in the woodlot by Highway 401 and in the wetlands in the Meadowvale Station ANSI (Figure 5.2).

Candidate Turtle Wintering Areas overlap with Amphibian Breeding Habitat (Woodland). The same wetlands at the north end of the Study Area and in the Meadowvale Station Woods ANSI are also candidate habitat for Turtle Wintering Areas.



5.6.2 Presence of SWH According to Local Criteria

The Peel-Caledon Significant Woodlands and Significant Wildlife Habitat Study (2009) provides some discussion and analysis regarding the types of habitat that are present in the area and how significance should be determined. An assessment was completed using data collected during the 2019 field investigations and available background data (including agency correspondence) to determine the presence of SWH within the Study Area based on the criterion provided in the Peel-Caledon Significant Woodlands and Significant Wildlife Habitat Study (2009). The findings of this assessment are compiled in Appendix C.

SWH features identified by CVC were included in the results and have been updated where necessary with the findings from Burnside's SWH assessment. The updated SWH features that meet criteria from the Peel-Caledon SWH assessment are illustrated on Figure 5.2.

Confirmed SWH in the Study Area include:

- Deer Wintering Area;
- Rare Vegetation Communities (FODM7-4);
- Foraging Areas with Abundant Mast;
- Highly Diverse Areas;
- Seeps and Springs;
- Species Identified as Special Concern based on Species at Risk in Ontario List that is Periodically Updated by OMNR; and
- Species that are listed as Rare (S1-S3) or Historical in Ontario based on records kept by the NHIC.

All of these features, with the exception of Highly Diverse Areas, are discussed above as part of the Ecoregion 7E Criterion Schedule. The Highly Diverse Area was identified as part of correspondence with CVC (Appendix A) and has been determined to meet criteria provided within the Peel-Caledon SWH assessment. The feature is delineated as per the provided data on Figure 5.2.

Candidate SWH in the Study Area include:

- Raptor Wintering Areas;
- Snake Hibernacula;
- Bat Maternal Roosts and Hibernacula;
- Amphibian Breeding Habitat (Forested Sites); and
- Turtle Nesting Habitat and Turtle Overwintering Areas.

All of these features are discussed above as part of the Ecoregion 7E Criterion Schedule.

5.7 Habitat of Endangered and Threatened Species

The records review conducted in Section 3.0 of this report identified a number of SAR which are, or may be, present in the Study Area. A screening was completed to further assess the potential for SAR to inhabit the area. The screening is provided in Appendix D.

Based on the screening several Confirmed, and Candidate Habitats were identified. “Confirmed” Habitats are those which meet a key lifecycle requirement (i.e., nesting habitat) for a particular Endangered or Threatened species and the key species has been confirmed present and using the habitat. “Candidate” habitats meet habitat requirements but have not been fully studied, thus species presence cannot be ruled out. Confirmed and Candidate Habitats are summarized in Table 5.2 and presented in Figure 5.2.

Table 5.2: Confirmed and Candidate Habitats of Endangered and Threatened Species

Species	Habitat in the Study Area
Confirmed Habitats	
Barn Swallow (THR)	Barn Swallow foraging habitat has been confirmed over the open areas of the Study Area (i.e., meadows).
Bobolink (THR)	Bobolink were identified as probable breeders in the southwestern meadow shown on Figure 5.2. As no nests were directly observed, the entire field is considered to provide habitat.
Butternut (END)	A single SAR, Butternut (<i>Juglans cinerea</i>) was identified within this ecosite. Multiple Hybrid Butternuts were identified within this ecosite and have had hybridity confirmed through genetic testing at the Forest Gene Conservations Association.
American Eel (END)	Occupied reach of stream for this species was confirmed in the Credit River in the Study Area by the MECP.
Redside Dace (END)	The MECP has designated Fletcher’s Creek as regulated Redside Dace Habitat. The habitat includes the meander belt of the creek plus 30 m.

Species	Habitat in the Study Area
Candidate Habitats	
Little Brown Myotis (END) Northern Myotis (END) Tri-colored Bat (END)	There is suitable roosting habitat present in areas where there is deciduous forest habitat and deciduous swamp habitat in the Study Area (see Figure 5.2). This also includes forested habitat in the adjacent Meadowvale Station Woods ANSI on the east side of the Study Area. Suitable roosting habitat may also be present in the sheds and house found in the Study Area.
Blanding's Turtle (THR)	Suitable habitat is present in Fletcher's Creek, the wetlands in the north end of the Study Area and the wetlands present in the adjacent Meadowvale Station Woods ANSI (Figure 4.2 and Figure 5.2).
Jefferson Salamander (END)	Suitable habitat is present in the wooded area in the north end of the Study Area and in the adjacent Meadowvale Station Woods ANSI (Figure 4.2 and Figure 5.2).

Confirmed and Candidate Species at Risk habitat within the Study Area is shown on Figure 5.2.

5.8 Fish Habitat

According to Section 2(1) of the *Fisheries Act*, fish habitat includes spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes.

In the Study Area, direct fish habitat is present within the Credit River and Fletcher's Creek. Indirect habitat is provided by Harris Creek and the unnamed tributary.

5.9 City of Mississauga Natural Areas

As noted in Section 2.4, the City's OP identifies Significant Natural Areas across much of the Study Area, including the woodland areas along the Credit River and Fletcher's Creek and a Significant Natural Area and Natural Green Space. Smaller treed areas and hedgerows around the farmhouse and between old farm fields also have this designation. These smaller treed areas are outside of the Significant Woodlands boundaries and most of the other key natural features identified through this study.

5.10 Environmentally-sensitive or Significant Areas

According to Section 20 of the City's OP, ESAs are places where ecosystem functions or features warrant special protection. These may include but are not limited to rare or

Natural Heritage Report
December 2020

unique plant or animal populations or habitats' plant or animal communities, or concentrations of ecological functions. In the City, environmentally-sensitive or significant areas are inventoried and designated by Conservation Authorities and the Provincial Government.

As noted in Section 3.2.3, the Meadowvale Station Woods ESA coincides with the ANSI and additionally include lands along Fletcher's Creek.

6.0 Summary of Natural Features Present

The following Provincially Significant Natural Features are present or may be present:

- Significant Woodlands;
- Significant Valleylands;
- Confirmed Significant Wildlife Habitat¹⁰, including:
 - Terrestrial Crayfish;
 - Rare Vegetation Community (FOD7-4 ecosite)/ Rare Vegetation Communities/ Foraging Areas with Abundant Mast/ Highly Diverse Areas;
 - Deer Wintering Congregation/ Deer Wintering Area;
 - Seeps and Springs; and
 - Special Concern and Rare Wildlife Species, including:
 - Eastern Wood-pewee (Special Concern)
 - Monarch (*Danaus plexippus* – Special Concern)
- Candidate Significant Wildlife Habitat, including:
 - Bat Maternity Colonies/ Bat Maternal Roosts and Hibernacula
 - Raptor Wintering Area
 - Reptile Hibernacula/ Snake Hibernacula
 - Amphibian Breeding Habitat (Woodland)/ Amphibian Breeding Habitat (Forested Sites)
 - Marsh Breeding Bird Habitat
 - Turtle Wintering Areas/ Turtle Nesting Habitat and Turtle Overwintering Areas
- Confirmed Significant Habitat of Endangered and Threatened species, including:
 - Barn Swallow (THR)
 - Bobolink (THR)
 - Butternut (END)
 - American Eel (END)
 - Redside Dace (END)
- Candidate Significant Habitat of Endangered and Threatened species, including:
 - Little Brown Myotis (END)
 - Northern Myotis (END)

¹⁰ The first habitat listed is based on the provincial criteria. This is followed by the corresponding habitat based on the Peel-Caledon criteria, where applicable.

Natural Heritage Report
December 2020

- Tri-colored Bat (END)
 - Blanding's Turtle (THR)
 - Jefferson Salamander (END)
- Fish Habitat.

The following locally or regionally designated natural features are present:

- Meadowvale Woods Regional Life Science ANSI;
- Meadowvale Woods ESA; and
- City of Mississauga Natural Areas.

The Project File Report identified Alternative bridge and trail routes and provides an evaluation of the Alternatives based on their potential impact to natural features in conjunction with various other social, cultural and economic criteria. Potential impacts to natural features and recommended mitigation measures are also provided in the Project File Report.

7.0 References

Bird Studies Canada (BSC). March 2001. Ontario Breeding Bird Atlas Guide for Participants. 45 pp.

Cadman, M.D. et al. 2007. *Atlas of the Breeding Birds of Ontario, 2001-2005*. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp.

Chapman, L.J., and Putnam, D.F. 1984: *Physiography of Southern Ontario; Ontario Geological Survey*, Map P. 2715 (coloured). Scale 1:600 000.

Natural Heritage Information Centre (NHIC). 2019. *NHIC Biodiversity Explorer Website*. Ontario Ministry of Natural Resources. Retrieved July 2019 from <https://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/mainSubmit.do>

Ontario Ministry of Municipal Affairs and Housing (MMAH), 2014. *Provincial Policy Statement 2014 Under the Planning Act*. Ministry of Municipal Affairs and Housing, Provincial Planning Policy Branch, Toronto, ON M5G 2E5. 56 pp.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2015. *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E and 7E*.

Ontario Ministry of Natural Resources (MNRF). 2010. *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition*. Toronto: Queen's Printer for Ontario. 248 pp.

Ontario Ministry of Natural Resources (MNRF). 2000. *Significant Wildlife Habitat Technical Guide*. Fish and Wildlife Branch, Wildlife Section. Science Development and Transfer Branch, Southcentral Science Section. 151p. + appendices.

Ontario Ministry of Natural Resources (MNRF). 2019. *Species at Risk in Ontario (SARO) List*. Ontario Ministry of Natural Resources. Retrieved July 2019 from www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/246809.html

Ontario Ministry of Natural Resources (OMNR). August 2013. Survey Protocol for Eastern Meadowlark (*Sturnella magna*) in Ontario. Species at Risk Branch, Peterborough. ii + 20 pp.

D.W. Hoffman and N.R. Richards, 1953. Soil Map of Peel County Ontario, Soil Survey of Peel County by Report No. 18, (available at: http://sis.agr.gc.ca/cansis/publications/surveys/on/on18/on18_report.pdf)



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix A

Agency Correspondence

Tricia Radburn

From: Tricia Radburn
Sent: Tuesday, April 30, 2019 11:52 AM
To: jakub.kilis@cvc.ca
Subject: Park 505 Mississauga- Data Request
Attachments: 043764 Study Area.pdf

Jakub,

R.J. Burnside & Associated Ltd. has been retained to undertake some park planning work as well as an Environmental Assessment to support development of a park at the former Harris Farm lands in Mississauga (Hwy 401 and Creditview Rd.- see attached study area). The project will include design and construction of trails and two pedestrian bridges- one crossing the Credit River and one crossing Fletcher's Creek. The location of each bridge will be determined through the EA process.

We aim to send out a Notice of Commencement for the EA in the coming months. In the meantime, we are working to collect background data for the site. We are aware that an ANSI is present on the adjacent property and that Fletcher's Creek provides regulated habitat for reddsides.

At this time, we were hoping you would be able to:

- Provide any additional natural heritage records that CVC may have, including fish records;
- Provide hydraulic modeling for the CVC and Fletcher's Creek in the vicinity of the study area.

We will also be aiming to stake the woodland and wetland boundaries at the site in the coming months. We will be in touch at a later date to schedule that.

Please let me know if you require any additional information. We would be happy to meet with CVC to discuss the project in further detail if you feel that would be helpful.

Kind Regards,



Tricia Radburn, M.Sc.(PI), MCIP, RPP
Senior Environmental Planner

R.J. Burnside & Associates Limited
292 Speedvale Ave. Unit 20, Guelph, ON N1H 1C4
Office: [800-265-9662](tel:800-265-9662) Direct: [226-486-1778](tel:226-486-1778)
www.rjburnside.com



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix B

Background Records

Appendix B

MEADOWVALE STATION WOODS

1

Region of Peel	NAI Area # 3709, 3728	Credit Valley Conservation Authority
City of Mississauga	Size: 57 hectares	Watershed: Credit River
Con 3W, Lots 7-9	Ownership: 40% private, 60% public (City of Mississauga, MTC)	Subwatershed: Fletcher's Creek; Credit River: Norval to Port Credit

General Summary

This relatively large urban natural area is within the City of Mississauga, bisected by Highway 401 and east of Creditview Rd. This natural area occupies part of the east side of the Credit floodplain and valley wall, including the lower reaches and mouth of Fletchers Creek where it joins the Credit River.

The area has mature deciduous forest with vernal pools as well as floodplain communities. Biodiversity is high particularly for fauna and a variety of Species At Risk and provincially and regionally rare species are supported here. Floral biodiversity is high for an urban area but a large proportion of the flora is exotic and invasive species are widespread, possibly suppressing native floral biodiversity. This area is located in a key position providing linkage along two major corridors, the Credit River corridor and along Fletchers Creek, a major tributary of the Credit River.

NAI biologists have not inventoried this natural area. Instead the data set has been compiled from a variety of sources. Vegetation communities, plant species and breeding birds were inventoried by consultants for the Mississauga Natural Areas Survey (NAS). The NAS surveys were conducted 4 times between 1996 and 2009. This natural area corresponds with two NAS areas (part of CCR2, part of MV2). The NAS provides vegetation community coverage for 100% of the delineated area. Note that some of the NAS coverage extends beyond the area delineated here so some species reported for this area may not be present, but are found nearby.

CVC's Terrestrial Monitoring biologists have frequently and regularly visited a monitoring plot within this site from 2003 to the present. Their species observations from 2003 to 2009 are included in the data set reported on here (the CVC database is annually updated and thus will be the most current source at any point in time) although their data are restricted to the monitoring plot. Fish species were inventoried both within the natural area and from upstream and downstream sampling stations (Table 1). As there are no barriers between the downstream station and this natural area, and between the upstream station and this natural area, the data from downstream and upstream were extrapolated to this area.

Table 1: CVC Field Visits

Visit Date	Inventory Type
12 June 1989	Fish
13 Aug. 1996	Fish
18 Sept. 1997	Fish
29 July 1999	Fish
05 May 2000	Fish

24 Aug. 2000	Fish
13 Sept. 2000	Fish
02 Aug. 2001	Fish
17 June 2003	Fish

Natural Feature Classifications and Planning Areas

This natural area is part of:

Life Science ANSI - regionally significant Meadowvale Station Woods
ESA - Meadowvale Station Woods ESA

Physical Features

This area is in the South Slope physiographic region; characterized by low-lying ground moraines. Soils of this region tend to be clay loams with pore sizes between soil particles so small that absorption of groundwater into aquifers is slow.

Fletcher's Creek flows through this natural area and joins the Credit River a short distance south of this area. The Credit River borders the western edge of this area.

Human History

The nearby community of Meadowvale in the vicinity of 2nd Line W. and Old Derry Rd. was first settled by United Empire Loyalists from New York State in 1819. Due to a lack of roads, the settlers came up the river on boats and rafts from what is now Port Credit. At that time, Meadowvale was densely covered by White Pine forest. Each family was granted 200 acres in return for clearing a portion of it and building a dwelling. Many of the pines were sold for shipbuilding. Early industry included a sawmill, grist mill, wool carding mill, blacksmith, carriage shop and foundry for making farm implements (Anonymous, 2009; Hicks, 2004). From this we can infer that logging, crop-raising, and livestock-rearing were common land uses in the surrounding countryside.

While much of the land surrounding this natural area was once farmed, farming now only continues to the west. Parts of this natural area may have been logged in recent decades. This natural area is bisected by Highway 401 a major expressway. The highway is fenced with chain-link fencing. The north half of the area has a limited network of trails that are moderately used for passive recreation. The north section of this natural area is bordered on its east side by 2nd Line, to the northwest by a residential street (Lamplight Way), by agricultural fields on the west side and by Highway 401 to the south. A recent, dense residential development is adjacent to the northwest corner of this section. The southern section of the natural area is bordered by Highway 401 to the north, by 2nd Line to the northeast, by the Credit River to the south and west and by a dense, relatively recent residential development on the east side. The south section of the natural area appears to be highly fragmented by the agricultural fields, however this is not because the fields have been cut into the natural communities, but rather because parts of the farm not actively cultivated, including wet areas along small drainage ditches, a riparian buffer along the Credit River and areas between fields, have been allowed to regenerate natural vegetation. Thus the appearance of fragmentation is the result of natural regeneration and not destruction of natural communities.

Vegetation Communities

For the most part, the vegetation community mapping generated by the Mississauga NAS coincides with the NAI natural area delineations in Mississauga although there are some small discrepancies. Part of this could be due to real changes in community boundaries between the years that the mapping and area delineation were done. Other factors that may contribute to discrepancies are differing ways of defining edges of communities and differing levels of resolution in mapping. The Vegetation Communities map following this text illustrates the discrepancies. Values for community sizes and proportions making up the natural area are taken from the NAS mapping.

The general community types present are deciduous forest (77%), cultural savannah (13%) and plantation (1%).

A total of eight vegetation communities of five different types were mapped by the NAS for this area (City of Mississauga, 2006a, 2006b; Table 2). One community was classified only to ecosite level.

Table 2: ELC Vegetation Communities

Map reference *	Vegetation type	Size in hectares	% of natural area
FOD6-5	Fresh-Moist Sugar Maple - Hardwood Deciduous Forest (2 communities)	34.15	59.81
FOD7-3	Fresh-Moist Willow Lowland Deciduous Forest (2 communities)	8.09	14.16
FOD7-4	Bur Oak-Black Walnut Forest (2 communities)	1.91	3.34
CUS1-1	Hawthorn Cultural Savannah	7.33	12.84
CUP3	Coniferous Plantation Ecosite	0.83	1.45
	TOTAL AREA INVENTORIED	52.31	

* Note: The map reference code refers to the vegetation type shown on mapping for this area and also to the Appendix list of species typically encountered in this vegetation type.

Species Presence

A data-sensitive species occurs at this site. The CVC Data Management Technician should be contacted for further details.

Vascular Plants

Plant biodiversity is high in this area, for an urban site. A total of 254 vascular plant species are recorded for this area, of which 160 (63%) are native. Ten species are regionally rare (Table 4). Spring ephemeral species including May Apple (*Podophyllum peltatum*), Claytonia Spring Beauty (*Claytonia virginica*) and Bloodroot (*Sanguinaria canadensis*) are abundant. Historic records of the nationally and provincially Threatened Butternut (*Juglans cinerea*) exist for this site.

Birds

Breeding bird diversity is high in this natural area. A total of 71 breeding bird species are recorded here, of which 68 (96%) are native. Three of these are Species At Risk (Table 3). Bobolink (*Dolichonyx oryzivorus*) is Threatened both nationally and provincially and both Barn Swallow (*Hirundo rustica*) and Eastern Meadowlark (*Sturnella magna*) are Threatened nationally. The provincially rare Black-crowned Night-heron (*Nycticorax nycticorax*; S-rank S3) was observed.

This site supports eight species of colonial-nesting birds, namely Great Blue Heron (*Ardea herodias*), Great Egret (*Ardea alba*), Black-crowned Night Heron, Green Heron (*Butorides virescens*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), Bank Swallow (*Riparia riparia*), Barn Swallow and Cliff Swallow (*Petrochelidon pyrrhonota*). The site also supports two species of waterfowl, Wood Duck (*Aix sponsa*) and Mallard (*Anas platyrhynchos*). Interior forest habitat is present here, supporting four species of area-sensitive forest interior birds, namely Hairy Woodpecker (*Picoides villosus*), Pileated Woodpecker (*Dryocopus pileatus*), Red-breasted Nuthatch (*Sitta canadensis*) and Ovenbird (*Seiurus aurocapilla*). Open and early successional communities as well as adjacent agricultural fields provide habitat for breeding of nine species of grassland birds, American Kestrel (*Falco sparverius*), Horned Lark (*Eremophila alpestris*), Vesper Sparrow (*Pooecetes gramineus*), Bobolink, Eastern Meadowlark, Savannah Sparrow (*Passerculus sandwichensis*), Eastern Kingbird (*Tyrannus tyrannus*), Field Sparrow (*Spizella pusilla*) and Willow Flycatcher (*Empidonax traillii*). Three of these grassland bird species, Bobolink, Eastern Meadowlark, and Savannah Sparrow, are area-sensitive. The area also supports at least one raptor species, Cooper's Hawk (*Accipiter cooperii*).

Fish

A total of 24 species of fish are recorded in the area, of which 22 (92%) are native. Two additional species are known historically (1984). One of the fish species occurring here, Redside Dace (*Clinostomus elongates*), is Endangered nationally and provincially (Table 3). Redside Dace is also provincially rare. Brassy Minnow (*Hybognathus hankinsoni*) and Iowa Darter (*Etheostoma exile*) occur at this site, one of only a few locations where these species have been detected in the Credit River watershed. This natural area supports mixed warm/cool water fish communities.

Herpetofauna

Twelve herpetofaunal species are recorded incidentally from this site, all of which are native. Two Species At Risk are supported here (Table 3). Eastern Snapping Turtle (*Chelydra serpentina*) is designated Special Concern both nationally and provincially, and Western Chorus Frog (*Pseudacris triseriata*) is Threatened nationally. Eastern Snapping Turtle is also provincially rare.

Bullfrogs (*Rana catesbeiana*) occur at this site. The remaining herpetofaunal species consist of five frog/toad species, one snake species and three salamander species. Historic records exist for Midland Painted Turtle (*Chrysemys picta marginata*; from 1975) and Common Water Snake (*Nerodia sipedon sipedon*; from 1975; City of Mississauga, 2006a, 2006b).

Mammals

Eleven native mammal species were detected incidentally at this site. Long-tailed Weasel (*Mustela frenata*) and Mink (*Mustela vison*) are present.

Table 3: Designated Species At Risk

Scientific name	Common name	COSEWIC	COSSARO	S rank	G rank
BIRDS					
<i>Hirundo rustica</i>	Barn Swallow	THR		S5B	G5
<i>Dolichonyx oryzivorus</i>	Bobolink	THR	THR	S4B	G5
<i>Sturnella magna</i>	Eastern Meadowlark	THR		S5B	G5
Herpetofauna					
<i>Chelydra serpentina</i>	Eastern Snapping Turtle	SC	SC	S3	G5T5
<i>Pseudacris triseriata</i>	Western Chorus Frog	THR		S4	G5
Fish					
<i>Clinostomus elongatus</i>	Redside Dace	END	END	S2	G4

Table 4: Regionally Rare Vascular Plant Species (Kaiser, 2001)

Scientific name	Common name	S rank	G rank
VASCULAR PLANTS			
<i>Carex grayi</i>	Asa Gray Sedge	S4	G4
<i>Collinsonia canadensis</i>	Canada Horse-balm	S4	G5
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5	G5
<i>Lysimachia terrestris</i>	Swamp Loosestrife	S5	G5
<i>Physocarpus opulifolius</i>	Eastern Ninebark	S5	G5
<i>Platanus occidentalis</i>	Sycamore	S4	G5
<i>Polygonum punctatum</i>	Dotted Smartweed	S5	G5
<i>Quercus bicolor</i>	Swamp White Oak	S4	G5
<i>Salix nigra</i>	Black Willow	S4?	G5
<i>Symphotrichum pilosum</i> var. <i>pilosum</i>	White Heath Aster variety	S5	G5T5

Site Condition and Disturbances

This remains a relatively large urban forested area with mature forest. Parts of it may have been historically logged but have regenerated nicely.

Non-native and invasive species are common, with notable problematic invasive species being Garlic Mustard (*Alliaria petiolata*), Tartarian Honeysuckle (*Lonicera tatarica*), Common Buckthorn (*Rhamnus*

cathartica), Dog-strangling Vine (*Cynanchum rossicum*), Manitoba Maple (*Acer negundo*), Dame's Rocket (*Hesperis matronalis*) and Japanese Knotweed (*Polygonum cuspidatum*).

Well-marked trails pass through this natural area and sustain moderate recreational use. Moderate litter is found on the natural area edges along 2nd Line West and Highway 401.

Noise levels are moderate to high throughout the area, especially near Highway 401 and overhead from airplane traffic to and from nearby Pearson Airport.

Tree diseases include Beech Bark Disease. Past observations of Butternut trees may have succumbed to Butternut Canker.

Severe erosion occurs along Fletcher's Creek and mature trees and their root masses have been recently dislodged from the bank and now lie prostrate across the creek (L. Wallis, pers. comm., 2011). Fletcher's Creek passes through Brampton and part of Mississauga. Increased development within this area has likely resulted in increased runoff from impermeable surfaces (e.g. pavement) creating intermittent flooding during storms. This flooding can cause erosion along banks.

Ecological Features and Functions

All of this natural area is included in the regionally significant Meadowvale Station Woods Life Science ANSI and the Meadowvale Station Woods ESA (valley related).

With forest communities greater than 2 ha, this natural area has the potential to support and sustain biodiversity, healthy ecosystem functions and to provide long-term resilience for the natural system. The riparian area provides a transitional zone between terrestrial and aquatic habitats, helping to maintain the water quality of the creek and providing a movement corridor for plants and wildlife.

This area is well-connected with other natural areas along the Credit River corridor via the floodplain. Meadowvale Village is an old community and the homes along 2nd Line are older with mature landscaping and tree cover. This urban tree cover forms a second linkage of this natural area with Credit River floodplain greenlands and natural habitat patches to the north of Old Derry Rd. This area also has connectivity along the vegetated Fletchers Creek valley corridor, across 2nd Line and stretching to the northeast. The relatively close proximity of other areas of natural habitat creates above-average potential for wildlife movement between natural areas, species dispersal and recovery from disturbance, creating additional resilience for the ecosystem.

Fletcher's Creek, a major tributary of the Credit River, runs through this area and as well, the main Credit borders this area, thus supporting the connectivity function of the Credit River and its tributaries by providing a natural habitat corridor that facilitates the cross-regional movement of wildlife along this corridor between major provincial corridors.

A data-sensitive species occurs at this site.

This site contains vernal pools.

This area contains habitat that supports six Species At Risk (three bird species, one turtle species, one frog species, one fish species). The area also supports three provincially rare species (one bird species, one turtle species, one fish species) and ten regionally rare plant species.

This area contains interior forest habitat, supporting four species of forest interior birds.

This area and the adjacent supporting agricultural fields provide breeding habitat for nine species of grassland birds, of which three are area-sensitive. This area supports eight species of colonial-nesting birds, two waterfowl species and at least one raptor species.

This area supports Bullfrogs. This area supports amphibian breeding. This area may also support turtle breeding.

Based on the above features, this area should be evaluated to determine if significant wildlife habitat is present in accordance with the Provincial Policy Statement, Region of Peel Official Plan, and area municipal Official Plan.

Opportunities

As a large portion of this natural area is public, opportunities exist to map, monitor and potentially control invasive species here. The use of the area by the public also presents an opportunity for educational messaging and awareness-raising by various means on themes revolving around the ecology of the area, environmental stewardship and restoration.

Maintenance and enhancement where possible of natural buffers along the Credit River and Fletchers Creek is encouraged, where these watercourses pass through agricultural and residential areas. Also encouraged is the maintenance of natural linkage between each of the two sections of this natural area and adjacent natural and successional habitat. Unfortunately the two halves of this area are mutually isolated by Hwy. 401 for all but the most mobile species, however indirect linkage is possible via the Credit corridor.

Road mortality is a problem along 2nd Line W. adjacent to this natural area. Mammals including White-tailed Deer and Raccoon have been found dead and on the shoulder of the road (pers. comm., L. Wallis, 2011). This road receives increased traffic as a number of residences have recently been built, and are still being built, both along 2nd Line W. and in subdivisions coming off of it.

Dumping of construction waste is an issue along 2nd Line W. next to this natural area (L. Wallis, pers. comm., 2011).

Mink are present and a search for den sites is warranted.

Given the presence of the main Credit River plus a tributary stream offering different types of stream habitat, plus the presence of vernal pools and open grassland/savannah areas targeted inventories for butterflies and dragonflies/damselflies would likely be productive.

Literature Cited

Anonymous. 2009. **The Village of Meadowvale**. Available at <http://heritagemississauga.com> Last Accessed 23 November 2010.

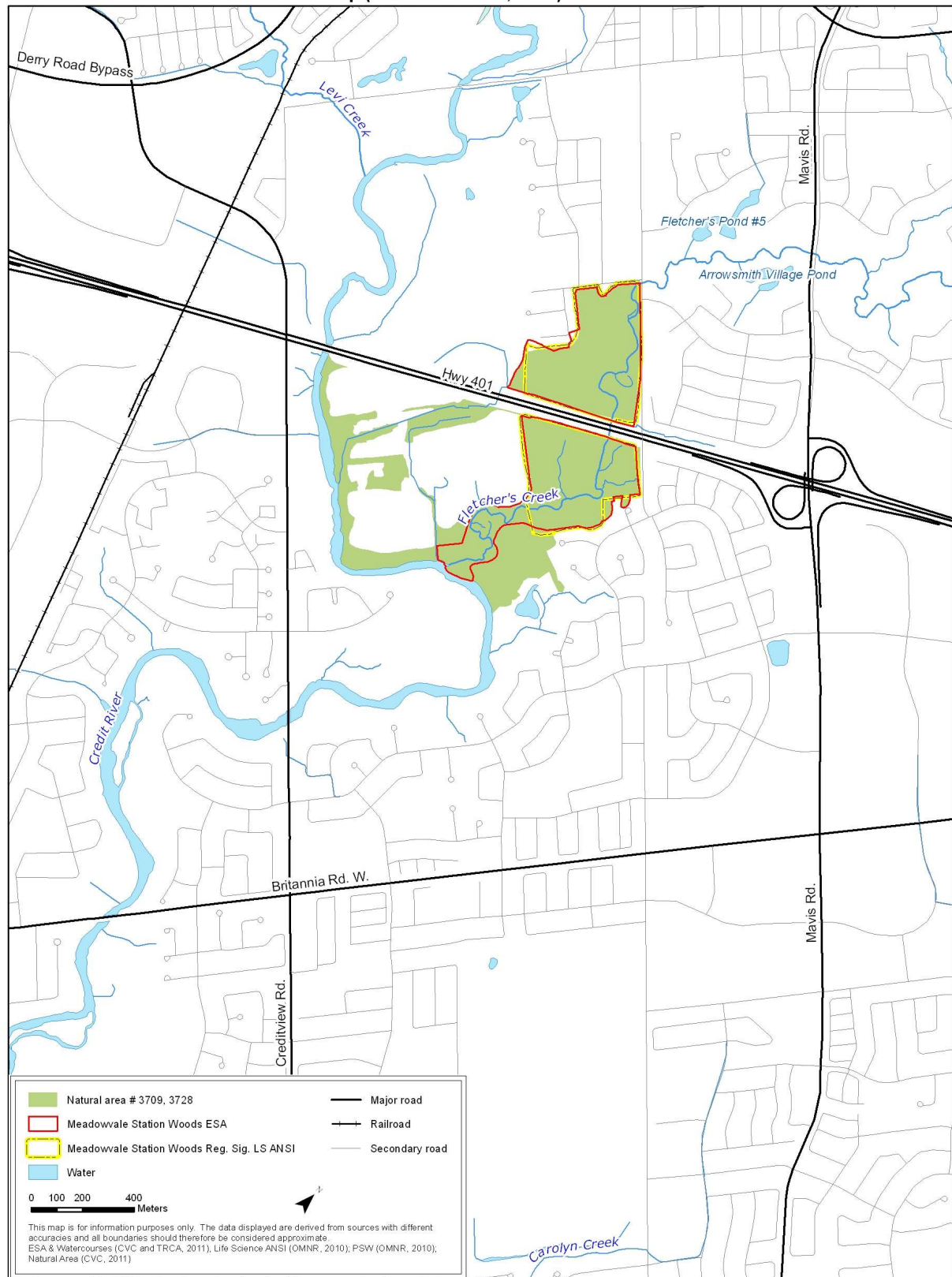
City of Mississauga. 2006a. **Natural Areas Fact Sheet Meadowvale Station Woods MV2**. Available at <http://www.mississauga.ca/> Last Accessed 01 April, 2010.

City of Mississauga. 2006b. **Natural Areas Fact Sheet Credit River CRR2**. Available at <http://www.mississauga.ca/> Last Accessed 01 April, 2010.

Hicks, K.A. 2004. **Meadowvale: Mills to Millennium**. Friends of the Mississauga Library, Mississauga, Ontario.

Kaiser, J. 2001. **The Vascular Plant Flora of the Region of Peel and the Credit River Watershed**. Prepared for: Credit Valley Conservation, the Regional Municipality of Peel, Toronto and Region Conservation Authority.

Meadowvale Station Woods Context Map (NAI Area # 3709, 3728)



Meadowvale Station Woods Vegetation Communities Map (NAI Area # 3709, 3728)



Natural Heritage Information Center Database Search Results

Square #	Element Type	Common Name	Scientific Name	SRank	SARO Sta	COSEWIC	Last Obs Date	EO ID	Details URL
17PJ0329	NATURAL AREA	Meadowvale Station Woods						1420	http://nhic.mnr.gov.on.ca/natural_areas/areas.php?source=MaMNHA&feature=NA&areaid=1420
17PJ0329	SPECIES	Redside Dace	Clinostomus elongatus	S2	END	END	7/29/1999	7798	http://nhic.mnr.gov.on.ca/reports/public_details.php?source=1kmgriddetail&nhic_eo_id=7798
17PJ0329	SPECIES	Henslow's Sparrow	Ammodramus henslowii	SHB	END	END	7/11/1932	13074	http://nhic.mnr.gov.on.ca/reports/public_details.php?source=1kmgriddetail&nhic_eo_id=13074
17PJ0329	NATURAL AREA	CREDIT MEADOWS PARK						19009	http://nhic.mnr.gov.on.ca/natural_areas/areas.php?source=MaMNHA&feature=NA&areaid=19009
17PJ0229	SPECIES	Redside Dace	Clinostomus elongatus	S2	END	END	7/29/1999	7798	http://nhic.mnr.gov.on.ca/reports/public_details.php?source=1kmgriddetail&nhic_eo_id=7798
17PJ0229	SPECIES	Henslow's Sparrow	Ammodramus henslowii	SHB	END	END	7/11/1932	13074	http://nhic.mnr.gov.on.ca/reports/public_details.php?source=1kmgriddetail&nhic_eo_id=13074

Ontario Breeding Bird Atlas Results

Region	Square	Species	Breeding Evidence				Point Counts			
			Max BE	Categ	#Sq	Atlasser Name	#PC	%PC	Abun	#Sq
10	17PJ02	Canada Goose	FY	CONF	1	Luke Fazio	1	2.86	0.1714	1
10	17PJ02	Wood Duck	FY	CONF	1	Luke Fazio				
10	17PJ02	Mallard	FY	CONF	1	Luke Fazio				
10	17PJ02	Green Heron	V	PROB	1	Luke Fazio				
10	17PJ02	Turkey Vulture	H	POSS	1	Luke Fazio				
10	17PJ02	Sharp-shinned Hawk	CF	CONF	1	Luke Fazio	2	5.71	0.0857	1
10	17PJ02	Red-tailed Hawk	FY	CONF	1	2 atlassers				
10	17PJ02	American Kestrel	AE	CONF	1	Mark Cranford	1	2.86	0.0857	1
10	17PJ02	Peregrine Falcon	NY	CONF	1	2 atlassers				
10	17PJ02	Killdeer	FY	CONF	1	2 atlassers	4	11.43	0.1143	1
10	17PJ02	Rock Pigeon	NE	CONF	1	Luke Fazio	2	5.71	0.1714	1
10	17PJ02	Spotted Sandpiper	FY	CONF	1	Luke Fazio				
10	17PJ02	Common Snipe	D	PROB	1	Luke Fazio				
10	17PJ02	American Woodcock	H	POSS	1	Luke Fazio				
10	17PJ02	Mourning Dove	NY	CONF	1	Roy Smith	10	28.57	0.4571	1
10	17PJ02	Yellow-billed Cuckoo	T	PROB	1	Luke Fazio				
10	17PJ02	Black-billed Cuckoo	P	PROB	1	Luke Fazio				
10	17PJ02	Eastern Screech-Owl	A	PROB	1	Luke Fazio				
10	17PJ02	Great Horned Owl	S	POSS	1	Luke Fazio				
10	17PJ02	Common Nighthawk	H	POSS	1	Luke Fazio				
10	17PJ02	Chimney Swift	V	PROB	1	Luke Fazio				
10	17PJ02	Belted Kingfisher	CF	CONF	1	Luke Fazio				
10	17PJ02	Downy Woodpecker	AE	CONF	1	Luke Fazio	1	2.86	0.0286	1
10	17PJ02	Hairy Woodpecker	FY	CONF	1	Luke Fazio				
10	17PJ02	Northern Flicker	FY	CONF	1	Luke Fazio	1	2.86	0.0286	1
10	17PJ02	Pileated Woodpecker	FY	CONF	1	Luke Fazio				
10	17PJ02	Eastern Wood-Pewee	CF	CONF	1	Luke Fazio	4	11.43	0.1143	1
10	17PJ02	Alder Flycatcher	H	POSS	1		1	2.86	0.0286	1
10	17PJ02	Willow Flycatcher	T	PROB	1	Luke Fazio				
10	17PJ02	Least Flycatcher	S	POSS	1	Luke Fazio				
10	17PJ02	Eastern Phoebe	AE	CONF	1	Luke Fazio				
10	17PJ02	Great Crested Flycatcher	CF	CONF	1	Luke Fazio	4	11.43	0.1714	1
10	17PJ02	Eastern Kingbird	FY	CONF	1	Luke Fazio	1	2.86	0.0286	1
10	17PJ02	Warbling Vireo	FY	CONF	1	Luke Fazio				
10	17PJ02	Red-eyed Vireo	CF	CONF	1	Luke Fazio	6	17.14	0.1714	1
10	17PJ02	Blue Jay	FY	CONF	1	Luke Fazio	6	17.14	0.2	1
10	17PJ02	American Crow	FY	CONF	1	3 atlassers	10	28.57	0.5714	1
10	17PJ02	Horned Lark	FY	CONF	1	Luke Fazio				
10	17PJ02	Purple Martin	V	PROB	1	Luke Fazio				
10	17PJ02	Tree Swallow	AE	CONF	1	Luke Fazio				
10	17PJ02	Northern Rough-winged Swallow	FY	CONF	1	Luke Fazio				
10	17PJ02	Bank Swallow	CF	CONF	1	Luke Fazio				

 SAR in Ontario

Ontario Breeding Bird Atlas Results

Region	Square	Species	Breeding Evidence				Point Counts			
			Max BE	Categ	#Sq	Atlasser Name	#PC	%PC	Abun	#Sq
10	17PJ02	Cliff Swallow	NY	CONF	1	Luke Fazio				
10	17PJ02	Barn Swallow	FY	CONF	1	Luke Fazio	1	2.86	0.0571	1
10	17PJ02	Black-capped Chickadee	FY	CONF	1	3 atlassers	7	20	0.2286	1
10	17PJ02	White-breasted Nuthatch	A	PROB	1	Mark Cranford				
10	17PJ02	Brown Creeper	H	POSS	1	Alan Wormington				
10	17PJ02	Carolina Wren	S	POSS	1	Luke Fazio				
10	17PJ02	House Wren	CF	CONF	1	Luke Fazio	2	5.71	0.0571	1
10	17PJ02	Veery	S	POSS	1	Luke Fazio				
10	17PJ02	Wood Thrush	S	POSS	1	Luke Fazio	2	5.71	0.1143	1
10	17PJ02	American Robin	CF	CONF	1	2 atlassers	19	54.29	0.8571	1
10	17PJ02	Gray Catbird	CF	CONF	1	Mark Cranford				
10	17PJ02	Northern Mockingbird	NY	CONF	1	Roy Smith	1	2.86	0.0286	1
10	17PJ02	Brown Thrasher	T	PROB	1	Luke Fazio				
10	17PJ02	European Starling	CF	CONF	1	Roy Smith	21	60	2.3714	1
10	17PJ02	Cedar Waxwing	FY	CONF	1	Luke Fazio	2	5.71	0.0571	1
10	17PJ02	Yellow Warbler	CF	CONF	1	Luke Fazio				
10	17PJ02	Pine Warbler	CF	CONF	1	Luke Fazio				
10	17PJ02	American Redstart	CF	CONF	1	Luke Fazio				
10	17PJ02	Ovenbird	S	POSS	1	2 atlassers	1	2.86	0.0286	1
10	17PJ02	Northern Waterthrush	S	POSS	1	Luke Fazio				
10	17PJ02	Mourning Warbler	T	PROB	1	Luke Fazio				
10	17PJ02	Common Yellowthroat	S	POSS	1	Luke Fazio				
10	17PJ02	Eastern Towhee	S	POSS	1	Luke Fazio				
10	17PJ02	Chipping Sparrow	FY	CONF	1	Luke Fazio	3	8.57	0.0857	1
10	17PJ02	Field Sparrow	CF	CONF	1	Mark Cranford				
10	17PJ02	Savannah Sparrow	CF	CONF	1	Luke Fazio	5	14.29	0.2	1
10	17PJ02	Song Sparrow	CF	CONF	1	Luke Fazio	9	25.71	0.3143	1
10	17PJ02	Swamp Sparrow	H	POSS	1	Luke Fazio				
10	17PJ02	Scarlet Tanager	P	PROB	1	Luke Fazio				
10	17PJ02	Northern Cardinal	FY	CONF	1	Luke Fazio	13	37.14	0.4857	1
10	17PJ02	Rose-breasted Grosbeak	FY	CONF	1	2 atlassers	1	2.86	0.0286	1
10	17PJ02	Indigo Bunting	CF	CONF	1	Luke Fazio	3	8.57	0.0857	1
10	17PJ02	Bobolink	CF	CONF	1	Luke Fazio				
10	17PJ02	Red-winged Blackbird	CF	CONF	1	2 atlassers	10	28.57	2.1143	1
10	17PJ02	Eastern Meadowlark	FY	CONF	1	Luke Fazio				
10	17PJ02	Common Grackle	CF	CONF	1	2 atlassers	9	25.71	0.9714	1
10	17PJ02	Brown-headed Cowbird	NY	CONF	1	Mark Cranford	1	2.86	0.0286	1
10	17PJ02	Orchard Oriole	S	POSS	1	Alfred L. Adamo				
10	17PJ02	Baltimore Oriole	CF	CONF	1	Winnie Poon	1	2.86	0.0286	1
10	17PJ02	House Finch	FY	CONF	1	Luke Fazio				
10	17PJ02	American Goldfinch	FY	CONF	1	Luke Fazio	14	40	0.6286	1

Ontario Breeding Bird Atlas Results

Region	Square	Species	Breeding Evidence				Point Counts			
			Max BE	Categ	#Sq	Atlasser Name	#PC	%PC	Abun	#Sq
10	17PJ02	House Sparrow	AE	CONF	1	Mark Cranford	15	42.86	1.1714	1

Ontario Reptile and Amphibian Atlas Results

Square #	Common Name	Number of Individuals	Year of Observation	Month of Observation	Calendar Day of Observation	Observation Id
17PJ02	American Bullfrog	1	2012	September	15	108649
17PJ02	American Toad	1	2018	June	28	475069
17PJ02	Blanding's Turtle	1	2015	July	21	346868
17PJ02	Blue-spotted Salamander	2	2017	August	11	456900
17PJ02	Dekay's Brownsnake	1	2018	August	16	476088
17PJ02	Eastern Gartersnake	2	2018	June	17	474089
17PJ02	Eastern Red-backed Salamander	6	2018	April	30	473744
17PJ02	Eastern Ribbonsnake	1	1952	July		413364
17PJ02	Gray Treefrog	1	1990	June	1	103841
17PJ02	Green Frog	1	2018	September	15	477473
17PJ02	Jefferson Salamander	1	2004	April	24	419911
17PJ02	Jefferson/Blue-spotted Salamander Complex	1	1989	March	13	103908
17PJ02	Jefferson/Blue-spotted Salamander Hybrid	1	1990	July	11	102660
17PJ02	Midland Painted Turtle	1	2018	May	14	473629
17PJ02	Milksnake	2	2018	May	27	472166
17PJ02	Mudpuppy	1	1951	May	27	105722
17PJ02	Northern Leopard Frog	1	2016	March	31	358440
17PJ02	Northern Map Turtle	1	2015	July	27	346725
17PJ02	Northern Watersnake	1	1990	June	1	107113
17PJ02	Red-bellied Snake	1	1990	May	31	103804
17PJ02	Snapping Turtle	1	2018	June	4	472503
17PJ02	Spotted Salamander	1	1990	July	11	102657
17PJ02	Spring Peeper	2	2010	May	22	104563
17PJ02	Western Chorus Frog	1	2012	March	21	108631
17PJ02	Wood Frog	1	1990	July	11	102658

 SAR in Ontario or listed on SARA (federal) or COSEWIC

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Bird	Accipiter cooperii	Cooper's Hawk	Creditview Rd. at Falconer	NAR		NAR	G5	\$4	2				
Bird	Accipiter cooperii	Cooper's Hawk	Meadowvale Station Woods	NAR		NAR	G5	\$4	2				
Bird	Accipiter cooperii	Cooper's Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	\$4	2				
Bird	Accipiter cooperii	Cooper's Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	\$4	2				
Bird	Accipiter cooperii	Cooper's Hawk	Harris Farm - Creditview Rd & Hwy 401	NAR		NAR	G5	\$4	2				
Bird	Accipiter striatus	Sharp-shinned Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	\$5	3				
Bird	Accipiter striatus	Sharp-shinned Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	\$5	3				
Bird	Accipiter striatus	Sharp-shinned Hawk	Meadowvale Station Woods	NAR		NAR	G5	\$5	3				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods South				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Credit Meadows Park - SWH Waterfowl Survey				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Harris Farm - Creditview Rd & Hwy 401				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Agelaius phoeniceus	Red-winged Blackbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	4				
Bird	Aix sponsa	Wood Duck	Meadowvale Station Woods South				G5	\$5	2				
Bird	Aix sponsa	Wood Duck	Meadowvale Station Woods				G5	\$5	2				
Bird	Anas platyrhynchos	Mallard	Meadowvale Station Woods South				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Credit Meadows Park - SWH Waterfowl Survey				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Harris Farm - Raptor Wintering Areas Survey				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Harris Farm - Raptor Wintering Areas Survey				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Harris Farm - Raptor Wintering Areas Survey				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Harris Farm - Raptor Wintering Areas Survey				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5	4				
Bird	Anas platyrhynchos	Mallard	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5	4				
Bird	Archilochus colubris	Ruby-throated Hummingbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Archilochus colubris	Ruby-throated Hummingbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Archilochus colubris	Ruby-throated Hummingbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Ardea herodias	Great Blue Heron	Credit Meadows Park - SWH Waterfowl Survey				G5	\$4	3				
Bird	Ardea herodias	Great Blue Heron	Harris Farm - Raptor Wintering Areas Survey				G5	\$4	3				
Bird	Ardea herodias	Great Blue Heron	Harris Farm - Raptor Wintering Areas Survey				G5	\$4	3				
Bird	Ardea herodias	Great Blue Heron	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	3				
Bird	Ardea herodias	Great Blue Heron	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$4	3				
Bird	Ardea herodias	Great Blue Heron	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$4	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Harris Farm - CVC Breeding Bird Survey				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Harris Farm - Creditview Rd & Hwy 401				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Bombycilla cedrorum	Cedar Waxwing	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	\$5B	3				
Bird	Branta canadensis	Canada Goose	Credit Meadows Park - SWH Waterfowl Survey				G5	\$5	4				
Bird	Branta canadensis	Canada Goose	Harris Farm - Raptor Wintering Areas Survey				G5	\$5	4				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Branta canadensis	Canada Goose	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Branta canadensis	Canada Goose	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Branta canadensis	Canada Goose	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Branta canadensis	Canada Goose	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Branta canadensis	Canada Goose	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Branta canadensis	Canada Goose	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Branta canadensis	Canada Goose	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Bubo virginianus	Great Horned Owl	Meadowvale Station Woods				G5	S4	3				
Bird	Bubo virginianus	Great Horned Owl	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4	3				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods South	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Creditview at Hwy. 401	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Winter Raptor Sightings	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Raptor Report	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Creditview at Hwy. 401	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Creditview at Hwy. 401	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - CVC Breeding Bird Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - CVC Breeding Bird Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Raptor Wintering Areas Survey	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Harris Farm - Creditview Rd & Hwy 401	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	NAR		NAR	G5	S5	4				
Bird	Buteo jamaicensis	Red-tailed Hawk	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	NAR		NAR	G5	S5	4				
Bird	Butorides virescens	Green Heron	2nd Line West and Sombbrero Way, Mississauga				G5	S4B	2				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods South				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods South				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Harris Farm - Creditview Rd & Hwy 401				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4	</			

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Cardinalis cardinalis	Northern Cardinal	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D										

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	SC	SC	SC	G5	S4B	1				
Bird	Contopus virens	Eastern Wood-pewee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D										

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Dumetella carolinensis	Gray Catbird	Harris Farm - Creditview Rd & Hwy 401				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Dumetella carolinensis	Gray Catbird	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Geothlypis philadelphia	Mourning Warbler	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Geothlypis trichas	Common Yellowthroat	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Geothlypis trichas	Common Yellowthroat	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Geothlypis trichas	Common Yellowthroat	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Geothlypis trichas	Common Yellowthroat	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Haemorhous mexicanus	House Finch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	SNA	5				
Bird	Hirundo rustica	Barn Swallow	Harris Farm - CVC Breeding Bird Survey	THR	THR	THR	G5	S4B	1				
Bird	Hirundo rustica	Barn Swallow	Harris Farm - Creditview Rd & Hwy 401	THR	THR	THR	G5	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Hylocichla mustelina	Wood Thrush	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D	THR	THR	SC	G4	S4B	1				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Icterus galbula	Baltimore Oriole	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Junco hyemalis	Dark-eyed Junco	Harris Farm - Raptor Wintering Areas Survey				G5	S5B	2				
Bird	Larus delawarensis	Ring-billed Gull	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B,S4N	2				
Bird	Larus delawarensis	Ring-billed Gull	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B,S4N	2				
Bird	Larus delawarensis	Ring-billed Gull	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B,S4N	2				
Bird	Larus delawarensis	Ring-billed Gull	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B,S4N	2				
Bird	Larus delawarensis	Ring-billed Gull	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B,S4N	2				
Bird	Larus sp.	Gull species	Harris Farm - Raptor Wintering Areas Survey										
Bird	Megasceryle alcyon	Belted Kingfisher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melanerpes carolinus	Red-bellied Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4	2				
Bird	Melospiza melodia	Song Sparrow	Credit Meadows Park - SWH Waterfowl Survey				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Harris Farm - CVC Breeding Bird Survey				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Harris Farm - CVC Breeding Bird Survey				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Harris Farm - CVC Breeding Bird Survey				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Harris Farm - Creditview Rd & Hwy 401				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Melospiza melodia	Song Sparrow	Meadowvale Station Woods										

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Myiarchus crinitus	Great Crested Flycatcher	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Oreothlypis peregrina	Tennessee Warbler	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	2				
Bird	Passer domesticus	House Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	SNA	5				
Bird	Passer domesticus	House Sparrow	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	SNA	5				
Bird	Passerculus sandwichensis	Savannah Sparrow	Harris Farm - CVC Breeding Bird Survey				G5	S4B	4				
Bird	Passerina cyanea	Indigo Bunting	Harris Farm - CVC Breeding Bird Survey				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Harris Farm - Creditview Rd & Hwy 401				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Passerina cyanea	Indigo Bunting	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Petrochelidon pyrrhonota	Cliff Swallow	Credit Meadows Park - SWH Waterfowl Survey				G5	S4B	3				
Bird	Pheucticus ludovicianus	Rose-breasted Grosbeak	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Pheucticus ludovicianus	Rose-breasted Grosbeak	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Pheucticus ludovicianus	Rose-breasted Grosbeak	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Picoides pubescens	Downy Woodpecker	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Harris Farm - Creditview Rd & Hwy 401				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides pubescens	Downy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	4				
Bird	Picoides villosus	Hairy Woodpecker	Harris Farm - Raptor Wintering Areas Survey				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Harris Farm - Creditview Rd & Hwy 401				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Picoides villosus	Hairy Woodpecker	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5	3				
Bird	Piranga olivacea	Scarlet Tanager	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S4B	3				
Bird	Piranga olivacea	Scarlet Tanager	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Piranga olivacea	Scarlet Tanager	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Piranga olivacea	Scarlet Tanager	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S4B	3				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods South				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Harris Farm - Creditview Rd & Hwy 401				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Poecile atricapillus	Black-capped Chickadee	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird													

Plant and Wildlife Species Records Provided by Credit Valley Conservation

[illegible]

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B	4				
Bird	Spinus tristis	American Goldfinch	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	\$5B					

Plant and Wildlife Species Records Provided by Credit Valley Conservation

[illegible]

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Vireo olivaceus	Red-eyed Vireo	Meadowvale Station Woods (hectare) - I-05-13 Bird Station D				G5	S5B	4				
Bird	Zenaida macroura	Mourning Dove	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Zenaida macroura	Mourning Dove	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Zenaida macroura	Mourning Dove	Harris Farm - Raptor Wintering Areas Survey				G5	S5	4				
Bird	Zenaida macroura	Mourning Dove	Harris Farm - Creditview Rd & Hwy 401				G5	S5	4				
Bird	Zenaida macroura	Mourning Dove	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Bird	Zenaida macroura	Mourning Dove	Meadowvale Station Woods (hectare) - I-05-13 Bird Station C				G5	S5	4				
Butterflies, Moths	Actias luna	Luna Moth	Meadowvale Station Woods South				G5	S4					
Butterflies, Moths	Cercyonis pegala	Common Wood-Nymph	Harris Farm - CVC Breeding Bird Survey				G5	S5					
Butterflies, Moths	Colias eurytheme	Orange Sulphur	Harris Farm - CVC Breeding Bird Survey				G5	S5					
Butterflies, Moths	Colias philodice	Clouded Sulphur	Harris Farm - CVC Breeding Bird Survey				G5	S5					
Butterflies, Moths	Danaus plexippus	Monarch	Harris Farm - CVC Breeding Bird Survey	END	SC (Sch 1)	SC	G4	S2N,S4B	1				
Butterflies, Moths	Danaus plexippus	Monarch	Harris Farm - CVC Breeding Bird Survey	END	SC (Sch 1)	SC	G4	S2N,S4B	1				
Butterflies, Moths	Danaus plexippus	Monarch	Harris Farm - CVC Breeding Bird Survey	END	SC (Sch 1)	SC	G4	S2N,S4B	1				
Butterflies, Moths	Danaus plexippus	Monarch	Harris Farm - Creditview Rd & Hwy 401	END	SC (Sch 1)	SC	G4	S2N,S4B	1				
Butterflies, Moths	Erynnis sp.	Duskywing species	Harris Farm - CVC Breeding Bird Survey										
Butterflies, Moths	Papilio canadensis	Canadian Tiger Swallowtail	Harris Farm - Creditview Rd & Hwy 401				G5	S5					
Butterflies, Moths	Phyciodes sp.	Crescent species	Harris Farm - CVC Breeding Bird Survey										
Butterflies, Moths	Pieris rapae	Cabbage White	Harris Farm - CVC Breeding Bird Survey				G5	SNA	5				
Butterflies, Moths	Vanessa atalanta	Red Admiral	Harris Farm - CVC Breeding Bird Survey				G5	S5					
Clams and Mussels	Pisidiidae (Family)	Peaclam	Meadowvale Station Woods South										
Crayfishes	Fallicambarus fodiens	Digger Crayfish	Meadowvale Station Woods South				G5	S4					
Crayfishes	Fallicambarus fodiens	Digger Crayfish	Meadowvale Station Woods South				G5	S4					
Crayfishes	Fallicambarus fodiens	Digger Crayfish	Meadowvale Station Woods South				G5	S4					
Crayfishes	Fallicambarus fodiens	Digger Crayfish	Meadowvale Station Woods South				G5	S4					
Crayfishes	Fallicambarus fodiens	Digger Crayfish	Meadowvale Station Woods South				G5	S4					
Crayfishes	Fallicambarus fodiens	Digger Crayfish	Meadowvale Station Woods South				G5	S4					

Plant and Wildlife Species Records Provided by Credit Valley Conservation

[illegible]

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Forb	Alisma sp. (triviale/subcordatum)	Water-plantain species	Meadowvale Station Woods South				GNR		4				
Forb	Alisma sp. (triviale/subcordatum)	Water-plantain species	Fletcher's Creek, reach FC1-2				GNR		4				
Forb	Alisma sp. (triviale/subcordatum)	Water-plantain species	Harris Farm - Creditview Rd & Hwy 401				GNR		4				
Forb	Alliaria petiolata	Garlic Mustard	6415 Creditview Road				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	6415 Creditview Road				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	6415 Creditview Road				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	Fletcher's Creek, reach FC1-1				GNR	SNA	5				
Forb	Alliaria petiolata	Garlic Mustard	Fletcher's Creek, reach FC1-2				GNR	SNA	5				
Forb	Allium tricoccum var. tricoccum	Wild Leek	Meadowvale Station Woods South				G--T5	S4	3				
Forb	Allium tricoccum var. tricoccum	Wild Leek	Meadowvale Station Woods South				G--T5	S4	3				
Forb	Allium tricoccum var. tricoccum	Wild Leek	Fletcher's Creek, reach FC1-2				G--T5	S4	3				
Forb	Arctium lappa	Great Burdock	6415 Creditview Road				GNR	SNA	5				
Forb	Arctium minus	Common Burdock	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	W-43 - Meadowvale South				G5	S5	4				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	W-43 - Meadowvale South				G5	S5	4				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	W-43 - Meadowvale South				G5	S5	4				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	Meadowvale Station Woods South				G5	S5	4				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	Meadowvale Station Woods South				G5	S5	4				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	Meadowvale Station Woods South				G5	S5	4				
Forb	Arisaema triphyllum	Jack-in-the-pulpit	Fletcher's Creek, reach FC1-2				G5	S5	4				
Forb	Barbarea vulgaris	Bitter Wintercress	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Barbarea vulgaris	Bitter Wintercress	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Barbarea vulgaris	Bitter Wintercress	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Barbarea vulgaris	Bitter Wintercress	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Barbarea vulgaris	Bitter Wintercress	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Barbarea vulgaris	Bitter Wintercress	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Bidens frondosa	Devil's Beggarticks	6415 Creditview Road				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	W-43 - Meadowvale South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb	Bidens frondosa	Devil's Beggarticks	Meadowvale Station Woods South				G5	S5	4				
Forb													

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Forb	Bidens tripartita	Three-parted Beggarticks	W-43 - Meadowvale South				G5	S5?	3	rare			rare
Forb	Bidens tripartita	Three-parted Beggarticks	W-43 - Meadowvale South				G5	S5?	3	rare			rare
Forb	Bidens tripartita	Three-parted Beggarticks	W-43 - Meadowvale South				G5	S5?	3	rare			rare
Forb	Bidens vulgata	Tall Beggarticks	Meadowvale Station Woods South				G5	S5	2	rare		rare	rare
Forb	Boehmeria cylindrica	False Nettle	W-43 - Meadowvale South				G5	S5	4				uncommon
Forb	Boehmeria cylindrica	False Nettle	W-43 - Meadowvale South				G5	S5	4				uncommon
Forb	Boehmeria cylindrica	False Nettle	Meadowvale Station Woods South				G5	S5	4				uncommon
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	W-43 - Meadowvale South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	Meadowvale Station Woods South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	Meadowvale Station Woods South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	Meadowvale Station Woods South				G5	S5	3				
Forb	Caltha palustris	Yellow Marsh Marigold	Harris Farm - Creditview Rd & Hwy 401				G5	S5	3				
Forb	Cardamine douglassii	Limestone Bittercress	Meadowvale Station Woods South				G5	S4	2		rare	rare	rare
Forb	Cardamine douglassii	Limestone Bittercress	Meadowvale Station Woods South				G5	S4	2		rare	rare	rare
Forb	Cardamine douglassii	Limestone Bittercress	Meadowvale Station Woods South				G5	S4	2		rare	rare	rare
Forb	Cardamine pratensis	Meadow Bittercress	Meadowvale Station Woods South				GU	SNA	5				
Forb	Chelone glabra	White Turtlehead	Meadowvale Station Woods South				G5	S5	3			uncommon	
Forb	Cicuta maculata var. maculata	Spotted Water-hemlock	Harris Farm - Creditview Rd & Hwy 401				G5T5	S5	3			uncommon	
Forb	Cicuta maculata var. maculata	Spotted Water-hemlock	Harris Farm - Creditview Rd & Hwy 401				G5T5	S5	3			uncommon	
Forb	Cicuta maculata var. maculata	Spotted Water-hemlock	Harris Farm - Creditview Rd & Hwy 401				G5T5	S5	3			uncommon	
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	6415 Creditview Road				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	W-43 - Meadowvale South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	Meadowvale Station Woods South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	Meadowvale Station Woods South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	Meadowvale Station Woods South				G5	S5	4				
Forb	Circaea canadensis	Broad-leaved Enchanter's Nightshade	Meadowvale Station Woods South				G5	S5	4				
Forb	Cirsium arvense	Canada Thistle	6415 Creditview Road				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cirsium arvense	Canada Thistle	W-43 - Meadowvale South				G5	SNA	5				
Forb	Cryptotaenia canadensis	Canada Honewort	Meadowvale Station Woods South				G5	S5	3				
Forb	Cryptotaenia canadensis	Canada Honewort	Meadowvale Station Woods South				G5	S5	3				
Forb	Cryptotaenia canadensis	Canada Honewort	Meadowvale Station Woods South				G5	S5	3				
Forb	Cryptotaenia canadensis	Canada Honewort	Fletcher's Creek, reach FC1-2				G5	S5	3				
Forb	Cryptotaenia canadensis	Canada Honewort	Fletcher's Creek, reach FC1-2				G5	S5	3				
Forb	Cryptotaenia canadensis	Canada Honewort	Fletcher's Creek, reach FC1-2				G5	S5	3				
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	W-43 - Meadowvale South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	Meadowvale Station Woods South				G5	S5	2	rare		rare	uncommon
Forb	Cuscuta gronovii	Swamp Dodder	Meadowvale Station Woods South				G5	S5	2	rare		rare	uncommon

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Forb	Cynoglossum officinale	Common Hound's-tongue	6415 Creditview Road				GNR	SNA	5				
Forb	Dipsacus fullonum	Common Teasel	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Elodea canadensis	Canada Waterweed	Fletcher's Creek, reach FC1-2				G5	S5	2	rare		rare	rare
Forb	Elodea canadensis	Canada Waterweed	Fletcher's Creek, reach FC1-2				G5	S5	2	rare		rare	rare
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Epilobium ciliatum ssp. ciliatum	Northern Willowherb	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Epilobium hirsutum	Hairy Willowherb	6415 Creditview Road				GNR	SNA	5				
Forb	Epilobium hirsutum	Hairy Willowherb	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Epilobium parviflorum	Small-flowered Willowherb	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Epilobium parviflorum	Small-flowered Willowherb	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Epilobium parviflorum	Small-flowered Willowherb	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Epilobium parviflorum	Small-flowered Willowherb	Meadowvale Station Woods South				GNR	SNA	5				
Forb	Erigeron philadelphicus	Philadelphia Fleabane	W-43 - Meadowvale South				G5	S5	4				
Forb	Erigeron philadelphicus	Philadelphia Fleabane	Meadowvale Station Woods South				G5	S5	4				
Forb	Erythronium americanum	Yellow Trout-lily	Meadowvale Station Woods South				G5	S5	4				
Forb	Eupatorium perfoliatum	Common Boneset	W-43 - Meadowvale South				G5	S5	4				
Forb	Eupatorium perfoliatum	Common Boneset	W-43 - Meadowvale South				G5	S5	4				
Forb	Eupatorium perfoliatum	Common Boneset	W-43 - Meadowvale South				G5	S5	4				
Forb	Eupatorium perfoliatum	Common Boneset	W-43 - Meadowvale South				G5	S5	4				
Forb	Eupatorium perfoliatum	Common Boneset	W-43 - Meadowvale South				G5	S5	4				
Forb	Eupatorium perfoliatum	Common Boneset	Meadowvale Station Woods South				G5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Eutrochium maculatum var. maculatum	Spotted Joe Pye Weed	Meadowvale Station Woods South				G5T5	S5	4				
Forb	Galium asprellum	Rough Bedstraw	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	Meadowvale Station Woods South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	Meadowvale Station Woods South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	Meadowvale Station Woods South				G5	S5	4			uncommon	uncommon
Forb	Galium asprellum	Rough Bedstraw	Meadowvale Station Woods South				G5	S5	4			uncommon	uncommon
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	Meadowvale Station Woods South				G5	S5	4				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw											

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	W-43 - Meadowvale South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	Meadowvale Station Woods South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	Meadowvale Station Woods South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	Meadowvale Station Woods South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	Meadowvale Station Woods South				G5	S5	3				
Forb	Galium palustre	Marsh Bedstraw	Meadowvale Station Woods South				G5	S5	3				
Forb	Geranium robertianum	Herb-Robert	6415 Creditview Road				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	W-43 - Meadowvale South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	W-43 - Meadowvale South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	W-43 - Meadowvale South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	Meadowvale Station Woods South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	Meadowvale Station Woods South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	Meadowvale Station Woods South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	Meadowvale Station Woods South				G5	S5	4				
Forb	Geranium robertianum	Herb-Robert	Meadowvale Station Woods South				G5	S5	4				
Forb	Geum aleppicum	Yellow Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum aleppicum	Yellow Avens	Meadowvale Station Woods South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	W-43 - Meadowvale South				G5	S5	4				
Forb	Geum canadense	White Avens	Meadowvale Station Woods South				G5	S5	4				
Forb	Geum canadense	White Avens	Meadowvale Station Woods South				G5	S5	4				
Forb	Geum urbanum	Wood Avens	6415 Creditview Road				G5	SNA	5				
Forb	Geum urbanum	Wood Avens	6415 Creditview Road				G5	SNA	5				
Forb	Hackelia virginiana	Virginia Stickseed	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Hackelia virginiana	Virginia Stickseed	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Hackelia virginiana	Virginia Stickseed	W-43 - Meadowvale South				G5	S5	4			uncommon	uncommon
Forb	Hackelia virginiana	Virginia Stickseed	Meadowvale Station Woods South				G5	S5	4			uncommon	uncommon
Forb	Heracleum maximum	Cow-parsnip	Fletcher's Creek, reach FC1-1				G5	S5	2	rare	rare	rare	
Forb	Heracleum maximum	Cow-parsnip	Fletcher's Creek, reach FC1-1				G5	S5	2	rare	rare	rare	
Forb	Heracleum maximum	Cow-parsnip	Fletcher's Creek, reach FC1-1				G5	S5	2	rare	rare	rare	
Forb	Hesperis matronalis	Dame's Rocket	6415 Creditview Road				G4G5	SNA	5				
Forb	Hesperis matronalis	Dame's Rocket	W-43 - Meadowvale South				G4G5	SNA	5				
Forb	Hesperis matronalis	Dame's Rocket	W-43 - Meadowvale South				G4G5	SNA	5				
Forb	Hesperis matronalis	Dame's Rocket	Meadowvale Station Woods South				G4G5	SNA	5				
Forb	Hesperis matronalis	Dame's Rocket	Fletcher's Creek, reach FC1-1				G4G5	SNA	5				
Forb	Hydrophyllum virginianum	Virginia Waterleaf	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	6415 Creditview Road				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	W-43 - Meadowvale South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	E side of Second Line W, S of Sombrero Way				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Fletcher's Creek, reach FC1-2				G5	S5	4				
Forb	Impatiens capensis	Spotted Jewelweed	Fletcher's Creek, reach FC1-2				G5	S5	4				
Forb	Impatiens glandulifera	Purple Jewelweed	6415 Creditview Road				GNR	SNA	5				
Forb	Impatiens pallida	Pale Jewelweed	6415 Creditview Road				G5	S4	2	rare		rare	uncommon
Forb	Laportea canadensis	Wood Nettle	Meadowvale Station Woods South				G5	S5	4				
Forb	Lemna minor	Lesser Duckweed	Meadowvale Station Woods South				G5	S5?	4				
Forb	Lemna minor	Lesser Duckweed	Meadowvale Station Woods South				G5	S5?	4				
Forb	Lemna minor	Lesser Duckweed	Fletcher's Creek, reach FC1-2				G5	S5?	4				
Forb	Lobelia siphilitica	Great Blue Lobelia	Meadowvale Station Woods South				G5	S5	3			uncommon	
Forb	Lobelia siphilitica	Great Blue Lobelia	Meadowvale Station Woods South				G5	S5	3			uncommon	
Forb	Lycopus americanus	American Water-horehound	Fletcher's Creek, reach FC1-2				G5	S5	3				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	W-43 - Meadowvale South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	Meadowvale Station Woods South				G5	S5	4				
Forb	Lycopus uniflorus	Northern Water-horehound	Meadowvale Station Woods South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South				G5	S5	4				
Forb	Lysimachia ciliata	Fringed Loosestrife	W-43 - Meadowvale South										

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	W-43 - Meadowvale South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Meadowvale Station Woods South				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	E side of Second Line W, S of Sombrero Way				G5	SNA	5				
Forb	Lythrum salicaria	Purple Loosestrife	Fletcher's Creek, reach FC1-2				G5	SNA	5				
Forb	Maianthemum racemosum	Large False Solomon's Seal	W-43 - Meadowvale South				G5	S5	3				
Forb	Maianthemum racemosum	Large False Solomon's Seal	W-43 - Meadowvale South				G5	S5	3				
Forb	Maianthemum racemosum	Large False Solomon's Seal	W-43 - Meadowvale South				G5	S5	3				
Forb	Maianthemum racemosum	Large False Solomon's Seal	W-43 - Meadowvale South				G5	S5	3				
Forb	Maianthemum racemosum	Large False Solomon's Seal	Fletcher's Creek, reach FC1-2				G5	S5	3				
Forb	Maianthemum stellatum	Star-flowered False Solomon's Seal	W-43 - Meadowvale South				G5	S5	4				
Forb	Myosotis laxa	Small Forget-me-not	W-43 - Meadowvale South				G5	S5	3				
Forb	Myosotis laxa	Small Forget-me-not	Meadowvale Station Woods South				G5	S5	3				
Forb	Myosotis laxa	Small Forget-me-not	Meadowvale Station Woods South				G5	S5	3				
Forb	Myosotis scorpioides	True Forget-me-not	W-43 - Meadowvale South				G5	SNA	5				
Forb	Myosotis scorpioides	True Forget-me-not	W-43 - Meadowvale South				G5	SNA	5				
Forb	Myosotis scorpioides	True Forget-me-not	W-43 - Meadowvale South				G5	SNA	5				
Forb	Myosotis scorpioides	True Forget-me-not	Meadowvale Station Woods South				G5	SNA	5				
Forb	Myosotis scorpioides	True Forget-me-not	Meadowvale Station Woods South				G5	SNA	5				
Forb	Myosotis scorpioides	True Forget-me-not	Meadowvale Station Woods South				G5	SNA	5				
Forb	Myosotis scorpioides	True Forget-me-not	Meadowvale Station Woods South				G5	SNA	5				
Forb	Nabalus albus	White Rattlesnakeroot	6415 Creditview Road				G5	S5	3			uncommon	uncommon
Forb	Nasturtium officinale	Watercress	W-43 - Meadowvale South				GNR	SNA	5				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	6415 Creditview Road				G5	S5	4				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	W-43 - Meadowvale South				G5	S5	4				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	W-43 - Meadowvale South				G5	S5	4				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	W-43 - Meadowvale South				G5	S5	4				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	W-43 - Meadowvale South				G5	S5	4				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	W-43 - Meadowvale South				G5	S5	4				
Forb	Oxalis stricta	Upright Yellow Wood-sorrel	W-43 - Meadowvale South				G5	S5	4				
Forb	Pastinaca sativa	Wild Parsnip	Fletcher's Creek, reach FC1-1				GNR	SNA	5				
Forb	Pilea fontana	Lesser Clearweed	Meadowvale Station Woods South				G5	S4	2	rare	rare	rare	rare
Forb	Pilea pumila	Dwarf Clearweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Pilea pumila	Dwarf Clearweed	Meadowvale Station Woods South				G5	S5	4				
Forb	Prunella vulgaris	Self-heal	6415 Creditview Road				G5	S5					
Forb	Prunella vulgaris	Self-heal	6415 Creditview Road				G5	S5					
Forb	Ranunculus abortivus	Kidney-leaved Buttercup	Meadowvale Station Woods South				G5	S5	4				
Forb	Ranunculus acris	Tall Buttercup	6415 Creditview Road				G5	SNA	5				
Forb	Ranunculus acris	Tall Buttercup	Meadowvale Station Woods South				G5	SNA	5				
Forb	Ranunculus caricetorum	Northern Swamp Buttercup	Meadowvale Station Woods South				G5	S5	3				
Forb	Ranunculus caricetorum	Northern Swamp Buttercup	Meadowvale Station Woods South				G5	S5	3				
Forb	Ranunculus caricetorum	Northern Swamp Buttercup	Meadowvale Station Woods South				G5	S5	3				
Forb	Ranunculus caricetorum	Northern Swamp Buttercup	Meadowvale Station Woods South				G5	S5	3				
Forb	Ranunculus caricetorum	Northern Swamp Buttercup	Meadowvale Station Woods South				G5	S5	3				
Forb	Ranunculus sceleratus var. sceleratus	Cursed Buttercup	Meadowvale Station Woods South				G5T5	SNA	5				
Forb	Ranunculus sceleratus var. sceleratus	Cursed Buttercup	Meadowvale Station Woods South				G5T5	SNA	5				
Forb	Ranunculus sceleratus var. sceleratus	Cursed Buttercup	Meadowvale Station Woods South				G5T5	SNA	5				
Forb	Ranunculus sceleratus var. sceleratus	Cursed Buttercup	Meadowvale Station Woods South				G5T5	SNA	5				
Forb	Ranunculus sceleratus var. sceleratus	Cursed Buttercup	Meadowvale Station Woods South				G5T5	SNA	5				
Forb	Sagittaria latifolia	Broad-leaved Arrowhead	Meadowvale Station Woods South				G5	S5	3				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	W-43 - Meadowvale South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	Meadowvale Station Woods South				G--T5	S5	4				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	Meadowvale Station Woods South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	Meadowvale Station Woods South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	Meadowvale Station Woods South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	Meadowvale Station Woods South				G--T5	S5	4				
Forb	Solidago altissima var. altissima	Eastern Tall Goldenrod	E side of Second Line W, S of Sombrero Way				G--T5	S5	4				
Forb	Solidago gigantea	Giant Goldenrod	6415 Creditview Road				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod	W-43 - Meadowvale South				G5	S5	4			uncommon	
Forb	Solidago gigantea	Giant Goldenrod</											

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Forb	Thalictrum sp.	Meadow-rue species	Meadowvale Station Woods South										
Forb	Typha angustifolia	Narrow-leaved Cattail	Meadowvale Station Woods South				G5	SNA	5				
Forb	Typha angustifolia	Narrow-leaved Cattail	E side of Second Line W, S of Sombrero Way				G5	SNA	5				
Forb	Typha angustifolia	Narrow-leaved Cattail	Fletcher's Creek, reach FC1-2				G5	SNA	5				
Forb	Urtica dioica ssp. dioica	European Stinging Nettle	W-43 - Meadowvale South				G5T5?	SNA	5				
Forb	Urtica dioica ssp. dioica	European Stinging Nettle	W-43 - Meadowvale South				G5T5?	SNA	5				
Forb	Urtica dioica ssp. dioica	European Stinging Nettle	W-43 - Meadowvale South				G5T5?	SNA	5				
Forb	Urtica dioica ssp. gracilis	Slender Stinging Nettle	W-43 - Meadowvale South				G5T5	S5	4				
Forb	Verbena urticifolia	White Vervain	6415 Creditview Road				G5	S5	3				
Forb	Verbena urticifolia	White Vervain	Meadowvale Station Woods South				G5	S5	3				
Forb	Viola sp.	Violet species	W-43 - Meadowvale South										
Forb	Viola sp.	Violet species	W-43 - Meadowvale South										
Forb	Viola sp.	Violet species	W-43 - Meadowvale South										
Forb	Viola sp.	Violet species	W-43 - Meadowvale South										
Forb	Viola sp.	Violet species	Meadowvale Station Woods South										
Forb	Xanthium strumarium	Rough Cocklebur	Meadowvale Station Woods South				G5	S5	3				
Graminoid	Agrostis stolonifera	Creeping Bentgrass	6415 Creditview Road				G5	SNA	5				
Graminoid	Cinna arundinacea	Stout Woodreed	Meadowvale Station Woods South				G5	S4	2	rare	rare	rare	rare
Graminoid	Cinna latifolia	Drooping Woodreed	W-43 - Meadowvale South				G5	S5	3	rare			rare
Graminoid	Cinna latifolia	Drooping Woodreed	W-43 - Meadowvale South				G5	S5	3	rare			rare
Graminoid	Cinna latifolia	Drooping Woodreed	W-43 - Meadowvale South				G5	S5	3	rare			rare
Graminoid	Elymus riparius	Eastern Riverbank Wildrye	Meadowvale Station Woods South				G5	S4	2	rare	rare	rare	uncommon
Graminoid	Elymus riparius	Eastern Riverbank Wildrye	Fletcher's Creek, reach FC1-1				G5	S4	2	rare	rare	rare	uncommon
Graminoid	Glyceria striata	Fowl Mannagrass	W-43 - Meadowvale South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	W-43 - Meadowvale South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	W-43 - Meadowvale South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Glyceria striata	Fowl Mannagrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Leersia oryzoides	Rice Cutgrass	Meadowvale Station Woods South				G5	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	W-43 - Meadowvale South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	Meadowvale Station Woods South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	Meadowvale Station Woods South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	Meadowvale Station Woods South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	Meadowvale Station Woods South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	Meadowvale Station Woods South				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	E side of Second Line W, S of Sombrero Way				G5TNR	S5	4				
Graminoid	Phalaris arundinacea var. arundinacea	Reed Canary Grass	Fletcher's Creek, reach FC1-2				G5TNR	S5	4				
Graminoid	Phragmites australis ssp. australis	European Reed	Meadowvale Station Woods South				G5T5	SNA	5				
Graminoid	Poa compressa	Canada Bluegrass	W-43 - Meadowvale South				GNR	SNA	5				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma (jeffersonianum complex)	Jefferson complex (undetermined)	Meadowvale Station Woods						1				
Herpetofauna	Ambystoma jeffersonianum	Jefferson Salamander	Meadowvale Station Woods	END	END (Sch 1)	END	G4	S2	1				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Herpetofauna	Ambystoma jeffersonianum	Jefferson Salamander	Meadowvale Station Woods	END	END (Sch 1)	END	G4	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma jeffersonianum laterale (LJJ)	Jefferson Salamander X Blue-spotted Salamander	Meadowvale Station Woods	END		END	GNA	S2	1				
Herpetofauna	Ambystoma maculatum	Spotted Salamander	Meadowvale Station Woods - South Woodlot				G5	S4	2				
Herpetofauna	Ambystoma maculatum	Spotted Salamander	Meadowvale Station Woods - South Woodlot				G5	S4	2				
Herpetofauna	Ambystoma maculatum	Spotted Salamander	Meadowvale Station Woods - South Woodlot				G5	S4	2				
Herpetofauna	Ambystoma maculatum	Spotted Salamander	Meadowvale Station Woods - South Woodlot				G5	S4	2				
Herpetofauna	Ambystoma maculatum	Spotted Salamander	Meadowvale Station Woods - South Woodlot				G5	S4	2				
Herpetofauna	Ambystoma sp.	Mole Salamander species	Meadowvale Station Woods - South Woodlot										
Herpetofauna	Ambystoma sp.	Mole Salamander species	Meadowvale Station Woods - Salamander Monitoring Project										
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Fletcher's Creek, reach FC1-2				G5	S5	3				
Herpetofauna	Anaxyrus americanus	American Toad	Harris Farm - Creditview Rd & Hwy 401				G5	S5	3				
Herpetofauna	Chelydra serpentina	Snapping Turtle	Credit Meadows Park	SC	SC (Sch 1)	SC	G5	S3	1				
Herpetofauna	Hyla versicolor	Gray Treefrog	area 4 amphibian monitoring stop 225A				G5	S5	3				
Herpetofauna	Hyla versicolor	Gray Treefrog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Hyla versicolor	Gray Treefrog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Hyla versicolor	Gray Treefrog	Fletcher's Creek, reach FC1-2				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods South				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Fletcher's Creek, reach FC1-2				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Fletcher's Creek, reach FC1-2				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Fletcher's Creek, reach FC1-2				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Harris Farm - Creditview Rd & Hwy 401				G5	S5	3				
Herpetofauna	Lithobates clamitans	Green Frog	Meadowvale Station Woods				G5	S5	3				
Herpetofauna	Lithobates sylvaticus	Wood Frog	Meadowvale Station Woods South				G5	S5	2				
Herpetofauna	Lithobates sylvaticus	Wood Frog	Meadowvale Station Woods South				G5	S5	2				
Herpetofauna	Lithobates sylvaticus	Wood Frog	Meadowvale Station Woods South				G5	S5	2				
Herpetofauna	Lithobates sylvaticus	Wood Frog	Meadowvale Station Woods - South Woodlot				G5	S5	2				
Herpetofauna	Plethodon cinereus	Eastern Red-backed Salamander	Meadowvale Station Woods - Salamander Monitoring Project				G5	S5	3				
Herpetofauna	Plethodon cinereus	Eastern Red-backed Salamander	Meadowvale Station Woods - Salamander Monitoring Project				G5	S5	3				
Herpetofauna	Storeria dekayi	DeKay's Brownsnake	Creditview at Hwy. 401	NAR		NAR	G5	S5	2				
Herpetofauna	Thamnophis sirtalis sirtalis	Eastern Gartersnake	Meadowvale Station Woods - Salamander Monitoring Project				G5T5	S5	4				
Mammal	Canis latrans	Coyote	Meadowvale Station Woods South				G5	S5	3				
Mammal	Canis latrans	Coyote	Harris Farm - Raptor Wintering Areas Survey				G5	S5	3				
Mammal	Castor canadensis	Beaver	Fletcher's Creek watershed				G5	S5	3				
Mammal	Neovison vison	American Mink	Fletcher's Creek, reach FC1-2				G5	S4	2				
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Meadowvale Station Woods South				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Harris Farm - CVC Breeding Bird Survey				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Fletcher's Creek, reach FC1-1				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Fletcher's Creek, reach FC1-1				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Fletcher's Creek, reach FC1-2				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Fletcher's Creek, reach FC1-2				G5	S5	3				
Mammal	Odocoileus virginianus	White-tailed Deer	Harris Farm - Creditview Rd & Hwy 401				G5	S5	3				
Mammal	Procyon lotor	Northern Raccoon	Fletcher's Creek, reach FC1-1				G5	S5	4				
Mammal	Procyon lotor	Northern Raccoon	Fletcher's Creek, reach FC1-2				G5	S5	4				
Mammal	Sciurus carolinensis	Eastern Gray Squirrel	Meadowvale Station Woods South				G5	S5	4				
Mammal	Sciurus carolinensis	Eastern Gray Squirrel	Meadowvale Station Woods South				G5	S5	4				
Mammal	Sciurus carolinensis	Eastern Gray Squirrel	Meadowvale Station Woods South				G5	S5	4				
Mammal	Sciurus carolinensis	Eastern Gray Squirrel	Fletcher's Creek, reach FC1-2				G5	S5	4				
Mammal	Sciurus carolinensis	Eastern Gray Squirrel	Meadowvale Station Woods				G5	S5	4				
Midges	Chironomidae (Family)	Midge	Meadowvale Station Woods South										
Midges	Chironomidae (Family)	Midge	Meadowvale Station Woods South										
Midges	Chironomidae (Family)	Midge	Meadowvale Station Woods South										
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	W-43 - Meadowvale South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	Meadowvale Station Woods South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	Meadowvale Station Woods South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	Meadowvale Station Woods South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex bromoides	Brome-like Sedge	Meadowvale Station Woods South				G5	S5	2	rare	rare	rare	rare
Sedge	Carex lacustris	Lake Sedge	Meadowvale Station Woods South				G5	S5	4				uncommon
Sedge	Carex lupulina	Hop Sedge	Meadowvale Station Woods South				G5	S5	3				uncommon
Sedge	Carex pensylvanica	Pennsylvania Sedge	6415 Creditview Road				G5	S5	4				
Sedge	Carex pensylvanica	Pennsylvania Sedge	6415 Creditview Road				G5	S5	4				
Sedge	Carex retrorsa	Retrorsed Sedge	W-43 - Meadowvale South				G5	S5	4				uncommon
Sedge	Carex retrorsa	Retrorsed Sedge	W-43 - Meadowvale South				G5	S5	4				uncommon
Sedge	Carex retrorsa	Retrorsed Sedge	W-43 - Meadowvale South				G5	S5	4				uncommon
Sedge	Carex retrorsa	Retrorsed Sedge	W-43 - Meadowvale South				G5	S5	4				uncommon
Sedge	Carex retrorsa	Retrorsed Sedge	W-43 - Meadowvale South				G5	S5	4				uncommon
Sedge	Carex spicata	Spiked Sedge	6415 Creditview Road				GNR	SNA	5				
Sedge	Carex spicata	Spiked Sedge	6415 Creditview Road				GNR	SNA	5				
Sedge	Schoenoplectus tabernaemontani	Soft-stemmed Bulrush	Fletcher's Creek, reach FC1-2				G5	S5	3				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	Meadowvale Station Woods South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	Meadowvale Station Woods South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	Meadowvale Station Woods South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	Meadowvale Station Woods South				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	E side of Second Line W, S of Sombrero Way				G5	S5	4				
Shrub	Cornus sericea	Red-osier Dogwood	W-43 - Meadowvale South				G5	S5	4				
Shrub	Crataegus punctata	Dotted Hawthorn	6415 Creditview Road				G5	S5	4				
Shrub	Crataegus sp.	Hawthorn species	6415 Creditview Road										
Shrub	Euonymus obovatus	Running Strawberry Bush	6415 Creditview Road				G5	S4	3			rare	
Shrub	Euonymus obovatus	Running Strawberry Bush	Fletcher's Creek, reach FC1-2				G5	S4	3			rare	
Shrub	Euonymus obovatus	Running Strawberry Bush	Fletcher's Creek, reach FC1-2				G5	S4	3			rare	
Shrub	Euonymus obovatus	Running Strawberry Bush	Fletcher's Creek, reach FC1-2				G5	S4	3			rare	
Shrub	Ligustrum vulgare	European Privet	6415 Creditview Road				GNR	SNA	5				
Shrub	Lonicera tatarica	Tartarian Honeysuckle	6415 Creditview Road				GNR	SNA	5				
Shrub	Lonicera tatarica	Tartarian Honeysuckle	6415 Creditview Road				GNR	SNA	5				
Shrub	Lonicera tatarica	Tartarian Honeysuckle	Meadowvale Station Woods South				GNR	SNA	5				
Shrub	Lonicera tatarica	Tartarian Honeysuckle	Meadowvale Station Woods South				GNR	SNA	5				
Shrub	Lonicera tatarica	Tartarian Honeysuckle	Meadowvale Station Woods South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	6415 Creditview Road				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	6415 Creditview Road				GNR	SNA	5				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Shrub	Rhamnus cathartica	Common Buckthorn	6415 Creditview Road				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				
Shrub	Rhamnus cathartica	Common Buckthorn	W-43 - Meadowvale South				GNR	SNA	5				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_K AISER_2001	REGIONAL_RANK_ KAISER_2001	RARE_6E7_ VARGA_200 0	RARE_7E4_VAR GA_2000
Tree	Acer negundo	Manitoba Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer negundo	Manitoba Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer negundo	Manitoba Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer negundo	Manitoba Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer negundo	Manitoba Maple	Fletcher's Creek, reach FC1-1				G5	S5	4				
Tree	Acer negundo	Manitoba Maple	Fletcher's Creek, reach FC1-2				G5	S5	4				
Tree	Acer negundo	Manitoba Maple	Harris Farm - Creditview Rd & Hwy 401				G5	S5	4				
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Acer nigrum	Black Maple	Fletcher's Creek, reach FC1-2				G5	S4?	4			rare	
Tree	Acer platanoides	Norway Maple	6415 Creditview Road				GNR	SNA	5				
Tree	Acer rubrum	Red Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharinum	Silver Maple	6415 Creditview Road				G5	S5	3				
Tree	Acer saccharinum	Silver Maple	6415 Creditview Road				G5	S5	3				
Tree	Acer saccharinum	Silver Maple	6415 Creditview Road				G5	S5	3				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	W-43 - Meadowvale South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Meadowvale Station Woods South				G5	S5	4				
Tree	Acer saccharum	Sugar Maple	Fletcher's Creek, reach FC1-2				G5	S5	4				
Tree	Betula alleghaniensis	Yellow Birch	Meadowvale Station Woods South				G5	S5	3				
Tree	Betula papyrifera	Paper Birch	Meadowvale Station Woods South				G5	S5	4				
Tree	Betula papyrifera	Paper Birch	Meadowvale Station Woods South				G5	S5	4				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	Meadowvale Station Woods South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	Meadowvale Station Woods South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	Meadowvale Station Woods South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	Meadowvale Station Woods South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	Meadowvale Station Woods South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carpinus caroliniana	Blue-beech	W-43 - Meadowvale South				G5	S5	3				
Tree	Carya cordiformis	Bitternut Hickory	6415 Creditview Road				G5	S5	4				
Tree	Carya cordiformis	Bitternut Hickory	Meadowvale Station Woods South				G5	S5	4				
Tree	Carya cordiformis	Bitternut Hickory	Meadowvale Station Woods South				G5	S5	4				
Tree	Carya cordiformis	Bitternut Hickory	Meadowvale Station Woods South				G5	S5	4				
Tree	Carya cordiformis	Bitternut Hickory	Meadowvale Station Woods South				G5	S5	4				
Tree	Carya ovata	Shagbark Hickory	W-43 - Meadowvale South				G5	S5	4			rare	uncommon
Tree	Carya ovata	Shagbark Hickory	Meadowvale Station Woods South				G5	S5	4			rare	uncommon
Tree	Carya ovata	Shagbark Hickory	Meadowvale Station Woods South				G5	S5	4			rare	uncommon
Tree	Carya ovata	Shagbark Hickory	Meadowvale Station Woods South				G5	S5	4			rare	uncommon

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Tree	Carya ovata	Shagbark Hickory	Meadowvale Station Woods South				G5	S5	4			rare	uncommon
Tree	Carya ovata	Shagbark Hickory	Meadowvale Station Woods South				G5	S5	4			rare	uncommon
Tree	Fagus grandifolia	American Beech	Fletcher's Creek, reach FC1-2				G5	S4	3				
Tree	Fraxinus americana	White Ash	6415 Creditview Road				G5	S4	4				
Tree	Fraxinus americana	White Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus americana	White Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus nigra	Black Ash	W-43 - Meadowvale South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	W-43 - Meadowvale South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	W-43 - Meadowvale South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	W-43 - Meadowvale South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	Meadowvale Station Woods South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	W-43 - Meadowvale South	THR			G5	S4	3				uncommon
Tree	Fraxinus nigra	Black Ash	W-43 - Meadowvale South	THR			G5	S4	3				uncommon
Tree	Fraxinus pennsylvanica	Green Ash	6415 Creditview Road				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Meadowvale Station Woods South				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Fletcher's Creek, reach FC1-1				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Fletcher's Creek, reach FC1-2				G5	S4	4				
Tree	Fraxinus pennsylvanica	Green Ash	Fletcher's Creek, reach FC1-2				G5	S4	4				
Tree	Juglans cinerea	Butternut	Fletcher's Creek, reach FC1-1	END	END (Sch 1)	END	G4	S2?	1				
Tree	Juglans cinerea	Butternut	Fletcher's Creek, reach FC1-1	END	END (Sch 1)	END	G4	S2?	1				
Tree	Juglans cinerea	Butternut	Fletcher's Creek, reach FC1-1	END	END (Sch 1)	END	G4	S2?	1				
Tree	Juglans cinerea	Butternut	Fletcher's Creek, reach FC1-2	END	END (Sch 1)	END	G4	S2?	1				
Tree	Juglans cinerea	Butternut	Harris Farm - Creditview Rd & Hwy 401	END	END (Sch 1)	END	G4	S2?	1				
Tree	Juglans nigra	Black Walnut	6415 Creditview Road				G5	S4?	4			rare	
Tree	Juglans nigra	Black Walnut	6415 Creditview Road				G5	S4?	4			rare	
Tree	Juglans nigra	Black Walnut	Meadowvale Station Woods South				G5	S4?	4			rare	
Tree	Juglans nigra	Black Walnut	Fletcher's Creek, reach FC1-1				G5	S4?	4			rare	
Tree	Juniperus virginiana	Eastern Red Cedar	Harris Farm - Creditview Rd & Hwy 401				G5	S5	2	rare		rare	rare
Tree	Ostrya virginiana	Eastern Hop-hornbeam	6415 Creditview Road				G5	S5	4				
Tree	Picea glauca	White Spruce	6415 Creditview Road				G5	S5	2	rare			
Tree	Pinus strobus	Eastern White Pine	6415 Creditview Road				G5	S5	4				
Tree	Pinus sylvestris	Scots Pine	6415 Creditview Road				GNR	SNA	5				
Tree	Populus tremuloides	Trembling Aspen	Meadowvale Station Woods South				G5	S5	4				
Tree	Populus tremuloides	Trembling Aspen	Meadowvale Station Woods South				G5	S5	4				
Tree	Populus tremuloides	Trembling Aspen	Meadowvale Station Woods South				G5	S5	4				
Tree	Quercus macrocarpa	Bur Oak	6415 Creditview Road				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	6415 Creditview Road				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	Meadowvale Station Woods South				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	Meadowvale Station Woods South				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	Meadowvale Station Woods South				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	Meadowvale Station Woods South				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	W-43 - Meadowvale South				G5	S5	4			rare	
Tree	Quercus macrocarpa	Bur Oak	Fletcher's Creek, reach FC1-1				G5	S5	4			rare	
Tree	Quercus rubra	Northern Red Oak	W-43 - Meadowvale South				G5	S5	4				
Tree	Quercus rubra	Northern Red Oak	W-43 - Meadowvale South				G5	S5	4				
Tree	Quercus rubra	Northern Red Oak	W-43 - Meadowvale South				G5	S5	4				
Tree	Quercus rubra	Northern Red Oak	Meadowvale Station Woods South				G5	S5	4				
Tree	Quercus rubra	Northern Red Oak	Fletcher's Creek, reach FC1-2				G5	S5	4				
Tree	Salix x fragilis	Hybrid Crack Willow	6415 Creditview Road				GNA	SNA	5				
Tree	Salix x fragilis	Hybrid Crack Willow	Meadowvale Station Woods South				GNA	SNA	5				
Tree	Tilia americana	American Basswood	6415 Creditview Road				G5	S5	4				
Tree	Tilia americana	American Basswood	Meadowvale Station Woods South				G5	S5	4				
Tree	Tilia americana	American Basswood	Meadowvale Station Woods South				G5	S5	4				
Tree	Tilia americana	American Basswood	Meadowvale Station Woods South				G5	S5	4				
Tree	Tilia americana	American Basswood	Meadowvale Station Woods South				G5	S5	4				

Plant and Wildlife Species Records Provided by Credit Valley Conservation

[illegible]

Plant and Wildlife Species Records Provided by Credit Valley Conservation

TAXA_TYPE	SCIENTIFIC_NAME	COMMON_NAME	site_name	COSEWIC_STATUS	SARA_STATUS	SARO_STATUS	GLOBAL_RANK	PROVINCIAL_RANK	SCC_TIER	LOCAL_RANK_KAISER_2001	REGIONAL_RANK_KAISER_2001	RARE_6E7_VARGA_2000	RARE_7E4_VARGA_2000
Woody Vine	Vitis riparia	Riverbank Grape	W-43 - Meadowvale South				G5	S5	4				
Woody Vine	Vitis riparia	Riverbank Grape	W-43 - Meadowvale South				G5	S5	4				
Woody Vine	Vitis riparia	Riverbank Grape	E side of Second Line W, S of Sombrero Way				G5	S5	4				
Woody Vine	Vitis riparia	Riverbank Grape	Meadowvale Station Woods South				G5	S5	4				
Woody Vine	Vitis riparia	Riverbank Grape	Meadowvale Station Woods South				G5	S5	4				
Woody Vine	Vitis riparia	Riverbank Grape	Meadowvale Station Woods South				G5	S5	4				
Woody Vine	Vitis riparia	Riverbank Grape	Harris Farm - Creditview Rd & Hwy 401				G5	S5	4				

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Fletcher's Creek u/s 2nd Line	22-Aug-00	Catostomus commersonii	White Sucker	13
Fletcher's Creek u/s 2nd Line	22-Aug-00	Etheostoma caeruleum	Rainbow Darter	142
Fletcher's Creek u/s 2nd Line	22-Aug-00	Etheostoma flabellare	Fantail Darter	1
Fletcher's Creek u/s 2nd Line	22-Aug-00	Etheostoma nigrum	Johnny Darter	6
Fletcher's Creek u/s 2nd Line	22-Aug-00	Hybognathus hankinsoni	Brassy Minnow	19
Fletcher's Creek u/s 2nd Line	22-Aug-00	Luxilus cornutus	Common Shiner	60
Fletcher's Creek u/s 2nd Line	22-Aug-00	Noturus flavus	Stonecat	2
Fletcher's Creek u/s 2nd Line	22-Aug-00	Pimephales notatus	Bluntnose Minnow	67
Fletcher's Creek u/s 2nd Line	22-Aug-00	Rhinichthys atratulus	Blacknose Dace	474
Fletcher's Creek u/s 2nd Line	22-Aug-00	Rhinichthys cataractae	Longnose Dace	9
Fletcher's Creek u/s 2nd Line	22-Aug-00	Semotilus atromaculatus	Creek Chub	117
Fletcher's Creek u/s 2nd Line	19-Jun-01	Etheostoma caeruleum	Rainbow Darter	18
Fletcher's Creek u/s 2nd Line	19-Jun-01	Etheostoma nigrum	Johnny Darter	2
Fletcher's Creek u/s 2nd Line	19-Jun-01	Hybognathus hankinsoni	Brassy Minnow	1
Fletcher's Creek u/s 2nd Line	19-Jun-01	Luxilus cornutus	Common Shiner	6
Fletcher's Creek u/s 2nd Line	19-Jun-01	Pimephales notatus	Bluntnose Minnow	6
Fletcher's Creek u/s 2nd Line	19-Jun-01	Pimephales promelas	Fathead Minnow	2
Fletcher's Creek u/s 2nd Line	19-Jun-01	Rhinichthys atratulus	Blacknose Dace	180
Fletcher's Creek u/s 2nd Line	19-Jun-01	Rhinichthys cataractae	Longnose Dace	8
Fletcher's Creek u/s 2nd Line	19-Jun-01	Semotilus atromaculatus	Creek Chub	46
Fletcher's Creek u/s 2nd Line	17-Jul-02	Catostomus commersonii	White Sucker	23
Fletcher's Creek u/s 2nd Line	17-Jul-02	Etheostoma caeruleum	Rainbow Darter	58
Fletcher's Creek u/s 2nd Line	17-Jul-02	Etheostoma nigrum	Johnny Darter	3
Fletcher's Creek u/s 2nd Line	17-Jul-02	Lepomis gibbosus	Pumpkinseed	1
Fletcher's Creek u/s 2nd Line	17-Jul-02	Luxilus cornutus	Common Shiner	51
Fletcher's Creek u/s 2nd Line	17-Jul-02	Nocomis biguttatus	Hornyhead Chub	3
Fletcher's Creek u/s 2nd Line	17-Jul-02	Noturus flavus	Stonecat	2
Fletcher's Creek u/s 2nd Line	17-Jul-02	Pimephales notatus	Bluntnose Minnow	93
Fletcher's Creek u/s 2nd Line	17-Jul-02	Rhinichthys atratulus	Blacknose Dace	248
Fletcher's Creek u/s 2nd Line	17-Jul-02	Rhinichthys cataractae	Longnose Dace	45
Fletcher's Creek u/s 2nd Line	17-Jul-02	Semotilus atromaculatus	Creek Chub	127
Fletcher's Creek u/s 2nd Line	17-Jun-03	Catostomus commersonii	White Sucker	27
Fletcher's Creek u/s 2nd Line	17-Jun-03	Etheostoma caeruleum	Rainbow Darter	40
Fletcher's Creek u/s 2nd Line	17-Jun-03	Etheostoma nigrum	Johnny Darter	2
Fletcher's Creek u/s 2nd Line	17-Jun-03	Hypentelium nigricans	Northern Hog Sucker	3
Fletcher's Creek u/s 2nd Line	17-Jun-03	Lepomis gibbosus	Pumpkinseed	1
Fletcher's Creek u/s 2nd Line	17-Jun-03	Luxilus cornutus	Common Shiner	34
Fletcher's Creek u/s 2nd Line	17-Jun-03	Nocomis biguttatus	Hornyhead Chub	6
Fletcher's Creek u/s 2nd Line	17-Jun-03	Noturus flavus	Stonecat	1
Fletcher's Creek u/s 2nd Line	17-Jun-03	Oncorhynchus mykiss	Rainbow Trout	2
Fletcher's Creek u/s 2nd Line	17-Jun-03	Pimephales notatus	Bluntnose Minnow	65
Fletcher's Creek u/s 2nd Line	17-Jun-03	Pimephales promelas	Fathead Minnow	44
Fletcher's Creek u/s 2nd Line	17-Jun-03	Rhinichthys atratulus	Blacknose Dace	165

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Fletcher's Creek u/s 2nd Line	17-Jun-03	Rhinichthys cataractae	Longnose Dace	44
Fletcher's Creek u/s 2nd Line	17-Jun-03	Semotilus atromaculatus	Creek Chub	31
Fletcher's Creek u/s 2nd Line	28-Jun-04	Catostomus commersonii	White Sucker	18
Fletcher's Creek u/s 2nd Line	28-Jun-04	Culaea inconstans	Brook Stickleback	1
Fletcher's Creek u/s 2nd Line	28-Jun-04	Etheostoma caeruleum	Rainbow Darter	74
Fletcher's Creek u/s 2nd Line	28-Jun-04	Etheostoma flabellare	Fantail Darter	3
Fletcher's Creek u/s 2nd Line	28-Jun-04	Etheostoma nigrum	Johnny Darter	26
Fletcher's Creek u/s 2nd Line	28-Jun-04	Hybognathus hankinsoni	Brassy Minnow	11
Fletcher's Creek u/s 2nd Line	28-Jun-04	Luxilus cornutus	Common Shiner	12
Fletcher's Creek u/s 2nd Line	28-Jun-04	Nocomis micropogon	River Chub	12
Fletcher's Creek u/s 2nd Line	28-Jun-04	Pimephales notatus	Bluntnose Minnow	9
Fletcher's Creek u/s 2nd Line	28-Jun-04	Pimephales promelas	Fathead Minnow	1
Fletcher's Creek u/s 2nd Line	28-Jun-04	Rhinichthys atratulus	Blacknose Dace	231
Fletcher's Creek u/s 2nd Line	28-Jun-04	Rhinichthys cataractae	Longnose Dace	46
Fletcher's Creek u/s 2nd Line	28-Jun-04	Semotilus atromaculatus	Creek Chub	40
Fletcher's Creek u/s 2nd Line	28-Jun-04	Umbra limi	Central Mudminnow	10
Fletcher's Creek u/s 2nd Line	02-Aug-05	Catostomus commersonii	White Sucker	34
Fletcher's Creek u/s 2nd Line	02-Aug-05	Etheostoma caeruleum	Rainbow Darter	67
Fletcher's Creek u/s 2nd Line	02-Aug-05	Etheostoma nigrum	Johnny Darter	32
Fletcher's Creek u/s 2nd Line	02-Aug-05	Hypentelium nigricans	Northern Hog Sucker	1
Fletcher's Creek u/s 2nd Line	02-Aug-05	Lepomis gibbosus	Pumpkinseed	1
Fletcher's Creek u/s 2nd Line	02-Aug-05	Luxilus cornutus	Common Shiner	173
Fletcher's Creek u/s 2nd Line	02-Aug-05	Nocomis biguttatus	Hornyhead Chub	5
Fletcher's Creek u/s 2nd Line	02-Aug-05	Noturus flavus	Stonecat	2
Fletcher's Creek u/s 2nd Line	02-Aug-05	Pimephales notatus	Bluntnose Minnow	1
Fletcher's Creek u/s 2nd Line	02-Aug-05	Pimephales promelas	Fathead Minnow	28
Fletcher's Creek u/s 2nd Line	02-Aug-05	Rhinichthys atratulus	Blacknose Dace	196
Fletcher's Creek u/s 2nd Line	02-Aug-05	Rhinichthys cataractae	Longnose Dace	269
Fletcher's Creek u/s 2nd Line	02-Aug-05	Semotilus atromaculatus	Creek Chub	153
Fletcher's Creek u/s 2nd Line	09-Aug-06	Catostomus commersonii	White Sucker	22
Fletcher's Creek u/s 2nd Line	09-Aug-06	Etheostoma caeruleum	Rainbow Darter	71
Fletcher's Creek u/s 2nd Line	09-Aug-06	Etheostoma nigrum	Johnny Darter	15
Fletcher's Creek u/s 2nd Line	09-Aug-06	Hypentelium nigricans	Northern Hog Sucker	2
Fletcher's Creek u/s 2nd Line	09-Aug-06	Lepomis gibbosus	Pumpkinseed	9
Fletcher's Creek u/s 2nd Line	09-Aug-06	Luxilus cornutus	Common Shiner	148
Fletcher's Creek u/s 2nd Line	09-Aug-06	Micropterus salmoides	Largemouth Bass	1
Fletcher's Creek u/s 2nd Line	09-Aug-06	Nocomis biguttatus	Hornyhead Chub	10
Fletcher's Creek u/s 2nd Line	09-Aug-06	Noturus flavus	Stonecat	2
Fletcher's Creek u/s 2nd Line	09-Aug-06	Pimephales notatus	Bluntnose Minnow	42
Fletcher's Creek u/s 2nd Line	09-Aug-06	Pimephales promelas	Fathead Minnow	88
Fletcher's Creek u/s 2nd Line	09-Aug-06	Rhinichthys atratulus	Blacknose Dace	276
Fletcher's Creek u/s 2nd Line	09-Aug-06	Rhinichthys cataractae	Longnose Dace	222
Fletcher's Creek u/s 2nd Line	09-Aug-06	Semotilus atromaculatus	Creek Chub	109

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Fletcher's Creek u/s 2nd Line	09-Aug-07	Catostomus commersonii	White Sucker	29
Fletcher's Creek u/s 2nd Line	09-Aug-07	Etheostoma caeruleum	Rainbow Darter	130
Fletcher's Creek u/s 2nd Line	09-Aug-07	Etheostoma flabellare	Fantail Darter	1
Fletcher's Creek u/s 2nd Line	09-Aug-07	Etheostoma nigrum	Johnny Darter	23
Fletcher's Creek u/s 2nd Line	09-Aug-07	Hypentelium nigricans	Northern Hog Sucker	1
Fletcher's Creek u/s 2nd Line	09-Aug-07	Luxilus cornutus	Common Shiner	189
Fletcher's Creek u/s 2nd Line	09-Aug-07	Nocomis biguttatus	Hornyhead Chub	13
Fletcher's Creek u/s 2nd Line	09-Aug-07	Noturus flavus	Stonecat	4
Fletcher's Creek u/s 2nd Line	09-Aug-07	Pimephales notatus	Bluntnose Minnow	13
Fletcher's Creek u/s 2nd Line	09-Aug-07	Pimephales promelas	Fathead Minnow	2
Fletcher's Creek u/s 2nd Line	09-Aug-07	Rhinichthys atratulus	Blacknose Dace	211
Fletcher's Creek u/s 2nd Line	09-Aug-07	Rhinichthys cataractae	Longnose Dace	464
Fletcher's Creek u/s 2nd Line	09-Aug-07	Semotilus atromaculatus	Creek Chub	129
Fletcher's Creek u/s 2nd Line	01-Aug-08	Catostomus commersonii	White Sucker	5
Fletcher's Creek u/s 2nd Line	01-Aug-08	Etheostoma caeruleum	Rainbow Darter	98
Fletcher's Creek u/s 2nd Line	01-Aug-08	Etheostoma flabellare	Fantail Darter	1
Fletcher's Creek u/s 2nd Line	01-Aug-08	Etheostoma nigrum	Johnny Darter	3
Fletcher's Creek u/s 2nd Line	01-Aug-08	Hypentelium nigricans	Northern Hog Sucker	2
Fletcher's Creek u/s 2nd Line	01-Aug-08	Lepomis gibbosus	Pumpkinseed	3
Fletcher's Creek u/s 2nd Line	01-Aug-08	Luxilus cornutus	Common Shiner	88
Fletcher's Creek u/s 2nd Line	01-Aug-08	Nocomis biguttatus	Hornyhead Chub	4
Fletcher's Creek u/s 2nd Line	01-Aug-08	Pimephales notatus	Bluntnose Minnow	31
Fletcher's Creek u/s 2nd Line	01-Aug-08	Pimephales promelas	Fathead Minnow	6
Fletcher's Creek u/s 2nd Line	01-Aug-08	Rhinichthys atratulus	Blacknose Dace	104
Fletcher's Creek u/s 2nd Line	01-Aug-08	Rhinichthys cataractae	Longnose Dace	124
Fletcher's Creek u/s 2nd Line	01-Aug-08	Semotilus atromaculatus	Creek Chub	128
Fletcher's Creek u/s 2nd Line	20-Aug-09	Carassius auratus	Goldfish	1
Fletcher's Creek u/s 2nd Line	20-Aug-09	Catostomus commersonii	White Sucker	3
Fletcher's Creek u/s 2nd Line	20-Aug-09	Etheostoma caeruleum	Rainbow Darter	78
Fletcher's Creek u/s 2nd Line	20-Aug-09	Lepomis gibbosus	Pumpkinseed	1
Fletcher's Creek u/s 2nd Line	20-Aug-09	Luxilus cornutus	Common Shiner	32
Fletcher's Creek u/s 2nd Line	20-Aug-09	Nocomis micropogon	River Chub	1
Fletcher's Creek u/s 2nd Line	20-Aug-09	Oncorhynchus mykiss	Rainbow Trout	3
Fletcher's Creek u/s 2nd Line	20-Aug-09	Pimephales notatus	Bluntnose Minnow	3
Fletcher's Creek u/s 2nd Line	20-Aug-09	Pimephales promelas	Fathead Minnow	2
Fletcher's Creek u/s 2nd Line	20-Aug-09	Rhinichthys atratulus	Blacknose Dace	94
Fletcher's Creek u/s 2nd Line	20-Aug-09	Rhinichthys cataractae	Longnose Dace	164
Fletcher's Creek u/s 2nd Line	20-Aug-09	Semotilus atromaculatus	Creek Chub	38
Fletcher's Creek u/s 2nd Line	10-Aug-10	Catostomus commersonii	White Sucker	9
Fletcher's Creek u/s 2nd Line	10-Aug-10	Etheostoma caeruleum	Rainbow Darter	71
Fletcher's Creek u/s 2nd Line	10-Aug-10	Etheostoma nigrum	Johnny Darter	3
Fletcher's Creek u/s 2nd Line	10-Aug-10	Hypentelium nigricans	Northern Hog Sucker	1

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Fletcher's Creek u/s 2nd Line	10-Aug-10	Lepomis gibbosus	Pumpkinseed	4
Fletcher's Creek u/s 2nd Line	10-Aug-10	Luxilus cornutus	Common Shiner	75
Fletcher's Creek u/s 2nd Line	10-Aug-10	Noturus flavus	Stonecat	1
Fletcher's Creek u/s 2nd Line	10-Aug-10	Pimephales notatus	Bluntnose Minnow	3
Fletcher's Creek u/s 2nd Line	10-Aug-10	Pimephales promelas	Fathead Minnow	13
Fletcher's Creek u/s 2nd Line	10-Aug-10	Rhinichthys atratulus	Blacknose Dace	121
Fletcher's Creek u/s 2nd Line	10-Aug-10	Rhinichthys cataractae	Longnose Dace	190
Fletcher's Creek u/s 2nd Line	10-Aug-10	Semotilus atromaculatus	Creek Chub	49
Fletcher's Creek u/s 2nd Line	04-Aug-11	Carassius auratus	Goldfish	1
Fletcher's Creek u/s 2nd Line	04-Aug-11	Catostomus commersonii	White Sucker	11
Fletcher's Creek u/s 2nd Line	04-Aug-11	Etheostoma caeruleum	Rainbow Darter	40
Fletcher's Creek u/s 2nd Line	04-Aug-11	Etheostoma nigrum	Johnny Darter	2
Fletcher's Creek u/s 2nd Line	04-Aug-11	Lepomis gibbosus	Pumpkinseed	6
Fletcher's Creek u/s 2nd Line	04-Aug-11	Luxilus cornutus	Common Shiner	44
Fletcher's Creek u/s 2nd Line	04-Aug-11	Nocomis biguttatus	Hornyhead Chub	2
Fletcher's Creek u/s 2nd Line	04-Aug-11	Noturus flavus	Stonecat	1
Fletcher's Creek u/s 2nd Line	04-Aug-11	Pimephales promelas	Fathead Minnow	2
Fletcher's Creek u/s 2nd Line	04-Aug-11	Rhinichthys atratulus	Blacknose Dace	47
Fletcher's Creek u/s 2nd Line	04-Aug-11	Rhinichthys cataractae	Longnose Dace	166
Fletcher's Creek u/s 2nd Line	04-Aug-11	Semotilus atromaculatus	Creek Chub	30
Fletcher's Creek u/s 2nd Line	16-Aug-12	Ameiurus nebulosus	Brown Bullhead	1
Fletcher's Creek u/s 2nd Line	16-Aug-12	Catostomus commersonii	White Sucker	16
Fletcher's Creek u/s 2nd Line	16-Aug-12	Etheostoma caeruleum	Rainbow Darter	35
Fletcher's Creek u/s 2nd Line	16-Aug-12	Etheostoma nigrum	Johnny Darter	3
Fletcher's Creek u/s 2nd Line	16-Aug-12	Hypentelium nigricans	Northern Hog Sucker	4
Fletcher's Creek u/s 2nd Line	16-Aug-12	Lepomis gibbosus	Pumpkinseed	2
Fletcher's Creek u/s 2nd Line	16-Aug-12	Luxilus cornutus	Common Shiner	58
Fletcher's Creek u/s 2nd Line	16-Aug-12	Noturus flavus	Stonecat	1
Fletcher's Creek u/s 2nd Line	16-Aug-12	Oncorhynchus tshawytscha	Chinook Salmon	1
Fletcher's Creek u/s 2nd Line	16-Aug-12	Pimephales notatus	Bluntnose Minnow	30
Fletcher's Creek u/s 2nd Line	16-Aug-12	Pimephales promelas	Fathead Minnow	2
Fletcher's Creek u/s 2nd Line	16-Aug-12	Rhinichthys atratulus	Blacknose Dace	94
Fletcher's Creek u/s 2nd Line	16-Aug-12	Rhinichthys cataractae	Longnose Dace	205
Fletcher's Creek u/s 2nd Line	16-Aug-12	Semotilus atromaculatus	Creek Chub	35
Fletcher's Creek u/s 2nd Line	12-Aug-13	Catostomus commersonii	White Sucker	15
Fletcher's Creek u/s 2nd Line	12-Aug-13	Etheostoma caeruleum	Rainbow Darter	63
Fletcher's Creek u/s 2nd Line	12-Aug-13	Hypentelium nigricans	Northern Hog Sucker	1
Fletcher's Creek u/s 2nd Line	12-Aug-13	Lepomis gibbosus	Pumpkinseed	6
Fletcher's Creek u/s 2nd Line	12-Aug-13	Luxilus cornutus	Common Shiner	52
Fletcher's Creek u/s 2nd Line	12-Aug-13	Nocomis biguttatus	Hornyhead Chub	5
Fletcher's Creek u/s 2nd Line	12-Aug-13	Oncorhynchus mykiss	Rainbow Trout	1
Fletcher's Creek u/s 2nd Line	12-Aug-13	Pimephales notatus	Bluntnose Minnow	21

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Fletcher's Creek u/s 2nd Line	12-Aug-13	Pimephales promelas	Fathead Minnow	3
Fletcher's Creek u/s 2nd Line	12-Aug-13	Rhinichthys atratulus	Blacknose Dace	50
Fletcher's Creek u/s 2nd Line	12-Aug-13	Rhinichthys cataractae	Longnose Dace	129
Fletcher's Creek u/s 2nd Line	12-Aug-13	Semotilus atromaculatus	Creek Chub	38
Fletcher's Creek u/s 2nd Line	18-Aug-14	Catostomus commersonii	White Sucker	11
Fletcher's Creek u/s 2nd Line	18-Aug-14	Etheostoma caeruleum	Rainbow Darter	77
Fletcher's Creek u/s 2nd Line	18-Aug-14	Etheostoma nigrum	Johnny Darter	7
Fletcher's Creek u/s 2nd Line	18-Aug-14	Hypentelium nigricans	Northern Hog Sucker	1
Fletcher's Creek u/s 2nd Line	18-Aug-14	Luxilus cornutus	Common Shiner	103
Fletcher's Creek u/s 2nd Line	18-Aug-14	Micropterus salmoides	Largemouth Bass	3
Fletcher's Creek u/s 2nd Line	18-Aug-14	Nocomis biguttatus	Hornyhead Chub	3
Fletcher's Creek u/s 2nd Line	18-Aug-14	Pimephales notatus	Bluntnose Minnow	25
Fletcher's Creek u/s 2nd Line	18-Aug-14	Pimephales promelas	Fathead Minnow	2
Fletcher's Creek u/s 2nd Line	18-Aug-14	Rhinichthys atratulus	Blacknose Dace	137
Fletcher's Creek u/s 2nd Line	18-Aug-14	Rhinichthys cataractae	Longnose Dace	252
Fletcher's Creek u/s 2nd Line	18-Aug-14	Semotilus atromaculatus	Creek Chub	65
Fletcher's Creek u/s 2nd Line	30-Jul-15	Catostomus commersonii	White Sucker	3
Fletcher's Creek u/s 2nd Line	30-Jul-15	Etheostoma caeruleum	Rainbow Darter	32
Fletcher's Creek u/s 2nd Line	30-Jul-15	Lepomis gibbosus	Pumpkinseed	1
Fletcher's Creek u/s 2nd Line	30-Jul-15	Luxilus cornutus	Common Shiner	15
Fletcher's Creek u/s 2nd Line	30-Jul-15	Nocomis biguttatus	Hornyhead Chub	4
Fletcher's Creek u/s 2nd Line	30-Jul-15	Noturus flavus	Stonecat	1
Fletcher's Creek u/s 2nd Line	30-Jul-15	Pimephales promelas	Fathead Minnow	1
Fletcher's Creek u/s 2nd Line	30-Jul-15	Rhinichthys atratulus	Blacknose Dace	57
Fletcher's Creek u/s 2nd Line	30-Jul-15	Rhinichthys cataractae	Longnose Dace	107
Fletcher's Creek u/s 2nd Line	30-Jul-15	Semotilus atromaculatus	Creek Chub	23
Fletcher's Creek u/s 2nd Line	22-Aug-16	Catostomus commersonii	White Sucker	6
Fletcher's Creek u/s 2nd Line	22-Aug-16	Etheostoma caeruleum	Rainbow Darter	68
Fletcher's Creek u/s 2nd Line	22-Aug-16	Etheostoma nigrum	Johnny Darter	9
Fletcher's Creek u/s 2nd Line	22-Aug-16	Luxilus cornutus	Common Shiner	51
Fletcher's Creek u/s 2nd Line	22-Aug-16	Nocomis biguttatus	Hornyhead Chub	2
Fletcher's Creek u/s 2nd Line	22-Aug-16	Pimephales notatus	Bluntnose Minnow	9
Fletcher's Creek u/s 2nd Line	22-Aug-16	Pimephales promelas	Fathead Minnow	1
Fletcher's Creek u/s 2nd Line	22-Aug-16	Rhinichthys atratulus	Blacknose Dace	79
Fletcher's Creek u/s 2nd Line	22-Aug-16	Rhinichthys cataractae	Longnose Dace	102
Fletcher's Creek u/s 2nd Line	22-Aug-16	Semotilus atromaculatus	Creek Chub	35
Fletcher's Creek d/s 2nd Line	29-Jul-99	Ameiurus nebulosus	Brown Bullhead	4
Fletcher's Creek d/s 2nd Line	29-Jul-99	Catostomus commersonii	White Sucker	66
Fletcher's Creek d/s 2nd Line	29-Jul-99	Culaea inconstans	Brook Stickleback	2
Fletcher's Creek d/s 2nd Line	29-Jul-99	Etheostoma caeruleum	Rainbow Darter	71
Fletcher's Creek d/s 2nd Line	29-Jul-99	Etheostoma nigrum	Johnny Darter	15
Fletcher's Creek d/s 2nd Line	29-Jul-99	Hypentelium nigricans	Northern Hog Sucker	1

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Fletcher's Creek d/s 2nd Line	29-Jul-99	Luxilus cornutus	Common Shiner	58
Fletcher's Creek d/s 2nd Line	29-Jul-99	Rhinichthys atratulus	Blacknose Dace	137
Fletcher's Creek d/s 2nd Line	29-Jul-99	Rhinichthys cataractae	Longnose Dace	1
Fletcher's Creek d/s 2nd Line	29-Jul-99	Semotilus atromaculatus	Creek Chub	227
Credit River u/s Old Derry Rd	19-Aug-99	Ambloplites rupestris	Rock Bass	22
Credit River u/s Old Derry Rd	19-Aug-99	Ameiurus nebulosus	Brown Bullhead	1
Credit River u/s Old Derry Rd	19-Aug-99	Catostomus commersonii	White Sucker	37
Credit River u/s Old Derry Rd	19-Aug-99	Cyprinus carpio	Common Carp	1
Credit River u/s Old Derry Rd	19-Aug-99	Etheostoma caeruleum	Rainbow Darter	282
Credit River u/s Old Derry Rd	19-Aug-99	Etheostoma flabellare	Fantail Darter	70
Credit River u/s Old Derry Rd	19-Aug-99	Etheostoma nigrum	Johnny Darter	255
Credit River u/s Old Derry Rd	19-Aug-99	Hypentelium nigricans	Northern Hog Sucker	6
Credit River u/s Old Derry Rd	19-Aug-99	Luxilus cornutus	Common Shiner	38
Credit River u/s Old Derry Rd	19-Aug-99	Micropterus salmoides	Largemouth Bass	6
Credit River u/s Old Derry Rd	19-Aug-99	Noturus flavus	Stonecat	2
Credit River u/s Old Derry Rd	19-Aug-99	Pimephales notatus	Bluntnose Minnow	3
Credit River u/s Old Derry Rd	19-Aug-99	Rhinichthys atratulus	Blacknose Dace	20
Credit River u/s Old Derry Rd	19-Aug-99	Rhinichthys cataractae	Longnose Dace	14
Credit River u/s Old Derry Rd	19-Aug-99	Semotilus atromaculatus	Creek Chub	58
Credit River u/s Old Derry Rd	28-Aug-00	Ambloplites rupestris	Rock Bass	19
Credit River u/s Old Derry Rd	28-Aug-00	Catostomus commersonii	White Sucker	1
Credit River u/s Old Derry Rd	28-Aug-00	Etheostoma caeruleum	Rainbow Darter	254
Credit River u/s Old Derry Rd	28-Aug-00	Etheostoma flabellare	Fantail Darter	77
Credit River u/s Old Derry Rd	28-Aug-00	Etheostoma nigrum	Johnny Darter	33
Credit River u/s Old Derry Rd	28-Aug-00	Hypentelium nigricans	Northern Hog Sucker	1
Credit River u/s Old Derry Rd	28-Aug-00	Lepomis gibbosus	Pumpkinseed	1
Credit River u/s Old Derry Rd	28-Aug-00	Luxilus cornutus	Common Shiner	11
Credit River u/s Old Derry Rd	28-Aug-00	Micropterus salmoides	Largemouth Bass	2
Credit River u/s Old Derry Rd	28-Aug-00	Noturus flavus	Stonecat	16
Credit River u/s Old Derry Rd	28-Aug-00	Pimephales notatus	Bluntnose Minnow	5
Credit River u/s Old Derry Rd	28-Aug-00	Rhinichthys atratulus	Blacknose Dace	6
Credit River u/s Old Derry Rd	28-Aug-00	Rhinichthys cataractae	Longnose Dace	17
Credit River u/s Old Derry Rd	28-Aug-00	Semotilus atromaculatus	Creek Chub	15
Credit River u/s Old Derry Rd	28-Aug-01	Ambloplites rupestris	Rock Bass	43
Credit River u/s Old Derry Rd	28-Aug-01	Catostomus commersonii	White Sucker	45
Credit River u/s Old Derry Rd	28-Aug-01	Cyprinus carpio	Common Carp	2
Credit River u/s Old Derry Rd	28-Aug-01	Etheostoma caeruleum	Rainbow Darter	222
Credit River u/s Old Derry Rd	28-Aug-01	Etheostoma flabellare	Fantail Darter	132
Credit River u/s Old Derry Rd	28-Aug-01	Etheostoma nigrum	Johnny Darter	60
Credit River u/s Old Derry Rd	28-Aug-01	Hypentelium nigricans	Northern Hog Sucker	15
Credit River u/s Old Derry Rd	28-Aug-01	Luxilus cornutus	Common Shiner	203
Credit River u/s Old Derry Rd	28-Aug-01	Micropterus salmoides	Largemouth Bass	1
Credit River u/s Old Derry Rd	28-Aug-01	Nocomis biguttatus	Hornyhead Chub	24

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Credit River u/s Old Derry Rd	28-Aug-01	Noturus flavus	Stonecat	13
Credit River u/s Old Derry Rd	28-Aug-01	Pimephales notatus	Bluntnose Minnow	73
Credit River u/s Old Derry Rd	28-Aug-01	Rhinichthys atratulus	Blacknose Dace	44
Credit River u/s Old Derry Rd	28-Aug-01	Rhinichthys cataractae	Longnose Dace	220
Credit River u/s Old Derry Rd	28-Aug-01	Semotilus atromaculatus	Creek Chub	53
Credit River u/s Old Derry Rd	15-Aug-02	Ambloplites rupestris	Rock Bass	63
Credit River u/s Old Derry Rd	15-Aug-02	Catostomus commersonii	White Sucker	46
Credit River u/s Old Derry Rd	15-Aug-02	Culaea inconstans	Brook Stickleback	3
Credit River u/s Old Derry Rd	15-Aug-02	Cyprinus carpio	Common Carp	1
Credit River u/s Old Derry Rd	15-Aug-02	Etheostoma caeruleum	Rainbow Darter	413
Credit River u/s Old Derry Rd	15-Aug-02	Etheostoma flabellare	Fantail Darter	146
Credit River u/s Old Derry Rd	15-Aug-02	Etheostoma nigrum	Johnny Darter	30
Credit River u/s Old Derry Rd	15-Aug-02	Hypentelium nigricans	Northern Hog Sucker	7
Credit River u/s Old Derry Rd	15-Aug-02	Lepomis gibbosus	Pumpkinseed	10
Credit River u/s Old Derry Rd	15-Aug-02	Luxilus cornutus	Common Shiner	117
Credit River u/s Old Derry Rd	15-Aug-02	Nocomis micropogon	River Chub	18
Credit River u/s Old Derry Rd	15-Aug-02	Pimephales notatus	Bluntnose Minnow	23
Credit River u/s Old Derry Rd	15-Aug-02	Rhinichthys atratulus	Blacknose Dace	62
Credit River u/s Old Derry Rd	15-Aug-02	Rhinichthys cataractae	Longnose Dace	70
Credit River u/s Old Derry Rd	15-Aug-02	Semotilus atromaculatus	Creek Chub	163
Credit River u/s Old Derry Rd	06-Aug-04	Ambloplites rupestris	Rock Bass	31
Credit River u/s Old Derry Rd	06-Aug-04	Ameiurus nebulosus	Brown Bullhead	2
Credit River u/s Old Derry Rd	06-Aug-04	Catostomus commersonii	White Sucker	40
Credit River u/s Old Derry Rd	06-Aug-04	Cyprinidae (Family)	Carp and Minnow Family	1
Credit River u/s Old Derry Rd	06-Aug-04	Etheostoma caeruleum	Rainbow Darter	649
Credit River u/s Old Derry Rd	06-Aug-04	Etheostoma flabellare	Fantail Darter	326
Credit River u/s Old Derry Rd	06-Aug-04	Etheostoma nigrum	Johnny Darter	26
Credit River u/s Old Derry Rd	06-Aug-04	Hypentelium nigricans	Northern Hog Sucker	23
Credit River u/s Old Derry Rd	06-Aug-04	Luxilus cornutus	Common Shiner	89
Credit River u/s Old Derry Rd	06-Aug-04	Nocomis micropogon	River Chub	84
Credit River u/s Old Derry Rd	06-Aug-04	Noturus flavus	Stonecat	12
Credit River u/s Old Derry Rd	06-Aug-04	Oncorhynchus mykiss	Rainbow Trout	13
Credit River u/s Old Derry Rd	06-Aug-04	Pimephales notatus	Bluntnose Minnow	52
Credit River u/s Old Derry Rd	06-Aug-04	Rhinichthys atratulus	Blacknose Dace	57
Credit River u/s Old Derry Rd	06-Aug-04	Rhinichthys cataractae	Longnose Dace	376
Credit River u/s Old Derry Rd	06-Aug-04	Semotilus atromaculatus	Creek Chub	123
Credit River u/s Old Derry Rd	07-Jul-06	Ambloplites rupestris	Rock Bass	4
Credit River u/s Old Derry Rd	07-Jul-06	Catostomus commersonii	White Sucker	2
Credit River u/s Old Derry Rd	07-Jul-06	Culaea inconstans	Brook Stickleback	1
Credit River u/s Old Derry Rd	07-Jul-06	Etheostoma caeruleum	Rainbow Darter	301
Credit River u/s Old Derry Rd	07-Jul-06	Etheostoma flabellare	Fantail Darter	33
Credit River u/s Old Derry Rd	07-Jul-06	Etheostoma nigrum	Johnny Darter	12

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Credit River u/s Old Derry Rd	07-Jul-06	Hypentelium nigricans	Northern Hog Sucker	3
Credit River u/s Old Derry Rd	07-Jul-06	Luxilus cornutus	Common Shiner	146
Credit River u/s Old Derry Rd	07-Jul-06	Nocomis biguttatus	Hornyhead Chub	20
Credit River u/s Old Derry Rd	07-Jul-06	Noturus flavus	Stonecat	14
Credit River u/s Old Derry Rd	07-Jul-06	Oncorhynchus mykiss	Rainbow Trout	31
Credit River u/s Old Derry Rd	07-Jul-06	Oncorhynchus tshawytscha	Chinook Salmon	3
Credit River u/s Old Derry Rd	07-Jul-06	Pimephales notatus	Bluntnose Minnow	19
Credit River u/s Old Derry Rd	07-Jul-06	Pimephales promelas	Fathead Minnow	1
Credit River u/s Old Derry Rd	07-Jul-06	Rhinichthys atratulus	Blacknose Dace	106
Credit River u/s Old Derry Rd	07-Jul-06	Rhinichthys cataractae	Longnose Dace	192
Credit River u/s Old Derry Rd	07-Jul-06	Semotilus atromaculatus	Creek Chub	44
Credit River u/s Old Derry Rd	05-Jul-07	Ambloplites rupestris	Rock Bass	8
Credit River u/s Old Derry Rd	05-Jul-07	Catostomus commersonii	White Sucker	8
Credit River u/s Old Derry Rd	05-Jul-07	Cyprinidae (Family)	Carp and Minnow Family	278
Credit River u/s Old Derry Rd	05-Jul-07	Etheostoma caeruleum	Rainbow Darter	363
Credit River u/s Old Derry Rd	05-Jul-07	Etheostoma flabellare	Fantail Darter	60
Credit River u/s Old Derry Rd	05-Jul-07	Etheostoma nigrum	Johnny Darter	45
Credit River u/s Old Derry Rd	05-Jul-07	Hypentelium nigricans	Northern Hog Sucker	31
Credit River u/s Old Derry Rd	05-Jul-07	Lepomis gibbosus	Pumpkinseed	1
Credit River u/s Old Derry Rd	05-Jul-07	Luxilus cornutus	Common Shiner	162
Credit River u/s Old Derry Rd	05-Jul-07	Nocomis biguttatus	Hornyhead Chub	35
Credit River u/s Old Derry Rd	05-Jul-07	Nocomis micropogon	River Chub	21
Credit River u/s Old Derry Rd	05-Jul-07	Noturus flavus	Stonecat	33
Credit River u/s Old Derry Rd	05-Jul-07	Oncorhynchus mykiss	Rainbow Trout	4
Credit River u/s Old Derry Rd	05-Jul-07	Petromyzon marinus	Sea Lamprey	4
Credit River u/s Old Derry Rd	05-Jul-07	Pimephales notatus	Bluntnose Minnow	59
Credit River u/s Old Derry Rd	05-Jul-07	Pimephales promelas	Fathead Minnow	83
Credit River u/s Old Derry Rd	05-Jul-07	Rhinichthys atratulus	Blacknose Dace	113
Credit River u/s Old Derry Rd	05-Jul-07	Rhinichthys cataractae	Longnose Dace	353
Credit River u/s Old Derry Rd	05-Jul-07	Semotilus atromaculatus	Creek Chub	110
Credit River u/s Old Derry Rd	18-Aug-08	Ambloplites rupestris	Rock Bass	3
Credit River u/s Old Derry Rd	18-Aug-08	Catostomus commersonii	White Sucker	17
Credit River u/s Old Derry Rd	18-Aug-08	Cyprinus carpio	Common Carp	1
Credit River u/s Old Derry Rd	18-Aug-08	Etheostoma caeruleum	Rainbow Darter	180
Credit River u/s Old Derry Rd	18-Aug-08	Etheostoma flabellare	Fantail Darter	29
Credit River u/s Old Derry Rd	18-Aug-08	Etheostoma nigrum	Johnny Darter	17
Credit River u/s Old Derry Rd	18-Aug-08	Hypentelium nigricans	Northern Hog Sucker	12
Credit River u/s Old Derry Rd	18-Aug-08	Lepomis gibbosus	Pumpkinseed	2
Credit River u/s Old Derry Rd	18-Aug-08	Luxilus cornutus	Common Shiner	218
Credit River u/s Old Derry Rd	18-Aug-08	Nocomis biguttatus	Hornyhead Chub	23
Credit River u/s Old Derry Rd	18-Aug-08	Noturus flavus	Stonecat	2
Credit River u/s Old Derry Rd	18-Aug-08	Oncorhynchus mykiss	Rainbow Trout	1

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Credit River u/s Old Derry Rd	18-Aug-08	Pimephales notatus	Bluntnose Minnow	190
Credit River u/s Old Derry Rd	18-Aug-08	Pimephales promelas	Fathead Minnow	2
Credit River u/s Old Derry Rd	18-Aug-08	Rhinichthys atratulus	Blacknose Dace	44
Credit River u/s Old Derry Rd	18-Aug-08	Rhinichthys cataractae	Longnose Dace	150
Credit River u/s Old Derry Rd	18-Aug-08	Semotilus atromaculatus	Creek Chub	26
Credit River u/s Old Derry Rd	07-Aug-09	Ambloplites rupestris	Rock Bass	1
Credit River u/s Old Derry Rd	07-Aug-09	Catostomus commersonii	White Sucker	42
Credit River u/s Old Derry Rd	07-Aug-09	Etheostoma caeruleum	Rainbow Darter	238
Credit River u/s Old Derry Rd	07-Aug-09	Etheostoma flabellare	Fantail Darter	104
Credit River u/s Old Derry Rd	07-Aug-09	Etheostoma nigrum	Johnny Darter	23
Credit River u/s Old Derry Rd	07-Aug-09	Hypentelium nigricans	Northern Hog Sucker	15
Credit River u/s Old Derry Rd	07-Aug-09	Lepomis gibbosus	Pumpkinseed	1
Credit River u/s Old Derry Rd	07-Aug-09	Luxilus cornutus	Common Shiner	134
Credit River u/s Old Derry Rd	07-Aug-09	Nocomis biguttatus	Hornyhead Chub	10
Credit River u/s Old Derry Rd	07-Aug-09	Nocomis micropogon	River Chub	3
Credit River u/s Old Derry Rd	07-Aug-09	Noturus flavus	Stonecat	3
Credit River u/s Old Derry Rd	07-Aug-09	Oncorhynchus mykiss	Rainbow Trout	12
Credit River u/s Old Derry Rd	07-Aug-09	Pimephales notatus	Bluntnose Minnow	8
Credit River u/s Old Derry Rd	07-Aug-09	Pimephales promelas	Fathead Minnow	1
Credit River u/s Old Derry Rd	07-Aug-09	Rhinichthys atratulus	Blacknose Dace	56
Credit River u/s Old Derry Rd	07-Aug-09	Rhinichthys cataractae	Longnose Dace	310
Credit River u/s Old Derry Rd	07-Aug-09	Salmo trutta	Brown Trout	1
Credit River u/s Old Derry Rd	07-Aug-09	Semotilus atromaculatus	Creek Chub	31
Credit River u/s Old Derry Rd	08-Aug-12	Catostomus commersonii	White Sucker	18
Credit River u/s Old Derry Rd	08-Aug-12	Culaea inconstans	Brook Stickleback	1
Credit River u/s Old Derry Rd	08-Aug-12	Etheostoma caeruleum	Rainbow Darter	226
Credit River u/s Old Derry Rd	08-Aug-12	Etheostoma flabellare	Fantail Darter	20
Credit River u/s Old Derry Rd	08-Aug-12	Etheostoma nigrum	Johnny Darter	71
Credit River u/s Old Derry Rd	08-Aug-12	Hypentelium nigricans	Northern Hog Sucker	30
Credit River u/s Old Derry Rd	08-Aug-12	Lepomis gibbosus	Pumpkinseed	2
Credit River u/s Old Derry Rd	08-Aug-12	Luxilus cornutus	Common Shiner	371
Credit River u/s Old Derry Rd	08-Aug-12	Micropterus salmoides	Largemouth Bass	2
Credit River u/s Old Derry Rd	08-Aug-12	Nocomis biguttatus	Hornyhead Chub	55
Credit River u/s Old Derry Rd	08-Aug-12	Noturus flavus	Stonecat	7
Credit River u/s Old Derry Rd	08-Aug-12	Pimephales notatus	Bluntnose Minnow	203
Credit River u/s Old Derry Rd	08-Aug-12	Pimephales promelas	Fathead Minnow	1
Credit River u/s Old Derry Rd	08-Aug-12	Rhinichthys atratulus	Blacknose Dace	48
Credit River u/s Old Derry Rd	08-Aug-12	Rhinichthys cataractae	Longnose Dace	260
Credit River u/s Old Derry Rd	08-Aug-12	Semotilus atromaculatus	Creek Chub	33
Credit River u/s Old Derry Rd	24-Aug-16	Cyprinidae (Family)	Carp and Minnow Family	255
Credit River u/s Old Derry Rd	24-Aug-16	Etheostoma caeruleum	Rainbow Darter	167
Credit River u/s Old Derry Rd	24-Aug-16	Etheostoma flabellare	Fantail Darter	68
Credit River u/s Old Derry Rd	24-Aug-16	Etheostoma nigrum	Johnny Darter	89

Fish Records Provided by Credit Valley Conservation

Station_Name	FieldSample_CollectionDate	SCIENTIFIC_NAME	COMMON_NAME	Total Number of Individuals
Credit River u/s Old Derry Rd	24-Aug-16	Luxilus cornutus	Common Shiner	304
Credit River u/s Old Derry Rd	24-Aug-16	Nocomis biguttatus	Hornyhead Chub	98
Credit River u/s Old Derry Rd	24-Aug-16	Nocomis micropogon	River Chub	7
Credit River u/s Old Derry Rd	24-Aug-16	Noturus flavus	Stonecat	1
Credit River u/s Old Derry Rd	24-Aug-16	Pimephales notatus	Bluntnose Minnow	173
Credit River u/s Old Derry Rd	24-Aug-16	Rhinichthys atratulus	Blacknose Dace	59
Credit River u/s Old Derry Rd	24-Aug-16	Rhinichthys cataractae	Longnose Dace	222
Credit River u/s Old Derry Rd	24-Aug-16	Semotilus atromaculatus	Creek Chub	13
Credit River u/s Old Derry Rd	09-Aug-17	Etheostoma caeruleum	Rainbow Darter	79
Credit River u/s Old Derry Rd	09-Aug-17	Etheostoma flabellare	Fantail Darter	34
Credit River u/s Old Derry Rd	09-Aug-17	Etheostoma nigrum	Johnny Darter	24
Credit River u/s Old Derry Rd	09-Aug-17	Lepomis gibbosus	Pumpkinseed	2
Credit River u/s Old Derry Rd	09-Aug-17	Luxilus cornutus	Common Shiner	26
Credit River u/s Old Derry Rd	09-Aug-17	Nocomis biguttatus	Hornyhead Chub	6
Credit River u/s Old Derry Rd	09-Aug-17	Nocomis micropogon	River Chub	9
Credit River u/s Old Derry Rd	09-Aug-17	Noturus flavus	Stonecat	4
Credit River u/s Old Derry Rd	09-Aug-17	Oncorhynchus mykiss	Rainbow Trout	1
Credit River u/s Old Derry Rd	09-Aug-17	Oncorhynchus tshawytscha	Chinook Salmon	1
Credit River u/s Old Derry Rd	09-Aug-17	Pimephales notatus	Bluntnose Minnow	8
Credit River u/s Old Derry Rd	09-Aug-17	Pimephales promelas	Fathead Minnow	4
Credit River u/s Old Derry Rd	09-Aug-17	Rhinichthys atratulus	Blacknose Dace	24
Credit River u/s Old Derry Rd	09-Aug-17	Rhinichthys cataractae	Longnose Dace	135



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix C

Breeding Bird Survey Data

Appendix C: Breeding Bird Survey Summary Table

Surveys Conducted by: Nadine Price

Common Name	Scientific Name	Provincial SRANK ¹	Provincial SARO (Endangered Species Act, 2007) ²	Federal COSEWIC ³	Federal SARA (Species At Risk Act) ³	Federal SARA Schedule ⁴	Provincial MNRF Area Sensitive Species ⁵	Highest Number Recorded (All Habitat Units Combined)	Highest Recorded Breeding Evidence ⁶	Comments
American Crow	<i>Corvus brachyrhynchos</i>	S5B						2	H	
American Goldfinch	<i>Spinus tristis</i>	S5B						22	T	
American Robin	<i>Turdus migratorius</i>	S5B						21	A	
Baltimore Oriole	<i>Icterus galbula</i>	S4B						14	A	
Barn Swallow	<i>Hirundo rustica</i>	S4B	THR	THR	THR	1		5	H	Observed foraging in meadows and observed one individual investigating a shed structure in habitat unit H1 during the first survey. No nests were found.
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	S5B						1	S	
Black-capped Chickadee	<i>Poecile atricapillus</i>	S5						8	T	
Blue Jay	<i>Cyanocitta cristata</i>	S5						14	S	
Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR	THR	1	Yes	2	V	
Brown Thrasher	<i>Toxostoma rufum</i>	S4B						2	S	
Brown-headed Cowbird	<i>Molothrus ater</i>	S4B						15	T	
Canada Goose	<i>Branta canadensis</i>	S5						2	P	Observed on Credit River swimming together.
Cedar Waxwing	<i>Bombycilla cedrorum</i>	S5B						3	S	
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	S4B						5	H	Observed foraging in meadow.
Common Grackle	<i>Quiscalus quiscula</i>	S5B						2	S	
Common Yellowthroat	<i>Geothlypis trichas</i>	S5B						4	T	
Downy Woodpecker	<i>Picoides pubescens</i>	S5						6	S	
Eastern Kingbird	<i>Tyrannus tyrannus</i>	S4B						2	P	
Eastern Phoebe	<i>Sayornis phoebe</i>	S5B						1	S	
Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	SC	SC	SC	1		5	S	
European Starling	<i>Sturnus vulgaris</i>	SNA						24	NY	
Gray Catbird	<i>Dumetella carolinensis</i>	S4B						9	T	
Great Blue Heron	<i>Ardea herodias</i>	S4						8	X	Flying over site.
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	S4B						6	T	
Green Heron	<i>Butorides virescens</i>	S4B						3	H	Observed in SWM pond immediately adjacent to site.
House Wren	<i>Troglodytes aedon</i>	S5B						9	T	
Indigo Bunting	<i>Passerina cyanea</i>	S4B						4	T	

Common Name	Scientific Name	Provincial SRANK ¹	Provincial SARO (Endangered Species Act, 2007) ²	Federal COSEWIC ³	Federal SARA (Species At Risk Act) ³	Federal SARA Schedule ⁴	Provincial MNRF Area Sensitive Species ⁵	Highest Number Recorded (All Habitat Units Combined)	Highest Recorded Breeding Evidence ⁶	Comments
Killdeer	<i>Charadrius vociferus</i>	S5B,S5N						3	P	
Mallard	<i>Anas platyrhynchos</i>	S5						2	H	Observed taking off from Credit River.
Mourning Dove	<i>Zenaida macroura</i>	S5						1	S	
Northern Cardinal	<i>Cardinalis cardinalis</i>	S5						16	T	
Northern Flicker	<i>Colaptes auratus</i>	S4B						2	S	
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	S4B						3	H	Foraging over meadow.
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	S4						1	H	Drumming heard.
Red-breasted Nuthatch	<i>Sitta canadensis</i>	S5					Yes	3	S	
Red-eyed Vireo	<i>Vireo olivaceus</i>	S5B						4	T	
Red-tailed Hawk	<i>Buteo jamaicensis</i>	S5	NAR	NAR	NAR			6	A	Observed and heard calling from perch as well as foraging over meadow and calling.
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	S4						68	CF	
Ring-billed Gull	<i>Larus delawarensis</i>	S5B,S4N						10	X	Flying over site.
Savannah Sparrow	<i>Passerculus sandwichensis</i>	S4B					Yes	2	S	
Song Sparrow	<i>Melospiza melodia</i>	S5B						36	T	
Spotted Sandpiper	<i>Actitis macularius</i>	S5						1	H	Observed flying around and peeping in bare area of meadow (habitat unit M5).
Swamp Sparrow	<i>Melospiza georgiana</i>	S5B						2	CF	
Tree Swallow	<i>Tachycineta bicolor</i>	S4B						13	AE	Observed entering and exiting a Tree Swallow nest box in habitat unit M11, also observed entering and exiting a tree cavity in habitat unit M6.
Warbling Vireo	<i>Vireo gilvus</i>	S5B						6	T	
White-breasted Nuthatch	<i>Sitta carolinensis</i>	S5					Yes	3	T	
Willow Flycatcher	<i>Empidonax traillii</i>	S5B						2	T	
Yellow Warbler	<i>Setophaga petechia</i>	S5B						22	T	
TOTAL SPECIES	48									

¹S-Ranks (provincial)
Provincial (or Subnational) ranks are used by the Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario (Please refer to: <http://explorer.natureserve.org/nsranks.htm>)

SX — Presumed Extirpated - Species or community is believed to be extirpated from the province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

SH — Possibly Extirpated (Historical) - Species or community occurred historically in the province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20–40 years. A species or community could become SH without such a 20-40 year delay if the only known occurrences in a province were destroyed or if it had been extensively and unsuccessfully looked for. The SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences.

S1 — Critically Imperiled - Critically imperiled in the province or state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the province.

S2 — Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the province.

S3 — Vulnerable - Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 — Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5 — Secure - Common, widespread, and abundant in the province.
SNR — Unranked - Province conservation status not yet assessed.
SU — Unrankable - Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA — Not Applicable - A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
S#S# — Range Rank - A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).
S#? – Inexact or Uncertain - Denotes inexact or uncertain numeric rank.

Breeding Status Qualifiers

B – Breeding Conservation status refers to the breeding population of the species in the nation or state/province.
N – Nonbreeding Conservation status refers to the non-breeding population of the species in the province.
M – Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the province.

²**SARO *Endangered Species Act, 2007***
(provincial status from <http://www.ontario.ca/environment-and-energy/how-species-risk-are-listed#section-3>)
The provincial review process is implemented by the MNRF's Committee on the Status of Species at Risk in Ontario (COSSARO).

Extinct - A species that no longer exists anywhere.
Extirpated (EXT) - Lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario.
Endangered (END) - Lives in the wild in Ontario but is facing imminent extinction or extirpation.
Threatened (THR) - Lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
Special concern (SC) - Lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.
Not at Risk (NAR) - A species that has been evaluated and found to be not at risk.
Data Deficient (DD) - A species for which there is insufficient information for a provincial status recommendation.

³**SARA (*Federal Species at Risk Act*) Status and Schedule (includes COSEWIC Status)**
The Act establishes Schedule 1, as the official list of wildlife species at risk. It classifies those species as being either Extirpated, Endangered, Threatened, or Special Concern. Once listed, the measures to protect and recover a listed wildlife species are implemented.

Extinct - A wildlife species that no longer exists.
Extirpated (EXT) - A wildlife species that no longer exists in the wild in Canada, but exists elsewhere.
Endangered (END) - A wildlife species facing imminent extirpation or extinction.
Threatened (THR) - A wildlife species that is likely to become an endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
Special Concern (SC) - A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
Data Deficient (DD) - A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.
Not At Risk (NAR) - A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.

⁴**SARA Schedule**
Schedule 1: is the official list of species that are classified as extirpated, endangered, threatened, and of special concern.
Schedule 2: species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.
Schedule 3: species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

The Act establishes Schedule 1 as the official list of wildlife species at risk. However, please note that while Schedule 1 lists species that are extirpated, endangered, threatened and of special concern, the prohibitions do not apply to species of special concern.

Species that were designated at risk by COSEWIC prior to October 1999 (Schedule 2 & 3) must be reassessed using revised criteria before they can be considered for addition to Schedule 1 of SARA. After they have been assessed, the Governor in Council may on the recommendation of the Minister, decide on whether or not they should be added to the List of Wildlife Species at Risk.

⁵Source: Ontario Ministry of Natural Resources. 2000. *Significant Wildlife Habitat Technical Guide* & Appendices.

⁶**Ontario Breeding Bird Atlas - Breeding Evidence Codes**

Observed	
X	Species observed in its breeding season (no breeding evidence).

Possible	
H	Species observed in its breeding season in suitable nesting habitat.
S	Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.

Probable	
P	Pair observed in suitable nesting habitat in nesting season.
T	Permanent territory presumed through registration of territorial behaviour (song, etc.) on at least two days, a week or more apart, at the same place.
D	Courtship or display, including interaction between a male and a female or two males, including courtship feeding or copulation.

V	Visiting probable nest site
A	Agitated behaviour or anxiety calls of an adult.
B	Brood Patch on adult female or cloacal protuberance on adult male.
N	Nest-building or excavation of nest hole.

Confirmed	
DD	Distraction display or injury feigning.
NU	Used nest or egg shells found (occupied or laid within the period of the survey).

FY	Recently fledged young (nidicolous species) or downy young (nidifugous species), including incapable of sustained flight.
AE	Adult leaving or entering nest sites in circumstances indicating occupied nest.

FS	Adult carrying fecal sac.
CF	Adult carrying food for young.
NE	Nest containing eggs.
NY	Nest with young seen or heard.

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
M2	2019-06-06	1	American Goldfinch	(H) Species observed in its breeding season in suitable nesting habitat.	Flying over field
Rip1	2019-06-06	1	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	
W1	2019-06-06	1	American Robin	(A) Agitated behaviour or anxiety calls of an adult.	
W2	2019-06-06	1	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-06	1	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging in field
W1	2019-06-06	1	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-06	1	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-06	1	Barn Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Observed only one individual near storage shed. Didn't see going into shed. Did go into structure pictured here but no nests found (next to storage shed).
W1	2019-06-06	1	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
M6	2019-06-06	1	Blue Jay	(X) Species observed in its breeding season (no breeding evidence).	Flew over field and landed in tree on edge
M7	2019-06-06	1	Bobolink	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-06	1	Brown-headed Cowbird	(P) Pair observed in suitable nesting habitat in Nesting Season.	
R1	2019-06-06	1	Downy Woodpecker	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip1	2019-06-06	1	Eastern Wood-Pewee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-06	1	European Starling	(FY) Recently fledged young (nidicolous species) or downy young (nidifugous species), including incapable of sustained flight.	Adults and fledged young together
R1	2019-06-06	1	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-06	1	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M5	2019-06-06	1	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flew over
M6	2019-06-06	1	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
W1	2019-06-06	1	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	Great Crested Flycatcher	(H) Species observed in its breeding season in suitable nesting habitat.	
W1	2019-06-06	1	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-06	1	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-06	1	Killdeer	(H) Species observed in its breeding season in suitable nesting habitat.	
W1	2019-06-06	1	Mallard	(H) Species observed in its breeding season in suitable nesting habitat.	Took off from river
W1	2019-06-06	1	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-06	1	Northern Cardinal	(H) Species observed in its breeding season in suitable nesting habitat.	
H1	2019-06-06	1	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	Northern Flicker	(H) Species observed in its breeding season in suitable nesting habitat.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
W1	2019-06-06	1	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Heard calling
Rip1	2019-06-06	1	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Being harassed by Red-winged blackbirds
Rip1	2019-06-06	1	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
M1	2019-06-06	1	Red-winged Blackbird	(P) Pair observed in suitable nesting habitat in Nesting Season.	
M2	2019-06-06	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-06	1	Red-winged Blackbird	(P) Pair observed in suitable nesting habitat in Nesting Season.	
M7	2019-06-06	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-06	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-06	1	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
M5	2019-06-06	1	Red-winged Blackbird	(N) Nest-building or excavation of nest hole.	Holding nesting material in mouth
M6	2019-06-06	1	Red-winged Blackbird	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
M3	2019-06-06	1	Red-winged Blackbird	(X) Species observed in its breeding season (no breeding evidence).	Flying over field to trees on edge of field
M2	2019-06-06	1	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
M1	2019-06-06	1	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
M4	2019-06-06	1	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
M4	2019-06-06	1	Savannah Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-06	1	Savannah Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-06	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-06	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	Song Sparrow	(P) Pair observed in suitable nesting habitat in Nesting Season.	
H1	2019-06-06	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-06	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M3	2019-06-06	1	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
Rip1	2019-06-06	1	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-06	1	Willow Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M1	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M3	2019-06-06	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	At edge of field in shrubs

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
M5	2019-06-06	1	Yellow Warbler	(X) Species observed in its breeding season (no breeding evidence).	Flew over field
Rip2	2019-06-07	1	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	American Goldfinch	(H) Species observed in its breeding season in suitable nesting habitat.	
W3	2019-06-07	1	American Goldfinch	(P) Pair observed in suitable nesting habitat in Nesting Season.	
W5	2019-06-07	1	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-07	1	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	
M8	2019-06-07	1	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-07	1	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-07	1	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Black-capped Chickadee	(H) Species observed in its breeding season in suitable nesting habitat.	
M10	2019-06-07	1	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W4	2019-06-07	1	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip2	2019-06-07	1	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
M10	2019-06-07	1	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip3	2019-06-07	3	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip2	2019-06-07	1	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-07	1	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	Common Grackle	(X) Species observed in its breeding season (no breeding evidence).	Flying through
W3	2019-06-07	1	Common Yellowthroat	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	Eastern Kingbird	(P) Pair observed in suitable nesting habitat in Nesting Season.	
M8	2019-06-07	1	Eastern Wood-Pewee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	In small woodlot at northwest corner of habitat unit
M8	2019-06-07	1	European Starling	(H) Species observed in its breeding season in suitable nesting habitat.	Perched on electrical line
M9	2019-06-07	1	European Starling	(FY) Recently fledged young (nidicolous species) or downy young (nidifugous species), including incapable of sustained flight.	Flying over field, adults with fledged young that can fly
M11	2019-06-07	1	European Starling	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
Rip2	2019-06-07	1	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
H2	2019-06-07	1	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-07	1	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-07	1	Green Heron	(H) Species observed in its breeding season in suitable nesting habitat.	Observed at edge of SWM pond when heading back on trail.
W4	2019-06-07	1	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-07	1	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Indigo Bunting	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Indigo Bunting	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Mallard	(X) Species observed in its breeding season (no breeding evidence).	Flying over towards SWM pond.
H2	2019-06-07	1	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	Northern Cardinal	(H) Species observed in its breeding season in suitable nesting habitat.	
M8	2019-06-07	1	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Red-bellied Woodpecker	(H) Species observed in its breeding season in suitable nesting habitat.	
H2	2019-06-07	1	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W4	2019-06-07	1	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-07	3	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Circling over meadow
Rip3	2019-06-07	3	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Heard calling
Rip2	2019-06-07	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W4	2019-06-07	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-06-07	1	Red-winged Blackbird	(P) Pair observed in suitable nesting habitat in Nesting Season.	
M10	2019-06-07	1	Red-winged Blackbird	(P) Pair observed in suitable nesting habitat in Nesting Season.	
M8	2019-06-07	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
Rip3	2019-06-07	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-07	1	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	Flying in and out from nearby SWM pond.
W4	2019-06-07	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-07	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M11	2019-06-07	1	Song Sparrow	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip2	2019-06-07	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-06-07	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-06-07	1	Song Sparrow	(H) Species observed in its breeding season in suitable nesting habitat.	
W3	2019-06-07	1	Swamp Sparrow	(CF) Adult carrying food for young.	
M12	2019-06-07	1	Tree Swallow	(AE) Adult leaving or entering nest sites in circumstances indicating occupied nest.	TRES nest box in field.
M11	2019-06-07	1	Tree Swallow	(AE) Adult leaving or entering nest sites in circumstances indicating occupied nest.	3 TRES nest boxes in meadow, swallows using middle one.
M10	2019-06-07	1	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	Willow Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-07	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-07	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-07	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-07	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-07	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-07	1	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	American Goldfinch	(P) Pair observed in suitable nesting habitat in Nesting Season.	
R1	2019-06-18	2	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-18	2	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	
R1	2019-06-18	2	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	Foraging on road by farmhouse.
W4	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-18	2	Barn Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M1	2019-06-18	2	Barn Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M6	2019-06-18	2	Barn Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
W1	2019-06-18	2	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
R1	2019-06-18	2	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-18	2	Blue Jay	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-18	2	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
R1	2019-06-18	2	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
M7	2019-06-18	2	Bobolink	(V) Visiting probable nest site.	Male and female present.
Rip1	2019-06-18	2	Brown Thrasher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-18	2	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Downy Woodpecker	(H) Species observed in its breeding season in suitable nesting habitat.	
W4	2019-06-18	2	Eastern Wood-Pewee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-18	2	European Starling	(NY) Nest with young seen or heard.	
M4	2019-06-18	2	European Starling	(X) Species observed in its breeding season (no breeding evidence).	Flying over
R1	2019-06-18	2	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-18	2	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M5	2019-06-18	2	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over
H1	2019-06-18	2	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-18	2	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Indigo Bunting	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M6	2019-06-18	2	Killdeer	(X) Species observed in its breeding season (no breeding evidence).	Flying over
H1	2019-06-18	2	Mourning Dove	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-18	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-18	2	Northern Rough-winged Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
W1	2019-06-18	2	Red-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W4	2019-06-18	2	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Perched and calling them flew away
M4	2019-06-18	2	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
W1	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
W5	2019-06-18	2	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
M5	2019-06-18	2	Red-winged Blackbird	(CF) Adult carrying food for young.	
W4	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M3	2019-06-18	2	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
M4	2019-06-18	2	Red-winged Blackbird	(CF) Adult carrying food for young.	
M6	2019-06-18	2	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
M7	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-18	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M2	2019-06-18	2	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	Flying over field, other in field
M2	2019-06-18	2	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over field
M4	2019-06-18	2	Savannah Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M1	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M6	2019-06-18	2	Tree Swallow	(AE) Adult leaving or entering nest sites in circumstances indicating occupied nest.	Nest in tree cavity.
M3	2019-06-18	2	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M5	2019-06-18	2	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
R1	2019-06-18	2	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	White-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Willow Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-18	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
W2	2019-06-18	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-18	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-18	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-19	2	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M11	2019-06-19	2	American Goldfinch	(X) Species observed in its breeding season (no breeding evidence).	Flying over
H2	2019-06-19	2	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-19	2	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	
M10	2019-06-19	2	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	Saw on dirt road.
Rip2	2019-06-19	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-19	2	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Black-billed Cuckoo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-19	2	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-06-19	2	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-19	2	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip2	2019-06-19	2	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Common Grackle	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-19	2	Common Yellowthroat	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Downy Woodpecker	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-19	2	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-19	2	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-19	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-19	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
M10	2019-06-19	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-19	2	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Red-bellied Woodpecker	(H) Species observed in its breeding season in suitable nesting habitat.	Heard drumming on tree
Rip3	2019-06-19	2	Red-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Red-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	Heard in wooded area behind houses, outside of property boundary.
Rip2	2019-06-19	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-19	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-19	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-06-19	2	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
M9	2019-06-19	2	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-06-19	2	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M10	2019-06-19	2	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M12	2019-06-19	2	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over
H2	2019-06-19	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-06-19	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-06-19	2	Song Sparrow	(H) Species observed in its breeding season in suitable nesting habitat.	
M10	2019-06-19	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-06-19	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-06-19	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-06-19	2	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M11	2019-06-19	2	Tree Swallow	(AE) Adult leaving or entering nest sites in circumstances indicating occupied nest.	Went to middle nest box, possibly feeding young.
W3	2019-06-19	2	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-06-19	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-06-19	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-06-19	2	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-28	3	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-28	3	American Goldfinch	(X) Species observed in its breeding season (no breeding evidence).	Flying over

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
H1	2019-06-28	3	American Goldfinch	(H) Species observed in its breeding season in suitable nesting habitat.	Saw female
R1	2019-06-28	3	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging on road.
W5	2019-06-28	3	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-28	3	Baltimore Oriole	(A) Agitated behaviour or anxiety calls of an adult.	
W2	2019-06-28	3	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M2	2019-06-28	3	Barn Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
W1	2019-06-28	3	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-28	3	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
R1	2019-06-28	3	Blue Jay	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-28	3	Bobolink	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	Heard first thing this morning from edge of M1 by H1 and M7. Was in M7 singing.
H1	2019-06-28	3	Brown Thrasher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-28	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-28	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M3	2019-06-28	3	Cliff Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M4	2019-06-28	3	Cliff Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M6	2019-06-28	3	Cliff Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
W4	2019-06-28	3	Downy Woodpecker	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Eastern Phoebe	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-28	3	Eastern Wood-Pewee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M2	2019-06-28	3	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M1	2019-06-28	3	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M3	2019-06-28	3	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over
W1	2019-06-28	3	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W4	2019-06-28	3	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-28	3	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
H1	2019-06-28	3	Indigo Bunting	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M4	2019-06-28	3	Killdeer	(P) Pair observed in suitable nesting habitat in Nesting Season.	In barer area of field
W5	2019-06-28	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-28	3	Northern Flicker	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W4	2019-06-28	3	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Red-tailed Hawk	(H) Species observed in its breeding season in suitable nesting habitat.	Heard calling.
W4	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M2	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M3	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M6	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M7	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-28	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M2	2019-06-28	3	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M4	2019-06-28	3	Savannah Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M1	2019-06-28	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W1	2019-06-28	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-28	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-28	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W5	2019-06-28	3	Song Sparrow	(H) Species observed in its breeding season in suitable nesting habitat.	Chipping.
M5	2019-06-28	3	Spotted Sandpiper	(H) Species observed in its breeding season in suitable nesting habitat.	Seen flying around and peeping in barer areA of field.
M2	2019-06-28	3	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M3	2019-06-28	3	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
M5	2019-06-28	3	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
M6	2019-06-28	3	Tree Swallow	(H) Species observed in its breeding season in suitable nesting habitat.	Foraging over field
W2	2019-06-28	3	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
R1	2019-06-28	3	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	In wooded area just past farm house.
R1	2019-06-28	3	White-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip1	2019-06-28	3	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W2	2019-06-28	3	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H1	2019-06-28	3	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-07-03	3	American Crow	(H) Species observed in its breeding season in suitable nesting habitat.	Cawing and flying over woods
H2	2019-07-03	3	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-07-03	3	American Goldfinch	(H) Species observed in its breeding season in suitable nesting habitat.	
M8	2019-07-03	3	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-07-03	3	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-07-03	3	American Goldfinch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M11	2019-07-03	3	American Goldfinch	(X) Species observed in its breeding season (no breeding evidence).	Flying over
H2	2019-07-03	3	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip2	2019-07-03	3	American Robin	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	
Rip3	2019-07-03	3	American Robin	(H) Species observed in its breeding season in suitable nesting habitat.	All 3 on road near bridge
M11	2019-07-03	3	American Robin	(X) Species observed in its breeding season (no breeding evidence).	Flying over
H2	2019-07-03	3	Baltimore Oriole	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	Baltimore Oriole	(H) Species observed in its breeding season in suitable nesting habitat.	
H2	2019-07-03	3	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Black-capped Chickadee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
H2	2019-07-03	3	Blue Jay	(H) Species observed in its breeding season in suitable nesting habitat.	
H2	2019-07-03	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
M10	2019-07-03	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-07-03	3	Brown-headed Cowbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Canada Goose	(P) Pair observed in suitable nesting habitat in Nesting Season.	Saw on Credit River
H2	2019-07-03	3	Cedar Waxwing	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Cedar Waxwing	(H) Species observed in its breeding season in suitable nesting habitat.	
W3	2019-07-03	3	Cedar Waxwing	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-07-03	3	Common Yellowthroat	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Common Yellowthroat	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Downy Woodpecker	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-07-03	3	Downy Woodpecker	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	Eastern Wood-Pewee	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	European Starling	(H) Species observed in its breeding season in suitable nesting habitat.	
H2	2019-07-03	3	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Gray Catbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-07-03	3	Great Blue Heron	(X) Species observed in its breeding season (no breeding evidence).	Flying over
Rip3	2019-07-03	3	Great Crested Flycatcher	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-07-03	3	Green Heron	(H) Species observed in its breeding season in suitable nesting habitat.	Heard calling as approaching M12 in SWM pond. Later saw second flying in and landed in pond.
W3	2019-07-03	3	House Wren	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	Indigo Bunting	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Indigo Bunting	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-07-03	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	Northern Cardinal	(P) Pair observed in suitable nesting habitat in Nesting Season.	
M10	2019-07-03	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-07-03	3	Northern Cardinal	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-07-03	3	Red-eyed Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M11	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	

Appendix C
Breeding Bird Survey Raw Data 2019

Habitat Unit ID	Date	Visit	Species	Breeding Evidence	Species Comment
M10	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-07-03	3	Red-winged Blackbird	(H) Species observed in its breeding season in suitable nesting habitat.	
W3	2019-07-03	3	Red-winged Blackbird	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M11	2019-07-03	3	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	
M9	2019-07-03	3	Ring-billed Gull	(X) Species observed in its breeding season (no breeding evidence).	Flying over
M11	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
H2	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M8	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M9	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M12	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-07-03	3	Song Sparrow	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip2	2019-07-03	3	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
W3	2019-07-03	3	Warbling Vireo	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
Rip3	2019-07-03	3	White-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	White-breasted Nuthatch	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	
M10	2019-07-03	3	Yellow Warbler	(S) Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season.	



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix D

Significant Wildlife Habitat Screening

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Table 1.1: Seasonal Concentration Areas of Animals						
Waterfowl Stopover & Staging Areas (Terrestrial) Rationale: Habitat important to migrating waterfowl.	CUM1 CUT1 - Plus evidence of annual spring flooding from melt water or run-off within these ecosites. Fields with seasonal flooding and waste grains in the Long Point, Rondeau, Lake St. Clair, Grand Bend and Point Pelee areas may be important to Tundra Swans.	Fields with sheet water during Spring (mid-March to May). - Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl. - Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available.	No potential. CUM and CUT ecosites are present in the Study Area however no spring flooding was observed in any fields.	American Black Duck Northern Pintail Gadwall Blue-winged Teal Green-winged Teal American Wigeon Northern Shoveler Tundra Swan	Studies carried out and verified presence of an annual concentration of any listed species, evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects. - Any mixed species aggregations of 100 or more individuals required. - The flooded field ecosite habitat plus a 100300 m radius area, dependent on local site conditions and adjacent land use is the SWH. - Annual use of habitat is documented from information sources or field studies (annual use can be based on studies or determined by past surveys with species numbers and dates). SWHMiST Index #7 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.
Waterfowl Stopover & Staging Areas (Aquatic) Rationale: Important for local and migrant waterfowl populations during the spring or fall migration or both periods combined. Sites identified are usually only one of a few in the eco-district.	MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7	- Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment ponds and SWM ponds do not qualify as a SWH, however a reservoir managed as a large wetland or pond/lake does qualify. - These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water).	Low potential. MA and SWD ecosites are present in the Study Area. Marshes and watercourses are also present in the Study Area however they are located in highly disturbed areas - near the highway and urban residential areas.	Canada Goose Cackling Goose Snow Goose American Black Duck Northern Pintail Northern Shoveler American Wigeon Gadwall Green-winged Teal Blue-winged Teal Hooded Merganser Common Merganser Lesser Scaup Greater Scaup Long-tailed Duck Surf Scoter White-winged Scoter	Studies carried out & verified presence of: - Aggregations of 100 or more of listed species for 7 days, results in >700 waterfowl use days. - Areas with annual staging of ruddy ducks, canvasbacks, and redheads are SWH. - The combined area of the Ecological Land Classification (ELC) ecosites and a 100 m radius area is the SWH. - Wetland area and shorelines associated with sites identified within the SWHTG Appendix K are SWH.	Not present. Targeted surveys were not carried out to verify the defining criteria. MA and SWD ecosites are present in the Study Area. Marshes and watercourses are also present in the Study Area however they are located in highly disturbed areas - near the highway and urban residential areas.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
				Black Scoter Ring-necked duck Common Goldeneye Bufflehead Redhead Ruddy Duck Red-breasted Merganser Brant Canvasback Ruddy Duck	- Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. - Annual Use of Habitat is Documented from Information Sources or Field Studies (Annual can be based on completed studies or determined from past surveys with species numbers and dates recorded). SWHMiST Index #7 provides development effects and mitigation measures.	
Shorebird Migratory Stopover Area Rationale: High quality shorebird stopover habitat is extremely rare and typically has a long history of use.	BBO1 BBO2 BBS1 BBS2 BBT1 BBT2 SDO1 SDS2 SDT1 MAM1 MAM2 MAM3 MAM4 MAM5	- Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and unvegetated shoreline habitats. - Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. - Sewage treatment ponds and storm water ponds do not qualify as a SWH.	No potential. The ecosites listed are not found in the Study Area and the habitat criteria listed are not found in the Study Area.	Greater Yellowlegs Lesser Yellowlegs Marbled Godwit Hudsonian Godwit Black-bellied Plover American Golden-Plover Semipalmated Plover Solitary Sandpiper Spotted Sandpiper Semipalmated Sandpiper Pectoral Sandpiper White-rumped Sandpiper Baird’s Sandpiper Least Sandpiper Purple Sandpiper Stilt Sandpiper Short-billed Dowitcher Red-necked Phalarope Whimbrel Ruddy Turnstone Sanderling Dunlin	Studies confirming: - Presence of 3 or more of listed species and >1000 shorebird use days during spring or fall migration period (shorebird use days are the accumulated number of shorebirds counted per day over the course of the fall or spring migration period). - Whimbrel stop briefly (<24 hrs.) during spring migration, any site with >100 Whimbrel used for 3 years or more is significant. - The area of significant shorebird habitat includes the mapped ELC shoreline ecosites plus a 100 m radius area. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #8 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.
Raptor Wintering Area Rationale: Sites used by multiple species, a high number of individuals and used	Hawks/Owls: Combination of ELC Community Series; need to have present one Community Series from each land class; Forest: FOD,	- The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. - Raptor wintering sites (hawk/owl) need to be >	Moderate potential. FOD, SWD, CUM, CUT and CUW ecosites are present within and outside of the park limits and provide >20 ha of forest and upland habitat. There is also open water present (Credit River) for Bald Eagle habitat.	Rough-legged Hawk Red-tailed Hawk Northern Harrier American Kestrel Snowy Owl Special Concern: Short-eared Owl Bald Eagle	Studies confirm the use of these habitats by: One or more Short-eared Owls or; One or more Bald Eagles or; At least 10 individuals and two of the listed hawk/owl species.	Low potential. Although targeted surveys were not carried out to verify the defining criteria, breeding bird surveys did not detect the wildlife species required for Significant Wildlife Habitat.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
annually are most significant.	FOM, FOC. <u>Upland:</u> CUM; CUT; CUS; CUW. <u>Bald Eagle:</u> Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).	20 ha, with a combination of forest and upland. - Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands. - Field area of the habitat is to be wind swept with limited snow depth or accumulation. - Eagle sites have open water, large trees and snags available for roosting.			- To be significant a site must be used regularly (3 in 5 years) for a minimum of 20 days by the above number of birds. - The habitat area for an Eagle winter site is the shoreline forest ecosites directly adjacent to the prime hunting area. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects.” SWHMiST Index #10 and #11 provides development effects and mitigation measures.	
Bat Hibernacula <u>Rationale:</u> Bat hibernacula are rare habitats in all Ontario landscapes.	Bat Hibernacula may be found in these ecosites: CCR1 CCR2 CCA1 CCA2 (Note: buildings are not considered to be SWH)	- Hibernacula may be found in caves, mine shafts, underground foundations and Karsts. - Active mine sites should not be considered as SWH. - The locations of bat hibernacula are relatively poorly known.	No potential. The ecosites listed are not found in the Study Area and the hibernacula habitat listed is not present within the Study Area.	Big Brown Bat Tri-coloured Bat	- All sites with confirmed hibernating bats are SWH. - The habitat area includes a 200 m radius around the entrance of the hibernaculum for most development types and 1000 m for wind farms. - Studies are to be conducted during the peak swarming period (August to September). Surveys should be conducted following methods outlined in the “Bats and Bat Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #1 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.
Bat Maternity Colonies <u>Rationale:</u> Known locations of forested bat	Maternity colonies considered SWH are found in forested ecosites.	Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH).	Moderate potential. The FOD and SWD ecosites are present in the Study Area and large diameter wildlife trees are present in the Study Area. Older forest	Big Brown Bat Silver-haired Bat	- Maternity Colonies with confirmed use by: >10 Big Brown Bats >5 Adult Female Silver- haired Bats	Moderate potential. The FOD and SWD ecosites are present in the Study Area and large diameter wildlife trees are present in the Study Area. Older forest areas are also present in the Study

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
maternity colonies are extremely rare in all Ontario landscapes.	All ELC ecosites in ELC Community Series: FOD FOM SWD SWM	• Maternity roosts are not found in caves and mines in Ontario. • Maternity colonies located in Mature deciduous or mixed forest stands with >10/ha large diameter (>25 cm dbh) wildlife trees. • Female Bats prefer wildlife tree (snags) in early stages of decay, class 1-3 or class 1 or 2. • Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.	areas are also present in the Study Area. In addition, the large Meadowvale Station Woods, an Area of Natural and Scientific Interest (ANSI), is located adjacent (east side) to the park and has some large diameter wildlife trees.		• The area of the habitat includes the entire woodland, or a forest stand ELC ecosite or an ecoelement containing the maternity colonies. • Evaluation methods for maternity colonies should be conducted following methods outlined in the “Bats and Bat Habitats: Guidelines for Wind Power Projects”. • SWHMiST Index #12 provides development effects and mitigation measures.	Area. In addition, the large Meadowvale Station Woods, an Area of Natural and Scientific Interest (ANSI) is located adjacent (east) to the park and has some large diameter wildlife trees.
Turtle Wintering Areas <u>Rationale:</u> Generally, sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	Snapping and Midland Painted Turtles. ELC Community Classes: SW, MA, OA and SA ELC Community Series: FEO and BOO For Northern Map Turtle: Open Water areas such as deeper rivers or streams and lakes with	• For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. • Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate Dissolved Oxygen. • Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH.	Moderate potential. SW and MA ecosites are present within the Study Area both within the developable boundaries and outside these boundaries in the Meadowvale Stations Woods ANSI. There are also creeks and the Credit River in the Study Area which may provide over-wintering habitat for the Northern Map Turtle wiwin deep pools.	Midland Painted Turtle <u>Special Concern:</u> Northern Map Turtle Snapping Turtle	• Presence of 5 over-wintering Midland Painted Turtles is significant. • One or more Northern Map Turtle or Snapping Turtle over-wintering within a wetland is significant. • The mapped ELC ecosite area with the over wintering turtles is the SWH. If the hibernation site is within a stream or river, the deep-water pool where the turtles are over wintering is the SWH. • Over wintering areas may be identified by searching for congregations (Basking Areas) of turtles on warm, sunny days during the fall (September–October) or spring (March–May). • Congregation of turtles is more common where wintering areas are limited and therefore significant.	Moderate potential. SW and MA ecosites are present within the Study Area both within the developable boundaries and outside these boundaries in the Meadowvale Stations Woods ANSI. There are also creeks and the Credit River in the Study Area which may provide over-wintering habitat for the Northern Map Turtle.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
	current can also be used as over-wintering habitat.				• SWHMiST Index #28 provides development effects and mitigation measures for turtle wintering habitat.	
Reptile Hibernaculum <u>Rationale:</u> Generally, sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, Rock Barren, Crevice, Cave, and Alvar sites may be directly related to these habitats. Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator.	• For snakes, hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH. • Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line. • Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock groundcover.	Moderate potential. Some potential exists within the Study Area where there may be animal burrows, or micro features on the landscape that go below the frost line, such as rock piles or slopes, rotting logs and the foundations of old buildings; there is one rural heritage residential house with a foundation, some of which may be suitable for reptile hibernacula.	<u>Snakes:</u> Eastern Gartersnake Northern Watersnake Northern Red-bellied Snake Northern Brownsnake Smooth Green Snake Northern Ring-necked Snake <u>Special Concern:</u> Milksnake Eastern Ribbonsnake	Studies confirming: • Presence of snake hibernacula used by a minimum of five individuals of a snake sp. or; individuals of two or more snake spp. • Congregations of a minimum of five individuals of a snake sp. or; individuals of two or more snake spp. near potential hibernacula (e.g., foundation or rocky slope) on sunny warm days in Spring (April/May) and Fall (September/October). • Note: If there are Special Concern Species present, then site is SWH. • Note: Sites for hibernation possess specific habitat parameters (e.g., temperature, humidity, etc.) and consequently are used annually, often by many of the same individuals of a local population (i.e., strong hibernation site fidelity). Other critical life processes (e.g., mating) often take place in close proximity to hibernacula. The feature in which the hibernacula is located plus a 30 m radius area is the SWH. • SWHMiST Index #13 provides development effects and mitigation measures for snake hibernacula.	Low potential. Targeted surveys were not carried out to verify the defining criteria, however no incidental observations of the listed reptile species were made during field surveys.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Colonially - Nesting Bird Breeding Habitat (Bank & Cliff) Rationale: Historical use and number of nests in a colony make this habitat significant. An identified colony can be very important to local populations. All swallow population are declining in Ontario.	Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles. Cliff faces, bridge abutments, silos, barns. Habitat found in the following ecosites: CUM1 CUT1 CUS1 BLO1 BLS1 BLT1 CLO1 CLS1 CLT1	- Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area. - Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. - Does not include a licensed/permitted Mineral Aggregate Operation.	Low potential. Although CUM and CUT ecosites are present in the Study Area, natural features providing exposed bank or cliff habitat are not present in the Study Area.	Cliff Swallow Northern Rough-winged Swallow (this species is not colonial but can be found in Cliff Swallow colonies)	Studies confirming: - Presence of 1 or more nesting sites with 8 or more cliff swallow pairs and/or rough-winged swallow pairs during the breeding season. - A colony identified as SWH will include a 50 m radius habitat area from the peripheral nests. - Field surveys to observe and count swallow nests are to be completed during the breeding season. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #4 provides development effects and mitigation measures.	Not present. Breeding bird surveys were conducted in the Study Area, and five Cliff Swallow and three Northern Rough-Winged Swallow were recorded foraging over the meadows. No breeding evidence was recorded for these species.
Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs) Rationale: Large colonies are important to local bird population, typically sites are only known colony in area and are used annually.	SWM2 SWM3 SWM5 SWM6 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7 FET1	- Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. - Most nests in trees are 11 to 15 m from ground, near the top of the tree.	Low potential. Although SWD ecosites are present in the Study Area, natural features providing standing trees in wetlands, lakes, islands and peninsulas are not present in the Study Area.	Great Blue Heron Black-crowned Night-Heron Great Egret Green Heron	Studies confirming: - Presence of 2 or more active nests of Great Blue Heron or other listed species. - The habitat extends from the edge of the colony and a minimum 300 m radius or extent of the Forest ecosite containing the colony or any island <15.0 ha with a colony is the SWH. - Confirmation of active heronries are to be achieved through site visits conducted during the nesting season (April to August) or by evidence such as the presence of fresh guano, dead young and/or eggshells. SWHMiST Index #5 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area. Breeding bird surveys were conducted in the Study Area, and three Green Heron were observed in the Stormwater management (SWM) pond at the south end of the Study Area. Eight Great Blue Heron were recorded flying over the Study Area with no breeding evidence.
Colonially - Nesting Bird Breeding Habitat (Ground) Rationale:	Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1:50,000 NTS map).	Nesting colonies of gulls and terns are on islands or peninsulas associated with open water or in marshy areas.	No potential. Although MA, CUM and CUT ecosites are present in the Study Area, no islands or peninsulas associated with open water or	Herring Gull Great Black-backed Gull Little Gull Ring-billed Gull Common Tern Caspian Tern	Studies confirming: Presence of > 25 active nests for Herring Gulls or Ring-billed Gulls, >5 active nests for Common Tern or >2 active nests for Caspian Tern.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird). MAM1 – 6 MAS1 – 3 CUM CUT CUS	Brewers Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands.	marshy areas is present in the Study Area. Breeding records for Brewer's Blackbird are mainly restricted to the north shore of Lake Huron and Georgian Bay, as well as Sudbury/Manitoulin Island and NW Ontario; no breeding records currently exist for Southern and Eastern Ontario.	Brewer's Blackbird	- Presence of 5 or more pairs for Brewer's Blackbird. - Any active nesting colony of one or more Little Gull, and Great Black-backed Gull is significant. - The edge of the colony and a minimum 150 m radius area of habitat, or the extent of the ELC ecosites containing the colony or any island <3.0 ha with a colony is the SWH. - Studies would be done during May/June when actively nesting. Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". SWHMiST Index #6 provides development effects and mitigation measures.	
Migratory Butterfly Stopover Areas Rationale: Butterfly stopover areas are extremely rare habitats and are biologically important for butterfly species that migrate south for the winter.	Combination of ELC Community Series; need to have present one Community Series from each land class. <u>Field:</u> CUM CUT CUS <u>Forest:</u> FOC FOD FOM CUP Anecdotally, a candidate site for butterfly stopover will have a history of butterflies being observed.	- A butterfly stopover area will be a minimum of 10 ha in size with a combination of field and forest habitat present and will be located within 5 km of Lake Erie or Ontario. - The habitat is typically a combination of field and forest and provides the butterflies with a location to rest prior to their long migration south. - The habitat should not be disturbed, fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements for this habitat.	No potential. The Study Area is greater than 5 km from Lake Ontario and the required field size is smaller than 10 ha in size.	Painted Lady Red Admiral <u>Special Concern</u> Monarch	Studies confirm: - The presence of Monarch Use Days (MUD) during fall migration (August/October). MUD is based on the number of days a site is used by Monarchs, multiplied by the number of individuals using the site. Numbers of butterflies can range from 100-500/day, significant variation can occur between years and multiple years of sampling should occur. - Observational studies are to be completed and need to be done frequently during the migration period to estimate MUD. - MUD of >5000 or >3000 with the presence of Painted Ladies or Red Admiral's is to be considered significant. SWHMiST Index #16 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
		Staging areas usually provide protection from the elements and are often spits of land or areas with the shortest distance to cross the Great Lakes.				
Landbird Migratory Stopover Areas <u>Rationale:</u> Sites with a high diversity of species as well as high numbers are most significant.	All ecosites associated with these ELC Community Series: FOC FOM FOD SWC SWM SWD	- Woodlots >5 ha in size and within 5 km of Lake Erie and Ontario. - If woodlands are rare in an area of shoreline, woodland fragments 2-5 ha can be considered for this habitat. - If multiple woodlands are located along the shoreline those Woodlands <2 km from Lake Ontario are more significant. - Sites have a variety of habitats; forest, grassland and wetland complexes. - The largest sites are more significant. - Woodlots and forest fragments are important habitats to migrating birds, these features located along the shore and located within 5 km of Lake Erie and Ontario are Candidate SWH.	No potential. The Study Area is greater than 5 km from Lake Ontario.	All migratory songbirds. Canadian Wildlife Service Ontario website: http://www.ec.gc.ca/nature/default.asp?lang=En&n=421B7A9D-1 All migrant raptors species: <i>Ontario Ministry of Natural Resources: Fish and Wildlife Conservation Act, 1997.</i> Schedule 7: Specially Protected Birds (Raptors)	Studies confirm: - Use of the habitat by >200 birds/day and with >35 spp with at least 10 bird spp. recorded on at least 5 different survey dates. This abundance and diversity of migrant bird species is considered above average and significant. - Studies should be completed during spring (April/May) and fall (August/October) migration using standardized assessment techniques. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #9 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Deer Winter Congregation Areas <u>Rationale:</u> Deer movement during winter in the southern areas of Ecoregion 7E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands to reduce or avoid the impacts of winter conditions.	All Forested ecosites with these ELC Community Series: FOC FOM FOD SWC SWM SWD Conifer plantations much smaller than 50 ha may also be used.	• Woodlots >100 ha in size or if large woodlots are rare in planning area woodlots >50 ha. • Deer movement during winter in the southern areas of Ecoregion 7E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands. • Large woodlots > 100 ha and up to 1500 ha are known to be used annually by densities of deer that range from 0.1-1.5 deer/ha. • Woodlots with high densities of deer due to artificial feeding are not significant.	High Potential Deer Wintering Congregation Areas have been identified within the subject property as identified through correspondence with Credit Valley Conservation in consultation with the MNRF. The woodlands within the study area are considered Confirmed Deer Winter Congregation Areas.	White-tailed Deer	Studies confirm: • Deer management is an MNRF responsibility, deer winter congregation areas considered significant will be mapped by MNRF. • Use of the woodlot by white- tailed deer will be determined by MNRF, all woodlots exceeding the area criteria are significant, unless determined not to be significant by MNRF. • Studies should be completed during winter (January/February) when >20 cm of snow is on the ground using aerial survey techniques, ground or road surveys. or a pellet count deer density survey. • SWHMiST Index #2 provides development effects and mitigation measures.	Confirmed The woodlands within the study area are considered Confirmed Deer Winter Congregation Areas.
Table 1.2.1: Rare Vegetation Communities						
Cliffs and Talus Slopes <u>Rationale:</u> Cliffs and Talus Slopes are extremely rare habitats in Ontario.	Any ELC ecosite within Community Series: TAO CLO TAS CLS TAT CLT	• Most cliff and talus slopes occur along the Niagara Escarpment. • A Cliff is vertical to near vertical bedrock >3 m in height. • A Talus Slope is rock rubble at the base of a cliff made up of coarse rocky debris.	No potential.		• Confirm any ELC Vegetation Type for Cliffs or Talus Slopes. • SWHMiST Index #21 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area. The Niagara Escarpment is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Sand Barren <u>Rationale:</u> Sand barrens are rare in Ontario and support rare species. Most Sand Barrens have been lost due to cottage development and forestry.	ELC ecosites: SBO1 SBS1 SBT1 Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always ≤ 60%.	A sand barren area >0.5 ha in size. Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered, but less than 60%.	No potential.		- Confirm any ELC Vegetation Type for Sand Barrens - Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). SWHMiST Index #20 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.
Alvar <u>Rationale:</u> Alvars are extremely rare habitats in Ecoregion 7E.	ALO1 ALS1 ALT1 FOC1 FOC2 CUM2 CUS2 CUT2-1 CUW2 Five Alvar Indicator Species: <i>Carex crawei</i> <i>Panicum philadelphicum</i> <i>Eleocharis compressa</i> <i>Scutellaria parvula</i> <i>Trichostema brachiatum</i> These indicator species are very specific to Alvars within Ecoregion 7E.	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animals species. Vegetation	No potential.		Field studies that identify: - Four of the five Alvar Indicator Species at a Candidate Alvar site is Significant. - Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). - The alvar must be in excellent condition and fit in with surrounding landscape with few conflicting land uses. SWHMiST Index #17 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
		cover varies from patchy to barren with a less than 60% tree cover. • An Alvar site > 0.5 ha in size. • Alvar is particularly rare in Ecoregion 7E where the only known sites are found in the western islands of Lake Erie.				
Old Growth Forest <u>Rationale:</u> Due to historic logging practices and land clearance for agriculture, old growth forest is rare in the Ecoregion 7E.	Forest Community Series: FOD FOC FOM SWD SWC SWM	• Old Growth forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.	No potential. Although the FOD ecosite is present within the Study Area, Old Growth forest was not identified in the Study Area.		Field Studies will determine: • If dominant trees species of the are >140 years old, then the area containing these trees is SWH. • The forested area containing the old growth characteristics will have experienced no recognizable forestry activities (cut stumps will not be present). • The area of forest ecosites combined or an eco-element within an ecosite that contains the old growth characteristics is the SWH. • Determine ELC vegetation types for the forest forest area containing the old growth characteristics. • SWHMiST Index #23 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.
Savannah <u>Rationale:</u> Savannahs are extremely rare habitats in Ontario.	TPS1 TPS2 TPW1 TPW2 CUS2	• No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH. • A Savannah is a tallgrass prairie habitat that has tree cover between 25–60%.	No potential.		Field studies confirm: • one or more of the Savannah indicator species listed in Appendix N should be present. Note: Savannah plant spp. list from Ecoregion 7E should be used. • Area of the ELC ecosite is the SWH. • Site must not be dominated by exotic or introduced species (<50% vegetative cover is exotic sp.).	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
		In Ecoregion 7E, known Tallgrass Prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in Toronto area (north of Lake Ontario).			SWHMiST Index #18 provides development effects and mitigation measures.	
Tallgrass Prairie <u>Rationale:</u> Tallgrass Prairies are extremely rare habitats in Ontario.	TPO1 TPO2	- No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway Right of Ways (ROW) are not considered to be SWH. - A Tallgrass Prairie has ground cover dominated by prairie grasses. An open Tallgrass Prairie habitat has < 25% tree cover. - In Ecoregion 7E, known Tallgrass Prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in Toronto area (north of Lake Ontario).	No potential.		Field studies confirm: - One or more of the Prairie indicator species listed in Appendix N should be present. Note: Prairie plant spp. list from Ecoregion 7E should be used. - Area of the ELC ecosite is the SWH. - Site must not be dominated by exotic or introduced species (<50% vegetative cover is exotic sp.). SWHMiST Index #19 provides development effects and mitigation measures.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Other Rare Vegetation Communities Rationale: Plant communities that often contain rare species which depend on the habitat for survival.	- Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG. - Any ELC ecosite Code that has a possible ELC Vegetation Type that is Provincially Rare is Candidate SWH.	- ELC ecosite codes that have the potential to be a rare ELC Vegetation Type as outlined in Appendix M. - The MNR/Natural Heritage Information Centre (NHIC) will have up to date listing for rare vegetation communities. - Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	High Potential A FOD7-4 Black Walnut Deciduous Forest ecosite has been identified within the subject property as identified through correspondence with Credit Valley Conservation.		Field studies should confirm: - If an ELC Vegetation Type is a rare vegetation community based on listing within Appendix M of SWHTG. - Area of the ELC Vegetation Type polygon is the SWH. SWHMiST Index #37 provides development effects and mitigation measures.	Confirmed The FOD7-4 ecosite identified during background information review has been confirmed during the ELC field investigations.
Table 1.2.2: Specialized Habitat for Wildlife considered Significant Wildlife Habitat						
Waterfowl Nesting Area Rationale: Important to local waterfowl populations, sites with greatest number of species and highest number of individuals are significant.	All upland habitats located adjacent to these wetland ELC ecosites are Candidate SWH: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SWT1 SWT2 SWD1 SWD2 SWD3 SWD4 Note: includes adjacency to Provincially Significant Wetlands (PSW).	- A waterfowl nesting area extends 120 m from a wetland (> 0.5 ha) or a wetland (>0.5ha) and any small wetlands (0.5ha) within 120 m or a cluster of 3 or more small (<0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur. - Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. - Wood Ducks and Hooded Mergansers utilize large diameter trees (>40 cm dbh) in woodlands for cavity nest sites.	Low potential. Although MA and SWD wetlands are present within the developable limits, there is no PSW in the Study Area and the upland areas are less than 120 m wide. In addition, the wetlands are located in highly disturbed areas - near the highway and urban residential areas. Just east of the developable limits, the wetlands are found within the Meadowvale Station Woods ANSI which will not be developed.	American Black Duck Northern Pintail Northern Shoveler Gadwall Blue-winged Teal Green-winged Teal Wood Duck Hooded Merganser Mallard	Studies confirmed: - Presence of 3 or more nesting pairs for listed species excluding Mallards, or; - Presence of 10 or more nesting pairs for listed species including Mallards. - Any active nesting site of an American Black Duck is considered significant. - Nesting studies should be completed during the spring breeding season (April - June). Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". - A field study confirming waterfowl nesting habitat will determine the boundary of the waterfowl nesting habitat for the SWH, this may be greater or less than 120 m from the wetland and will provide enough habitat for waterfowl to successfully nest. SWHMiST Index #25 provides development effects and mitigation measures.	Not present Breeding bird surveys were conducted in the Study Area, and only two Mallards were recorded in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Bald Eagle & Osprey Nesting, Foraging & Perching Habitat <u>Rationale:</u> Nest sites are fairly uncommon in Eco-region 7E and are used annually by these species. Many suitable nesting locations may be lost due to increasing shoreline development pressures and scarcity of habitat.	ELC Forest Community Series: FOD FOM FOC SWD SWM and SWC (directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.	• Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. • Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree’s canopy. • Nests located on man-made objects are not to be included as SWH (e.g., telephone poles and constructed nesting platforms).	Moderate potential. The FOD ecosite is present in the Study Area and adjacent to the Credit River. No Osprey or Bald Eagle nests were observed during breeding bird surveys.	Osprey Special Concern Bald Eagle	Studies confirm the use of these nests by: • One or more active Osprey or Bald Eagle nests in an area. • Some species have more than one nest in a given area and priority is given to the primary nest with alternate nests included within the area of the SWH. • For an Osprey, the active nest and a 300 m radius around the nest or the contiguous woodland stand is the SWH, maintaining undisturbed shorelines with large trees within this area is important. • For a Bald Eagle the active nest and a 400-800 m radius around the nest is the SWH. Area of the habitat from 400800 m is dependent on-site lines from the nest to the development and inclusion of perching and foraging habitat. • To be significant a site must be used annually. When found inactive, the site must be known to be inactive for >3 years or suspected of not being used for >5 years before being considered not significant. • Observational studies to determine nest site use, perching sites and foraging areas need to be done from mid-March to mid-August. • Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. • SWHMiST Index #26 provides development effects and mitigation measures.	Not present No Osprey or Bald Eagle nests were observed during breeding bird surveys.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Woodland Raptor Nesting Habitat Rationale: Nests sites for these species are rarely identified; these area sensitive habitats and are often used annually by these species.	May be found in all forested ELC ecosites. May also be found in: SWC SWM SWD and CUP3	- All natural or conifer plantation woodland/forest stands >30 ha with >4ha of interior habitat. Interior habitat determined with a 200 m buffer. - Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers hawk nest along forest edges sometimes on peninsulas or small off-shore islands. - In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest.	Low potential. While the forested ecosites present within the Study Area may be suitable nesting sites for raptors, the habitat size criteria for candidate Significant Wildlife Habitat is not present in the Study Area.	Northern Goshawk Cooper's Hawk Sharp-shinned Hawk Red-shouldered Hawk Barred Owl Broad-winged Hawk	Studies confirm: - Presence of 1 or more active nests from species list is considered significant. - Red-shouldered Hawk and Northern Goshawk – A 400 m radius around the nest or 28 ha area of habitat is the SWH (the 28 ha habitat area would be applied where optimal habitat is irregularly shaped around the nest). - Barred Owl – A 200 m radius around the nest is the SWH. - Broad-winged Hawk and Coopers Hawk– A 100 m radius around the nest is the SWH. - Sharp-Shinned Hawk – A 50 m radius around the nest is the SWH. - Conduct field investigations from early March to end of May. The use of call broadcasts can help in locating territorial (courting/nesting) raptors and facilitate the discovery of nests by narrowing down the search area. SWHMiST Index #27 provides development effects and mitigation measures.	Low potential. The habitat size criteria for Significant Wildlife Habitat is not present in the Study Area. Targeted surveys were not completed for this SWH feature.
Turtle Nesting Areas Rationale: These habitats are rare and when identified will often be the only breeding site for local populations of turtles.	Exposed mineral soil (sand or gravel) areas adjacent (<100 m) or within the following ELC ecosites: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 BOO1 FEO1	- Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. - For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial	No potential. The ecosites listed are not found in the Study Area and the habitat criteria listed are not found in the Study Area.	Midland Painted Turtle <u>Special Concern Species:</u> Northern Map Turtle Snapping Turtle	Studies confirm: - Presence of 5 or more nesting Midland Painted Turtles. - One or more Northern Map Turtle or Snapping Turtle nesting is a SWH. - The area or collection of sites within an area of exposed mineral soils where the turtles nest, plus a radius of 30-100 m around the nesting area dependent on slope, riparian vegetation and adjacent land use is the SWH. - Travel routes from wetland to nesting area are to be considered within the SWH as part of the 30-100 m area of habitat.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
		road embankments and shoulders are not SWH. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used.			- Field investigations should be conducted in prime nesting season typically late spring to early summer. Observational studies observing the turtles nesting is a recommended method. SWHMiST Index #28 provides development effects and mitigation measures for turtle nesting habitat.	
Seeps and Springs Rationale: Seeps/Springs are typical of headwater areas and are often at the source of coldwater streams.	Seeps/Springs are areas where ground water comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested ecosite within the headwater areas of a stream could have seeps/springs.	- Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system. - Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species.	Moderate Potential CVC has confirmed locations of seeps and springs beyond 120 m east of the subject property that meet ecoregion 7E criteria.	Wild Turkey Ruffed Grouse Spruce Grouse White-tailed Deer Salamander spp.	Field Studies confirm: - Presence of a site with 2 or more seeps/springs should be considered SWH. - The area of a ELC forest ecosite or an ecoelement within ecosite containing the seeps/springs is the SWH. The protection of the recharge area considering the slope, vegetation, height of trees and groundwater condition need to be considered in delineation the habitat. SWHMiST Index #30 provides development effects and mitigation measures.	High Potential Seeps and Springs have not been confirmed during Burnside's field investigations but are considered present off-site based on data provided by CVC.
Amphibian Breeding Habitat (Woodland) Rationale: These habitats are extremely important to amphibian biodiversity within a landscape and often represent the only breeding habitat for local amphibian populations.	All ecosites associated with these ELC Community Series: FOC FOM FOD SWC SWM SWD Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be	- Presence of a wetland, pond or woodland pool (including vernal pools) >500 m² (about 25 m diameter) within or adjacent (within 120 m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians. - Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to	Moderate potential. There are two wetlands present in the Study Area and adjacent Meadowvale Station Woods ANSI that are >500 m ² and found adjacent to or within a FOD ecosite.	Eastern Newt Blue-spotted Salamander Spotted Salamander Gray Treefrog Spring Peeper Western Chorus Frog Wood Frog	Studies confirm: - Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3. - A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the woodland/wetlands. - The habitat is the wetland area plus a 230 m radius of woodland area. If a wetland area is adjacent to a woodland,	Moderate potential. There are two wetlands present in the Study Area and adjacent Meadowvale Station Woods ANSI that are >500 m ² and found adjacent to or within a FOD ecosite. Breeding amphibian call surveys were not completed; however these wetland features will be treated as significant.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
	used due to reduced risk to migrating amphibians.	be used as breeding habitat.			a travel corridor connecting the wetland to the woodland is to be included in the habitat. • SWHMiST Index #14 provides development effects and mitigation measures.	
Amphibian Breeding Habitat (Wetlands) Rationale: Wetlands supporting breeding for these amphibian species are extremely important and fairly rare within Central Ontario landscapes.	ELC Community Classes: SW MA FE BO OA and SA. Typically, these wetland ecosites will be isolated (>120m) from woodland ecosites, however larger wetlands containing predominantly aquatic species (e.g., Bull Frog) may be adjacent to woodlands.	- Wetlands >500 m² (about 25 m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNRF mapping and could be important amphibian breeding habitats. - Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators. - Bullfrogs require permanent water bodies with abundant emergent vegetation.	Not present The MA ELC community class is present within the Study Area surrounding the stormwater management (SWM) pond at the south end of the Study Area. This MA ecosite is >500 m² but is adjacent to woodlands. The SW ELC community class is present in the north end of the Study Area, south of the 401. This feature is >500 m² and contains suitable habitat for amphibian breeding but is adjacent to woodlands. All amphibian habitat present are considered to be the Woodland type.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog	Studies confirm: - Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog/toad species with Call Level Codes of 3 or; Wetland with confirmed breeding Bullfrogs are significant. - The ELC ecosite wetland area and the shoreline are the SWH. - A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the wetlands. - If a SWH is determined for Amphibian Breeding Habitat (Wetlands) then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. SWHMiST Index #15 provides development effects and mitigation measures.	Not present. The MA ELC community class is present within the Study Area surrounding the stormwater management pond at the south end of the Study Area. This MA ecosite is >500 m² but is adjacent to woodlands and is part of a SWM pond. American Toad, Green Frog and American Bullfrog were incidentally observed near or in the MA ecosite however breeding amphibian call surveys were not completed in the Study Area.
Woodland Area-Sensitive Bird Breeding Habitat Rationale: Large, natural blocks of mature woodland habitat within the settled areas of Southern	All ecosites associated with these ELC Community Series: FOC FOM FOD SWC SWM	- Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs. old) forest stands or woodlots >30 ha. - Interior forest habitat is at least 200 m from forest edge habitat.	Moderate potential. FOD, FOC and SWD ecosites are present in the Study Area. The forested ecosites are connected and provide continuous habitat that is >30 ha. In addition, there is interior forest habitat and the habitat is large mature forest.	Yellow-bellied Sapsucker Red-breasted Nuthatch Veery Blue-headed Vireo Northern Parula Black-throated Green Warbler Blackburnian Warbler Black-throated Blue Warbler	Studies confirm: - Presence of nesting or breeding pairs of 3 or more of the listed wildlife species. Note: any site with breeding Cerulean Warblers or Canada Warblers is to be considered SWH. - Conduct field investigations in spring and early summer when birds are singing and defending their territories.	No potential. With the exception of the Red-breasted Nuthatch being present in the Study Area, the wildlife species criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
Ontario are important habitats for area sensitive interior forest song birds.	SWD			Ovenbird Scarlet Tanager Winter Wren Pileated Woodpecker Special Concern: Cerulean Warbler Canada Warbler	- Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #34 provides development effects and mitigation measures.	
Table 1.3: Habitat for Species of Conservation Concern considered Significant Wildlife Habitat						
Marsh Breeding Bird Habitat Rationale: Wetlands for these bird species are typically productive and fairly rare in Southern Ontario landscapes.	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SAS1 SAM1 SAF1 FEO1 BOO1 For Green Heron: All SW, MA and CUM1 sites	- Nesting occurs in wetlands. - All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present. - For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently, it may be found in upland shrubs or forest a considerable distance from water.	Moderate potential. Wetland habitat with shallow water and emergent aquatic vegetation is present in the Study Area surrounding the SWM pond. In addition, this wetland is an MA ELC community class and SW and CUM ecosites are present for Green Heron habitat.	American Bittern Virginia Rail Sora Common Moorhen American Coot Pied-billed Grebe Marsh Wren Sedge Wren Common Loon Green Heron Trumpeter Swan Special Concern: Black Tern Yellow Rail	Studies confirm: - Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or breeding by any combination of 4 or more of the listed species. Note: any wetland with breeding of 1 or more Black Terns, Trumpeter Swan, Green Heron or Yellow Rail is SWH. - Area of the ELC ecosite is the SWH. - Breeding surveys should be done in May/June when these species are actively nesting in wetland habitats. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #35 provides development effects and mitigation measures.	Low potential. While targeted marsh breeding bird surveys were not carried out to verify the defining criteria, standard breeding bird surveys were conducted in the Study Area and only one of these species was recorded, Green Heron. Three individuals were recorded on separate occasions, two of which might have been a pair. The marsh, however, is located around a SWM pond and near to an urban residential area and roads.
Open Country Bird Breeding Habitat Rationale: This wildlife habitat is declining throughout Ontario and North America. Species such as the Upland Sandpiper have declined significantly the past 40 years based on	CUM1 CUM2	- Large grassland areas (includes natural and cultural fields and meadows) >30 ha. - Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e., no row cropping or intensive hay or livestock pasturing in the last 5 years). - Grassland sites considered significant	No potential. While CUM ecosites are present within the Study Area, they are smaller than 30 ha.	Upland Sandpiper Grasshopper Sparrow Vesper Sparrow Northern Harrier Savannah Sparrow Special Concern Short-eared Owl	Field Studies confirm: - Presence of nesting or breeding of 2 or more of the listed species. - A field with 1 or more breeding Short-eared Owls is to be considered SWH. - The area of SWH is the contiguous ELC ecosite field areas. - Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories.	No potential. The habitat criteria for Significant Wildlife Habitat is not present in the Study Area. Breeding bird surveys were conducted in the Study Area, and only the Savannah Sparrow was observed singing in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
CWS (2004) trend records.		should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older. The Indicator bird species are area sensitive requiring larger grassland areas than the common grassland species.			- Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST Index #32 provides development effects and mitigation measures.	
Shrub/Early Successional Bird Breeding Habitat Rationale: This wildlife habitat is declining throughout Ontario and North America. The Brown Thrasher has declined significantly over the past 40 years based on CWS (2004) trend records.	CUT1 CUT2 CUS1 CUS2 CUW1 CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species.	- Large field areas succeeding to shrub and thicket habitats >10 ha in size. - Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (i.e., no row-cropping, haying or live-stock pasturing in the last 5 years). - Shrub thicket habitats (>10 ha) are most likely to support and sustain a diversity of these species. - Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands.	No potential. Although the CUT and CUW ecosites are present in the Study Area, they are less than 10 ha in size.	Indicator Spp: Brown Thrasher Clay-coloured Sparrow Common Spp. Field Sparrow Black-billed Cuckoo Eastern Towhee Willow Flycatcher Special Concern: Yellow-breasted Chat Golden-winged Warbler	Field Studies confirm: - Presence of nesting or breeding of 1 of the indicator species and at least 2 of the common species. - A habitat with breeding Yellow-breasted Chat or Golden-winged Warbler is to be considered as SWH. - The area of the SWH is the contiguous ELC ecosite field/thicket area. - Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories. - Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. SWHMiST cxlix Index #33 provides development effects and mitigation measures.	No potential. Although one of the indicator species (Brown Thrasher) and two of the common species (Black-billed Cuckoo and Willow Flycatcher) were observed during breeding bird surveys exhibiting breeding evidence, they were observed in different habitat units and the habitat size criteria for Significant Wildlife Habitat is not present in the Study Area.
Terrestrial Crayfish Rationale: Terrestrial Crayfish are only found within SW Ontario in Canada and their	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 MAS1 MAS2 -	- Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for Terrestrial Crayfish. - Constructs burrows in marshes, mudflats, meadows, the ground	Moderate potential. Meadow ecosites and MA and SWD ecosites are present in the Study Area.	Chimney or Digger Crayfish (<i>Fallicambarus fodiens</i>) Devil Crayfish or Meadow Crayfish (<i>Cambarus Diogenes</i>)	Studies Confirm: Presence of 1 or more individuals of species listed or their chimneys (burrows) in suitable meadow marsh, swamp or moist terrestrial sites.	Confirmed. Many crayfish burrows (at least 9) were observed at the edge of a meadow ecosite (MEGM3) in a moist area towards the northeast corner of the Study Area (Figure 9).

Significant Wildlife Habitat Screening in the Study Area– Ecoregion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
habitats are very rare.	MAS3 SWD SWT SWM CUM1 with inclusions of above meadow marsh or swamp ecosites can be used by terrestrial crayfish.	can't be too moist. Can often be found far from water. Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually the soil is not too moist so that the tunnel is well formed.			- Area of ELC ecosite or an ecoelement area of meadow marsh or swamp within the larger ecosite area is the SWH. - Surveys should be done April to August in temporary or permanent water. Note the presence of burrows or chimneys are often the only indicator of presence, observance or collection of individuals is very difficult. SWHMiST Index #36 provides development effects and mitigation measures.	
Special Concern and Rare Wildlife Species Rationale: These species are quite rare or have experienced significant population declines in Ontario.	All plant and animal Element Occurrences (EO) within a 1 or 10 km grid. Older element occurrences were recorded prior to GPS being available, therefore location information may lack accuracy.	When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially Rare species; linking candidate habitat on the site needs to be completed to ELC ecosites.	Moderate potential. The Special Concern species Common Nighthawk, Eastern Wood-pewee, Peregrine Falcon, Wood Thrush, Eastern Ribbonsnake and Monarch have been observed in the Study Area in the past through previous field investigations.	All Special Concern and Provincially Rare (S1-S3, SH) plant and animal species. Lists of these species are tracked by the NHIC.	Studies Confirm: - Assessment/inventory of the site for the identified Special Concern or rare species needs to be completed during the time of year when the species is present or easily identifiable. - The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH, this must be delineated through detailed field studies. The habitat needs be easily mapped and cover an important life stage component for a species e.g., specific nesting habitat or foraging habitat. SWHMiST Index #37 provides development effects and mitigation measures.	Confirmed. Monarch and Eastern Wood-pewee, both Special Concern species, were observed in the Study Area during field investigations in 2019.
Table 1.4.1: Animal Movement Corridors						
Amphibian Movement Corridors Rationale: Movement corridors for amphibians moving from their terrestrial habitat to breeding habitat can	Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1.	- Movement corridors between breeding habitat and summer habitat. - Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH from	No Potential This habitat type is only identified if amphibian Breeding Habitat- Wetland is identified.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog	- Field Studies must be conducted at the time of year when species are expected to be migrating or entering breeding sites. - Corridors should consist of native vegetation, with several layers of vegetation.	No potential. The defining criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat Screening in the Study Area– EcoRegion 7E Criteria (2015)

300043764.0000

Habitat	CANDIDATE - Significant Wildlife Habitat			CONFIRMED - Significant Wildlife Habitat		
	Ecological Land Classification Ecosite Codes	Habitat Criteria	Presence of Candidate Habitat in the Study Area (within 120 m of the Project)	Wildlife Species	Defining Criteria	Presence of Confirmed Significant Wildlife Habitat in the Study Area (within 120 m of the Project)
be extremely important for local populations.		Table 1.2.2 (Amphibian Breeding Habitat– Wetland) of this Schedule.		Mink Frog Bullfrog	- Corridors unbroken by roads, waterways or bodies, and undeveloped areas are most significant. - Corridors should have at least 15 m of vegetation on both sides of waterway or be up to 200 m wide of woodland habitat and with gaps <20 m. - Shorter corridors are more significant than longer corridors, however amphibians must be able to get to and from their summer and breeding habitat. SWHMiST Index #40 provides development effects and mitigation measures.	
Table 1.5.1: Significant Wildlife Habitat Exceptions for Ecodistricts within EcoRegion 7E						
7E-2 - Bat Migratory Stopover Area Rationale: Stopover areas for long distance migrant bats are important during fall migration.	No specific ELC types	- Long distance migratory bats typically migrate during late summer and early fall from summer breeding habitats throughout Ontario to southern wintering areas. Their annual fall migration may concentrate these species of bats at stopover areas. - This is the only known bat migratory stopover habitats based on current information.	No potential. No known bat field studies have been completed to date in the Study Area to determine if it is a migratory stopover area.	Hoary Bat Eastern Red Bat Silver-haired Bat	- Long Point (42°35'N, 80° 30'E, to 42°33'N, 80°03'E) has been identified as a significant stop-over habitat for fall migrating Silver-haired Bats, due to significant increases in abundance, activity and feeding that was documented during fall migration. - The confirmation criteria and habitat areas for this SWH are still being determined. SWH MIST Index #38 provides development effects and mitigation measures.	No potential. The defining criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
A. Seasonal Concentration Areas					
A1. Deer Wintering Area	Yes, with threshold	Deer wintering areas in the Region of Peel and Town of Caledon will be assessed and mapped by OMNR staff. According to OMNR, mapping will not be based on the traditional assessment methodology. Instead, it will be based on a detailed assessment of historic and recent motor vehicle accident data for Caledon in association with local expert knowledge.	Yes (to be provided by OMNR)	Yes.	Confirmed Habitat See Ecoregion 7E table.
A2. Colonial Bird Nesting Sites (e.g., heronry, gull colony)	Yes, with threshold	It is recommended that thresholds be based on the Significant Wildlife Habitat Technical Guide (OMNR 2000) and ORMCP TP2 (Queen's Printer for Ontario 2007a) supplemented by information from: - Atlas of the Breeding Birds of Ontario 2000-2005 (Cadman <i>eta.</i>, 2007) - Breeding Birds of Ontario Vols. 1 & 2 (Peck and James 1983, 1987) - Communications with OMNR and Conservation Authority staff. Therefore, it is recommended that any nesting colonies of the following species be considered SWH in the Region of Peel and Town of Caledon: Great Blue Heron, Great Egret, Black-crowned Night-Heron, and Black Tern. In addition, it is recommended that habitats that support the following number of nests/pairs be considered SWH in the Region of Peel and Town of Caledon: Green Heron, 2; Common Tern, 5; Northern Rough-winged Swallow, 5; Bank Swallow, 30; Cliff Swallow, 8; Barn Swallow, 3; Sedge Wren, 3; and Marsh Wren, 3. <u>Note 1:</u> Excluded areas include: a) actively used portions of recreational areas (e.g., sports fields, golf courses) and parks, and b) lands permanently transformed for human services or infrastructure (e.g., roads, buildings, piers, active pits and quarries). <u>Note 2:</u> If fewer than 5 naturally occurring Bank Swallow colonies exist in any of the jurisdictions within the Region of Peel (e.g., Town of Caledon), all colonies should be considered significant.	No	Yes.	No Potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
A3. Waterfowl Nesting Habitat	Yes, with threshold	The recommended threshold for Region of Peel and Town of Caledon are based on ORMCP TP2 (Queen's Printer for Ontario 2007a) but incorporate additions to the species list. Therefore, it is recommended that SWH be defined as waterfowl nesting areas that support: a) Any combination of 3 or more nesting pairs of: Wood Duck, Gadwall, American Wigeon, American Black Duck, Blue-winged Teal, Northern Shoveler, Northern Pintail, Green-winged Teal, Redhead, Hooded Merganser, Common Merganser, and Ruddy Duck. b) Any combination of 10 or more nesting pairs of listed species above, including Mallard.	No	Yes.	No Potential The recommended thresholds for Significant Wildlife Habitat are not present in the study area.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
		<u>Note:</u> Waterfowl nesting areas generally correspond with upland habitats adjacent to marsh, swamp and shallow water ELC community classes, and generally extend out as far as 120 from the wetland (> 0.5 ha) or a cluster of 3 or more smaller wetlands (< 0.5 ha) within 150 m of each other.			
A4i. Migratory Landbird Stopover Areas	Region of Peel – Yes, with threshold Town of Caledon No, not applicable	It is recommended that all Natural Areas be identified as SWH within: a) 2 km of Lake Ontario b) River and creek valleys within 5 km of Lake Ontario, and c) 500 m of a river valley, but within 5 km of Lake Ontario. Successional Communities are also to be identified as SWH if they are: • ≥5 ha in size and immediately on the lakeshore, or • ≥10 ha in size and within any of the zones (a, b, c) identified above. Natural Areas = all terrestrial and wetland communities as defined under the Ecological Classification (ELC) system (Lee <i>et al.</i> 1998), as well as cultural woodlands and plantations. Successional Areas = cultural savannahs, cultural thickets and cultural meadows. <u>Excluded areas include:</u> a) actively used portions of recreational areas (e.g., sports fields, golf courses) and parks, and b) lands permanently transformed for human services or infrastructure (e.g., roads, buildings, piers, active pits and quarries). <u>Note 1:</u> SWH designation is not intended to limit existing agricultural activities from continuing. <u>Note 2:</u> It is suggested that the City of Mississauga consider reviewing their Tree Permit By Law Number 474-05 to regulate the cutting of trees within 2 km of the lakeshore more rigorously.	Yes (sampling mapping to be provided to the Region)	Yes.	No Potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
A4ii. Migratory Bat Stopover Areas	Yes, without threshold	There is insufficient information currently available to suggest a threshold. However, in the not too distant future the OMNR Wind Resource Atlas (http://www.ontariowindatlas.ca/) will indicate areas considered important to bat migration. These areas should be considered candidate SWH in Region of Peel and the Town of Caledon. Further field studies will be required to confirm their significance. In meantime, the protection of significant migratory bat stopover areas is probably accomplished by criterion A4i, at least along Lake Ontario.	No	No.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
A4iii. Migratory Butterfly Stopover Areas	Region of Peel – Yes, without threshold Town of Caledon No, not applicable	There is insufficient information currently available to suggest a threshold. It is therefore recommended that the Region of Peel and Town of Caledon defer to the Significant Wildlife Habitat Technical Guide (OMNR 2000) approach, or guidelines for Eco-region 7E (in preparation by OMNR), until more data is gathered/analyzed. These areas are likely covered by criterion A4i along Lake Ontario. <u>Note:</u> According to CVC, migratory butterfly congregations have been observed along the Lake Ontario shoreline (e.g., Lakeside Park and Rattray Marsh) during the fall.	No	Yes.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
A4iv. Migratory Waterfowl Stopover and/or Staging (Terrestrial)	Yes, with threshold	ORMCP TP2 (Queen's Printer for Ontario 2007a) thresholds (but incorporating 4 additional species) are recommended for the Region of Peel and Town of Caledon: annual aggregations (observed on a single day) of 100 individuals or more in any combination of the listed species. <u>Listed species include:</u> Wood Duck, Gadwall, American Wigeon, American Black Duck, Blue-winged Teal, Northern Shoveler, Northern Pintail, Green-winged Teal, or Ring-necked Duck. Note 1: Annual habitat use can be based on background information or field studies conducted over at least a two-year period. Note 2: SWH designation is not intended to limit existing agricultural activities from continuing, or preventing built infrastructure (e.g., sewage lagoons) from functioning as required.	No	Yes.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
A4v. Migratory Waterfowl Stopover and/or Staging (Aquatic)	Yes, with threshold	ORMCP TP2 (Queen's Printer for Ontario 2007a) thresholds are recommended for mainland portions of the Region of Peel and Town of Caledon (i.e., annual aggregations of 100 or more individuals (observed during a single day), in any combination, included on the Mainland species list). Nearshore waters of Lake Ontario within the globally significant "The West End of Lake Ontario" Important Bird Area (IBA) should automatically be designated as SWH. However, for nearshore waters of Lake Ontario east of the IBA. It is recommended that areas that support annual aggregations of 250 or more individuals (observed during a single day), in any combination, included on the Nearshore species list be considered SWH. <u>Mainland Species List:</u> Wood Duck, Gadwall, American Wigeon, American Black Duck, Blue-winged Teal, Northern Pintail, Northern Shoveler, Green-winged Teal, Ring-necked Duck, Lesser Scaup, Bufflehead, Common Goldeneye, Hooded Merganser, Common Jvierganser. <u>Nearshore Species List:</u> Brant, Canvasback, Redhead, Greater Scaup, Lesser Scaup, King Eider, Common Eider, Harlequin Duck, Surf Scoter, White-winged Scoter, Black Scoter, Long-tailed Duck, Bufflehead, Common Goldeneye, Common Merganser, Red-breasted Merganser, Ruddy Duck, Homed Grebe, Red-necked Grebe. <u>Note 1:</u> Annual habitat use can be based on background information or field studies conducted over at least a two-year period. <u>Note 2:</u> SWH designation is not intended to limit existing agricultural activities from continuing or preventing built infrastructure (e.g., sewage lagoons) from functioning as required. <u>Note 3:</u> The nearshore waters of Lake Ontario are part of conservation authority jurisdiction under the <i>Conservation Authority Act</i> and in an agreement with DFO for development planning review including municipal activities and approvals.	No	Yes.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
A4vi. Migratory Shorebird Stopover Areas	Yes, with threshold	It is recommended that sites that support annual aggregations of ≥ 75 individuals (observed on a single day during migration), of any combination of species, be considered SWH: <u>Note 1:</u> A site is defined as (a) a 100 m reach of shoreline (centered at any location), or (b) a habitat patch 0.2 ha in size (centered at any location). This is roughly equivalent to a circle with a 25 m radius or square with 45 m sides. <u>Note 2:</u> The determination of annual habitat use can be based on background information or field studies conducted over at least a two-year period. <u>Note 3:</u> These thresholds should be examined in the future and revised if necessary by consulting with local naturalist clubs and/or the Ontario Field Ornithologists. <u>Note 4:</u> The designation of SWH is not intended to limit the ability of existing, normal agricultural uses from continuing, or preventing existing municipal infrastructure (e.g., sewage lagoons, piers, etc.) from functioning as required.	No	Yes.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
A5. Raptor Wintering Areas (i.e., used for feeding and/or roosting)	Yes, with threshold	Until information specific to the Region of Peel and Town of Caledon becomes available, it is recommended that the provincial guidelines presented in the Significant Wildlife Habitat Technical Guide (OMNR 2000) be used in both jurisdictions. Accordingly, it is recommended that open fields >20 ha in size adjacent to woodlands be considered candidate SWH. Open fields generally correspond with cultural meadows or abandoned agricultural lands. Smaller sites should also be considered if there is any evidence or reasonable possibility of regular winter raptor activity. Confirmed sites should be occupied at least 60% of winters (almost 2 out of every 3 years), and based on suggestions made by OMNR staff, include 2 or more species and at least 10 individuals of the following species: Northern Harrier, Red-tailed Hawk, Rough-legged Hawk, or American Kestrel. Refer to Section 6.5.10 to see how occurrence data can be collected. <u>Note 1:</u> Any wintering sites used by Short-eared Owl (designated Special Concern in Ontario and Canada) should also be designated SVVH. <u>Note 2:</u> SWH designation is not intended to limit the ability of existing, normal agricultural uses from continuing.	No	Yes.	Moderate potential. See Ecoregion 6E table.
A6. Snake Hibernacula	Yes, with threshold	It is recommended that sites that support the following conditions should be considered SWH in the Region of Peel and Town of Caledon. Thresholds are based on ORMCP TP2 (Queen's Printer for Ontario 2007a) and supplemented by Ontario Herpetofaunal Atlas data. 10 or more Eastern Gartersnakes, or 5 or more or DeKay's Brownsnakes, or 2 or more of the following species: Ring-necked Snake, Smooth Greensnake, Northern Watersnake, and Red-bellied Snake, or 2 or more of the above species. <u>Note 1:</u> Foundations of buildings in active use should be exempt. Any significant hibernacula associated with buildings/structures should however be considered for protection through some type stewardship or mitigation measures. <u>Note 2:</u> Significant snake hibernacula associated with existing municipal infrastructure should be managed in such a way that maintains the function of the facility but reduces its potential impact.	No	Yes.	Moderate potential. See Ecoregion 6E table.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
A7. Bat Maternal Roosts and Hibernacula	Yes, with threshold	Until information specific to the Region of Peel and Town of Caledon becomes available, it is recommended that the provincial guidelines presented in the Significant Wildlife Habitat Technical Guide (OMNR 2000) be used in both jurisdictions. Therefore, the following numbers of bats should be considered significant at maternity colonies and winter roosts, respectively: Big Brown Bat, 30, 30; Little Brown Bat 100, 50; Eastern Pipistrelle, 10, 20; Silver-haired Bat, 10, NIA; Long-eared Bat, 10, 20; Small-footed Bat, 10, all sites. However, with the discovery of White Nose Syndrome in neighbouring New York State in 2007, OMNR staff must be contacted to see if more restrictive thresholds are warranted. If so, these should supersede those in the Significant Wildlife Habitat Technical Guide (OMNR 2000). <u>Note:</u> The Natural Heritage Information Centre (OMNR) will be providing hibemacula habitat mapping in the future. However, due to its sensitive nature, specific location information will not be available. It is possible that larger patches will be shown on the MNR Wind Resource Atlas representing candidate SWH. It must also be understood that many hibemacula have not been found, therefore any known cave or crevice ecosites or old mine shafts should be considered candidate SWH and evaluated as such.	No	Yes.	Moderate potential. See Ecoregion 6E table.
A8. Bullfrog Concentration Areas	Yes, but will be covered by criterion B8ii	The thresholds recommended for the ORM (OMNR, 2007) will be incorporated in criterion B8ii (Amphibian breeding habitat-non-forested sites). That is, any sites supporting breeding Bullfrogs in the Region of Peel and Town of Caledon should be considered SWH.	Yes, but will be part of criterion B8ii	No.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
A9. Wild Turkey Winter Range	No, see text in Section 6.5.14	No threshold will be recommended. Wild Turkey is no longer of conservation concern in Ontario, the Region of Peel or Town of Caledon.	Not required	No.	There is no recommended threshold for this criterion due to the Wild Turkey no longer being a species of conservation concern, therefore it does not need to be assessed for Significant Wildlife Habitat.
A10. Turkey Vulture Summer Roosting Areas	Yes, without threshold	None. Insufficient information currently available to suggest a threshold.	No	No.	Low potential. The recommended thresholds for Significant Wildlife Habitat (i.e. agricultural fields adjacent to forest) are not present in the study area (see Section 6.5.15 for details on habitat criteria).
B. Rare Vegetation Communities or Specialized Habitats for Wildlife					
B1. Rare Vegetation Communities	Yes, with threshold	- All communities ranked as S1, S2 or S3 by NHIC (as per Bakowsky 1996) - Targeted vegetation communities ranked S3S4, S4 or S5 in Ecodistricts 6E-7 and 7E-4 in the Great Lakes Conservation Blueprint (Henson and Brodribb 2005), or identified as rare on the ORM in the ORMCP TP2 (Queen's Printer for Ontario 2007a): - Dry-Fresh White Pine-Red Pine Coniferous Forest Type (FOCI-2) - Dry-Fresh White Pine-Sugar Maple Forest Ecosite (FOM 2-2) - Dry-Fresh White Pine-Oak Mixed Forest Type (FOM2-1)	No (available mapping from NHIC and conservation authorities incomplete)	Yes.	Confirmed See Ecoregion 7E table.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
		- Moist-Fresh Hemlock-Sugar Maple Mixed Forest Type (FOM 6-1) - Dry-Fresh Red Oak Deciduous Forest Type (FODI-1) - Dry-Fresh White Oak Deciduous Forest Type (FODI-2) - Dry-Fresh Mixed Oak Deciduous Forest Type (FOD 1-4) - Dry-Fresh Oak-Hickory Deciduous Forest Type (FOD 2-2) - Dry-Fresh Hickory Deciduous Forest Type (FOD 2-3) - Fresh Sugar Maple-Black: Maple Deciduous Forest (FOD 6-2) - Broad-leaved Sedge Organic Meadow Marsh Type (MAM3-6) - White Cedar-Conifer Organic Swamp Type (SWC3-2) - Willow Organic Thicket Swamp Type (SWT3-2) All bog and fen wetland communities (considered rare in the Region of Peel and Town of Caledon). <u>Note 1:</u> The S3S4, S4 and S5 ranked woodland ELC Vegetation communities listed above are also captured by the significant woodlands criteria for significant communities (see Section 5.1.15). <u>Note 2:</u> The minimum size for rare vegetation communities is 0.5 ha.			
B2. Forests Providing a High Diversity of Habitats	Yes, but will be covered by significant woodlands	It is assumed that all forests providing a high diversity of habitats (as described in the Significant Wildlife Habitat Technical Guide (OMNR 2000) will be captured by the suite of significant woodlands criteria (e.g., size/interior, proximity to a watercourse, and presence of significant habitats and/or species) even though the diversity criterion itself has not been recommended. <u>Note:</u> See Sections 5.3 and 6.5.17 of this report for more details.	Possible at coarse ELC Community series level.	No.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
B3. Old-Growth or Mature Forest Stands	Yes, but will be covered by significant woodlands	It is assumed that all old-growth and mature forests will be captured by the significant woodlands criteria for old-growth and size. <u>Note:</u> See Sections 5.3.3.5 and 6.5.18 of this report for more details.	No	Yes.	No potential. The recommended thresholds for Significant Wildlife Habitat are not
B4. Foraging Areas with Abundant Mast	Yes, with threshold	It has been assumed that most forests providing foraging areas with abundant mast (i.e., nuts like acorns and fruit bearing shrubs) will be captured by the significant woodlands criterion for size/interior, as well as the criterion for old growth (see Section 5.3.1 - 5.3.3). To capture some areas that may not be captured as significant woodlands, we are also recommending any ELC community that is: - FOD I (Dry-Fresh Oak Deciduous Forest Ecosite), - FOD 2 (Dry-Fresh Oak-Maple-Hickory Deciduous Forest Ecosite) or - FOD 9 (Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite) also be considered SWH under this criterion. <u>Note:</u> See Sections 5.3 and 6.5.19 of this report for a more comprehensive rationale.	Potentially once ELC Ecosite mapping is completed for the Region of Peel	Yes.	Confirmed. The FODM7-4 ecosite within the Study Area is considered a foraging area with abundant mast.
B5. Highly Diverse Areas	Yes, with threshold	The top 5% most diverse habitat patches in the Region of Peel (a) in the Rural System (i.e., the Town of Caledon) and (b) in the Urban System (i.e., the Cities of Brampton and Mississauga). Diversity was determined by the number of ELC community types (at the Community Series level) per habitat patch. Habitat patches were defined as continuous natural areas (i.e., all woodland - FOD, FOC, FOM; wetland - MA, SW, FE; and successional community polygon types - CUT, CUS, CUP, CUW) not separated by arterial or collector roads or built-up areas by more than 20 m gaps.	Yes (sample mapping provided to the Region of Peel)	No.	Confirmed The communities within the project area meet the criteria as identified by CVC.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
		<u>Note:</u> Cultural meadows (CUM) were excluded because of the difficulty in distinguishing them from active agricultural areas in air photo interpretation. All agricultural areas (AGR) were excluded as well.			
B6. Cliffs and Caves	Yes, with threshold	Any cliff, talus, crevice or cave community (per ELC, Lee <i>et. al.</i> , 1998) ranked as S1, S2 or S3 by NHIC. <u>Note 1:</u> No minimum size threshold is recommended. <u>Note 2:</u> Areas where quarry licenses are active are excluded.	No (existing mapping from NHIC is incomplete)	Yes.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
B7. Seeps and Springs	Yes, with threshold	Site specific confirmation of presence through any of the following: • Visual confirmation of surface discharge or springs • Groundwater investigations or detailed vegetation assessments (<i>e.g.</i>, confirmed presence of plant species known to be associated with seepage areas in southern Ontario such as <i>Carex scabrata</i>). • Areas with red or rust coloured stains on the soil surface (these are usually precipitates of iron hydroxides indicating areas of groundwater discharge). • Locating patches of ground that are free of ice and snow in winter and where there is evidence of seepage or springs, or where there are previously confirmed records for seeps or springs. • Presence of marl (<i>i.e.</i>, precipitates of carbonates in solution where groundwater pathways go through areas of concentrated dissolved solids and come to the surface) The above site analysis needs to be completed in conjunction with evidence collected through background or current site-specific studies that concludes the seep or spring provides habitat for or otherwise supports other SWH criteria (as identified in this study). • <i>e.g.</i>, Deer Wintering Areas, Wild Turkey Winter Range, Rare Vegetation Communities (mostly indirectly), Highly Diverse Areas, Amphibian Breeding Habitat (indirectly), and Habitat for Species of Conservation Concern. <u>Note:</u> In addition to protection of the specific seep or spring zone, there needs to be consideration for protection of the hydrologic dynamics within the groundwater catchment area in the Official Plan policies and/or supporting guidelines.	No	Yes.	Moderate Potential. See Ecoregion 6E table. Confirmed Seeps and Springs east of the Subject Property.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
B8i. Amphibian Breeding Habitat Forested Sites (e.g., vernal pools)	Yes, with threshold	Based mostly on standards developed for the ORM (OMNR, 2007), it is recommended that sites that support the following conditions be considered SWH in the Region of Peel and Town of Caledon. - Breeding populations of 2 or more listed species in Group A with a combined total of at least 40 individuals present. - A combined total of at least 30 individuals from any species listed in Group B (i.e., species that tend to behave more like vernal pool obligates, at least in Peel Region). - All breeding populations of Four-toed Salamander regardless of number of individuals <u>Group A:</u> Red-spotted Newt, Blue-spotted Salamander, Jefferson Salamander complex 'hybrids' (where the Blue-spotted Salamander genome dominates), Spotted Salamander, unidentified members of the <i>Ambystoma</i> salamander genus, Gray Treefrog, Spring Peeper, and Wood Frog. <u>Group B:</u> Blue-spotted Salamander, unidentified members of the Jefferson Salamander complex or 'hybrids' where the Blue-spotted Salamander genome dominates, and Wood Frog. In addition, management recommendations in "Conserving Pool-breeding Amphibians ... " (Calhoun and Klemens 2002) should be followed (e.g., protect and maintain pool hydrology and water quality). <u>Note 1:</u> It is assumed that for every male frog heard calling a female frog is also present. That is, if 5 male frogs are heard calling, it is assumed 10 individuals are present. <u>Note 2:</u> In order to be sure how many individuals are present, field surveys must be conducted in a seasonally appropriate manner. Timing is critical. Refer to Section 6.5.23 for more information. <u>Note 3:</u> Larvae/egg masses numbers cannot reliably reveal how many individuals are present at a site. Documenting adults at the right time of year, under the right weather conditions, and using the right methodology should be the priority. Refer to Section 6.5.23 for more information. <u>Note 4:</u> The Great Lakes-St. Lawrence/Canadian Shield population of the Western Chorus Frog, whose geographic range includes the Region of Peel, was designated Threatened by COSEWIC in April 2008. It is addressed under Criterion C1.	No	Yes.	Moderate Potential See Ecoregion 6E table.
B8ii. Amphibian Breeding Habitat Non-Forested Sites (e.g., marshes)	Yes, with threshold	Based mostly on standards developed for the ORM (OMNR, 2007), it is recommended that sites that support the following conditions be considered SWH in the Region of Peel and Town of Caledon. - Breeding populations of 2 or more listed species in Group A with a combined total of at least 40 individuals present. - A combined total of at least 30 individuals from any species listed in Group B (i.e., species that tends to behave more like vernal pool obligates, at least in Peel Region). - All breeding populations of Bullfrog regardless of number of individuals - All breeding populations of Mudpuppy regardless of number of individuals	No	Yes.	No Potential. All wetlands are within are forested sites.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
		In addition, wetland hydrology and water quality must be maintained. Protection must also be extended to adjacent upland habitats to appropriately accommodate the terrestrial portion of their life cycles. The size of the area protected must reflect the habitat requirements of the listed species present. <u>Group A:</u> Red-spotted Newt, Blue-spotted Salamander, Jefferson Salamander complex 'hybrids' (where the Blue-spotted Salamander genome dominates), Spotted Salamander, unidentified members of the <i>Ambystoma</i> salamander genus, American Toad, Gray Treefrog, Spring Peeper, Green Frog, Pickerel Frog, Northern Leopard Frog, Mink Frog and Wood Frog. <u>Group B:</u> Blue-spotted Salamander, unidentified members of the Jefferson Salamander complex or 'hybrids' where the Blue-spotted Salamander genome dominates, and Wood Frog. <u>Note 1:</u> It is assumed that for every male frog or toad heard calling a female frog is also present. That is, if 5 male frogs or toads are heard calling, it is assumed 10 individuals are present. <u>Note 2:</u> In order to be sure how many individuals are present, field surveys must be conducted in a seasonally appropriate manner. Timing is critical. Refer to Section 6.5.24 for more information. <u>Note 3:</u> Larvae/egg masses numbers cannot reliably reveal how many individuals are present at a site. Documenting adults at the right time of year, under the right weather conditions, and using the right methodology should be the priority. Refer to Section 6.5.24 for more information. <u>Note 4:</u> The Great Lakes-St. Lawrence/Canadian Shield population of the Western Chorus Frog, whose geographic range includes the Region of Peel, was designated Threatened by COSEWIC in April 2008. It is addressed under Criterion C1.			
B 9. Turtle Nesting Habitat and Turtle Overwintering Areas	Yes, with threshold	It is recommended that the thresholds developed for the ORM (OMNR, 2007), i.e., breeding or overwintering presence of 5 or more pairs/individuals of Snapping Turtle or Midland Painted Turtle, apply to the Region of Peel and Town of Caledon. It is also recommended that the documentation required be expanded to include turtle nests, not just pairs. <u>Note:</u> Snapping Turtle was designated Special Concern nationally in December 2008. It's may receive similar SAR status in Ontario in 2009. Northern Map Turtle was removed from the list since it is designated Special Concern in Ontario and is therefore included under criterion C2.	No	Yes.	Moderate Potential. See Ecoregion 7E table.
B10. Habitat for Area-Sensitive Forest Interior Breeding Bird Species	Yes, with threshold	The recommended threshold is based on: - an analysis of the habitat requirements of area-sensitive forest interior species occurring in Peel, as well as forest interior patch size, and - the presence of species listed in the ORMCP TP2 (Queen's Printer for Ontario 2007a). Therefore, it is recommended that mature forests (i.e., greater than 60 years of age) with interior patch size ≥ 4 ha be considered SWH in the Region of Peel and Town of Caledon. In addition, habitats in either jurisdiction (including plantations) that support 3 or more listed species with probable or confirmed breeding evidence should be considered significant.	Yes, forest interior patch size information is available, but age may need confirmation. Also, site-specific survey work required to confirm whether smaller forest fragments exceed species thresholds.	Yes.	No potential. With the exception of the Red-breasted Nuthatch being present in the Study Area, the wildlife species criteria for Significant Wildlife Habitat is not present in the Study Area.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
		<u>Listed Species include:</u> Hairy Woodpecker, Pileated Woodpecker, Red-breasted Nuthatch, Brown Creeper, Winter Wren, Veery, Northern Parula, Black-throated Blue Warbler, Black-throated Green Warbler, Blackburnian Warbler, Black-and-white Warbler, Ovenbird, and Scarlet Tanager. <u>Note 1:</u> Whip-poor-will, Yellow-bellied Sapsucker, and Blue-headed Vireo were removed from the list since they also occur along forest edges and openings. Hairy Woodpecker, Pileated Woodpecker, Brown Creeper, Winter Wren, and Black-throated Blue Warbler were added to the list. <u>Note 2:</u> Small inclusions of younger forest should not be excluded when analyzing forest interior patch size.			
B11. Habitat for Open Country and Early Successional Breeding Bird Species	Yes, with threshold	Open country habitats ≥ 10 ha, not actively farmed for ≥ 5 years and with confirmed habitat utilization by: - at least 4 area-sensitive species from Group A, or 3 area-sensitive species from Group A and 4 or more species from Group B. <u>Group A:</u> Bobolink, Eastern Meadowlark, Grasshopper Sparrow, Northern Harrier, Savannah Sparrow, Upland Sandpiper, Western Meadowlark. <u>Group B:</u> American Kestrel, Brown Thrasher, Clay-colored Sparrow, Eastern Bluebird, Eastern Kingbird, Field Sparrow, Horned Lark, Sedge Wren, Vesper Sparrow, Willow Flycatcher.	No	Yes.	No Potential.
B12. Habitat for Wetland Breeding Bird Species	Yes, with threshold	ORMCP TP2 (Queen's Printer for Ontario 2007a) thresholds are recommended for the Region of Peel and Town of Caledon: 5 nesting pairs of any combination of species from Group A, or 4 nesting pairs of any combination of species from Group B. <u>Group A:</u> Common Loon, Pied-billed Grebe, American Bittern, Virginia Rail, Common Moorhem, Sora, American Coot, Sandhill Crane, Wilson's Snipe, Wilson's Phalarope, Black Tern, Marsh Wren, and Sedge Wren. <u>Group B:</u> Black Tern, Marsh Wren, and Sedge Wren.	No	Yes.	No Potential.
B13i Raptor Nesting Habitat (Raptors associated with wetlands, ponds, and rivers)	Yes, with threshold	ORMCP TP2 (Queen's Printer for Ontario 2007a) thresholds are recommended for the Region of Peel and Town of Caledon: the presence of one or more active nests of Northern Harrier or Osprey. <u>Note:</u> Short-eared Owl was removed from the list of species considered since it is designated Special Concern in Ontario and Canada. It is included under criterion C2 and C3.	No	Yes.	No Potential.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
B13ii Raptor Nesting Habitat (Raptors associated with woodlands habitats)	Yes, with threshold	ORMCP TP2 (Queen's Printer for Ontario 2007a) thresholds are recommended for the Region of Peel and Town of Caledon, (i.e., the presence of one or more active nests from listed species). <u>Listed species include:</u> Sharp-shinned Hawk, Cooper's Hawk, Northern Goshawk, Red-shouldered Hawk, Broad-winged Hawk, Northern Saw-whet Owl, and Long-eared Owl. <u>Note:</u> Eastern Screech-Owl was left off the list because of its common status.	No	Yes.	No Potential.
B14. Mink, River Otter, Marten, and Fisher Denning Sites	Yes, with threshold	Based on available distribution and occurrence data, it is recommended that the following supporting habitats be considered SWH: - All River Otter, Marten and Fisher den sites (i.e., a min. 10 x 10 m area around the den site); - Mink den sites in natural areas with low levels of disturbance (i.e., a min. 10 x 10 m area around the den site) With respect to Mink and River Otter, it is also recommended that as much wetland and undeveloped, undisturbed shoreline is protected as possible by establishing a 30 m no-development buffer from the shoreline for a distance of up to 500 m in either direction upstream and downstream for Mink and 2 km in either direction upstream and downstream for River Otter. For Fisher, it is recommended that as many large blocks of contiguous mid-aged to mature forest as possible surrounding the den site is protected. <u>Note:</u> Marten is not found in the planning area.	No	No.	No potential. According to the Ontario Fur Managers Federation, Mink prefer den sites dominated by coniferous trees such as Spruce, Balsam and Cedar. This habitat is not found within the study area. According to the Atlas of the Mammals of Ontario (Dobbyn, 1994), River Otter, Marten and Fisher species ranges are found north of Lake Simcoe and are therefore not present within the study area.
B15. Mineral Licks	No, not applicable	No thresholds are suggested as this criterion is primarily meant for Moose and not considered applicable to the Region of Peel or Town of Caledon.	No	No.	No potential. The recommended thresholds for Significant Wildlife Habitat are not present in the study area.
C. Habitat for Species of Conservation Concern Criteria					
C1. Species Identified as Nationally Endangered or Threatened by COSEWIC which are not listed as Endangered or Threatened under Ontario's Endangered Species Act.	Yes, with threshold	The habitat for any species identified to be nationally Endangered or Threatened by COSEWIC that is not identified as an Endangered or Threatened species on the Species at Risk in Ontario (SARO) List under Ontario's <i>Endangered Species Act</i> should be designated as SWH. As of April 2009, species in this category that occur or have occurred within the Region of Peel or Town of Caledon include: Rapids Clubtail, Western Chorus Frog, Common Nighthawk, Chimney Swift, Red-headed Woodpecker, Olive-sided Flycatcher, Golden-winged Warbler, Canada Warbler, and Lake Sturgeon. Requirements for habitat protection to be determined on a case-by-case basis in consultation with OMNR. <u>Note:</u> Does not include species that have been designated Threatened or Endangered by OMNR. These species are protected under Ontario's <i>Endangered Species Act</i> and	Specific point locations cannot be mapped due to data sensitivity; generalized 1 km squares can be mapped.	No.	No potential. The Western Chorus Frog has the potential to occur in the study area in habitat corresponding to the Amphibian Breeding Habitat (Forested Sites).

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
		Section 2.1.3 (significant habitat of endangered and threatened species) of the Provincial Policy Statement (2005).			
C2. Species Identified as Special Concern based on Species at Risk in Ontario List that is Periodically updated by OMNR.	Yes, with threshold	Per the Significant Wildlife Habitat Technical Guide (OMNR 2000), the habitat for any species designated Special Concern according to the Species at Risk in Ontario List should be identified and protected as SWH. Habitat requirements would need to be determined on a case-by-case basis. <u>Note:</u> Species of conservation concern do not include species that have been designated Threatened or Endangered by OMNR. These species are protected under Ontario's <i>Endangered Species Act</i> and Section 2.1.3 (significant habitat of endangered and threatened species) of the Provincial Policy Statement (2005).	Specific point locations cannot be mapped due to data sensitivity; generalized 1 km squares can. In addition, some species (e.g., snakes) cannot be named to protect the location of their habitat.	Yes.	Confirmed (Eastern Wood Pewee and Monarch). See Ecoregion 7E table.
C3. Species that are listed as Rare (S1-S3) or Historical in Ontario based on records kept by the NHIC.	Yes, with threshold	Per the Significant Wildlife Habitat Technical Guide (OMNR 2000), habitat for any species listed as S1, S2 and S3 (based on the records kept by the NHIC), should be identified and protected as SWH. Habitat requirements would need to be determined on a case-by-case basis.	Specific point locations cannot be mapped due to data sensitivity; generalized 1 km squares can be mapped.	Yes.	Confirmed (Butternut) See Ecoregion 7E table.
C4. Species whose populations appear to be experiencing substantial declines in Ontario.	Yes, without threshold	It is recommended that "substantial declines" be defined as significant declines at the p <0.10 (90%) confidence level. <u>Breeding Birds</u> Upon careful review of existing information sources such as the Breeding Bird Survey (BBS), Forest Bird Monitoring Program (FBMP), Marsh Monitoring Program (MMP), and the recently completed Atlas of the Breeding Birds of Ontario, the consultant team did not feel comfortable putting forward a threshold. Each had deficiencies or biases. <u>Other Wildlife Groups</u> Calling frog and toad population trend data gathered as part of the Marsh Monitoring Program, Frogwatch Ontario, Amphibian Road Call Count, and Backyard Frog Survey, could be utilized if deemed suitable. There is no Ontario-wide population trend data available for other wildlife groups in Ontario.	No	No.	No potential. No threshold has been prepared for this Criteria. As such, the field data cannot be compared against the threshold and is not assumed to be present.
C5. Species that have a high percentage of their global population in Ontario and are Rare or Uncommon in the Regional Municipality of Peel/Town of Caledon.	Yes, without threshold	An adequate analysis of what species should be considered needs to be undertaken before a threshold can be recommended for the Region of Peel or Town of Caledon.	No	No.	A comprehensive list of species has not yet been developed therefore the Significant Wildlife Habitat for this criterion cannot be determined.
C6. Species that are Rare within the Regional Municipality of Peel/Town of Caledon, even though they may not be Provincially Rare.	Plants - Yes, with threshold Wildlife - Yes, without threshold	Plants: It is recommended that Varga <i>et. al.</i>, 2005 be used to determine what species are rare in the Region of Peel and Town of Caledon. <u>Wildlife:</u> It is recommended that a composite TRCA/CVC list be prepared. However, CVC only has a list of species of conservation concern for birds, and that list is dated. <u>Note:</u> In addition, the significant species lists in Appendix A of the ORMCP TP6 should apply to areas on the ORM and should be considered during development of a wildlife list.	No	No.	A comprehensive list of species has not yet been developed therefore the Significant Wildlife Habitat for this criterion cannot be determined.

Significant Wildlife Habitat (SWH) Criteria	Recommended for Peel and/or Caledon?	Recommended Thresholds (where applicable)	Can it be mapped on a jurisdictional-wide level with existing information?	Ecoregion 7E Criteria? (Y/N)	Presence of Candidate/Confirmed Habitat in the Study Area (within 120 m)
C7. Species that are subjects of Recovery Programs	Yes	This criterion applies to species that are designated as Threatened, Endangered or Extirpated by COSEWIC but not Special Concern, Threatened or Endangered in Ontario. In the Region of Peel or Town of Caledon as of April 2009, this applies to: Rapids Clubtail, the Great Lakes/St. Lawrence- Canadian Shield population of Western Chorus Frog, Common Nighthawk, Whip-poor-will, Chimney Swift, Olive-sided Flycatcher, and Canada Warbler. Habitats that support any of these species in the Region or Town should be considered SWH. In addition, if any other species are subject to other recovery programs (such as Black Duck), habitats for these species should also be considered SWH. <u>Note:</u> COSEWIC and OMNR websites should be checked regularly to ensure that the list of species that qualify for protection under criterion C7 is up-to-date.	No	No.	Western Chorus Frog: Habitat for this species exists within the SWD ecosite south of the 401. Standing water in this quiet swamp provides suitable habitat for this species. No Western Chorus Frogs were observed during the field investigations.
C8. Species considered important to the Region of Peel/Town of Caledon, based on recommendations from a Local Conservation Advisory Committee.	Yes	No list of species is being recommended since no Conservation Advisory Committee currently exists in Peel or Caledon. However, this criterion is recommended should a list of species ever be developed for the Region or Town. <u>Note:</u> The term ‘Conservation Advisory Committee’ was taken verbatim from the Significant Habitat Technical Guide (OMNR 2000). It generically describes a committee with membership of knowledgeable naturalists familiar with conditions and biota in the jurisdiction. Some Environmental Advisory Committees possibly fall into this category although typically their role is to review planning submissions and they may not have the necessary field knowledge, or mandate to develop such specific lists. It is expected that a Conservation Advisory Committee would be aware of and consult status lists prepared by local conservation authorities but would have the knowledge base to refine the use of such lists.	No	No.	A comprehensive list of species has not yet been developed therefore the Significant Wildlife Habitat for this criterion cannot be determined.
D. Animal Movement Corridors					
Includes amphibian and White-tailed Deer movement corridors as well as more general animal and plant movement corridors.	Yes	Thresholds for this criterion need to be developed in accordance with the Region's Greenlands System framework for both the Region of Peel and Town of Caledon and should incorporate three scales of corridors, as follows: • Primary (e.g., Niagara Escarpment) • Secondary (e.g., major river valleys) • Tertiary corridors (e.g., hedgerows) <u>Note:</u> While primary and secondary corridors can likely be identified and mapped at the municipal wide scale, tertiary corridors will likely need to be identified through site-specific studies, although guidelines for their identification could be addressed in policy.	Yes, but without thresholds	Yes.	No thresholds for this criterion have been developed therefore the Significant Wildlife Habitat for this criterion cannot be determined.
ACRONYMS USED IN TABLE: COSEWIC ~Committee on the Status of Endangered Wildlife in Canada; COSSARO ~Committee on the Status of Species at Risk in Ontario; CVC ~Credit Valley Conservation; NHIC ~Natural Heritage Information Centre; ORM ~Oak Ridges Moraine; O.MNR ~Ontario Ministry of Natural Resources; ORMCP TP2 ~Oak Ridges Moraine Conservation Plan Technical Paper 2- Significant Wildlife Habitat (Queen's Printer for Ontario 2007a); ORMCP TP6 ~ Oak Ridges Moraine Conservation Plan Technical Paper 6- Identification of Significant Portions of Habitat for Endangered, Rare and Threatened Species (Queen's Printer for Ontario 2007b)					



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix E

Endangered and Threatened Species Habitat Screening

Appendix E: Background Review of Potential Species at Risk and Species of Conservation Concern in the Study Area

COMMON NAME **(Source)	SCIENTIFIC NAME	Provincial S-RANK ¹	Provincial SARO Status ²	COSEWIC ³	Federal SARA Status ³	Federal SARA Schedule ⁴	Habitat Description ⁵	Habitat Present in Study Area?
Birds								
Bank Swallow (Source: OBBA)	<i>Riparia riparia</i>	S4B	THR	THR	THR	1	Prefers open habitats including, farmland, lake/river shorelines, grasslands, and wetlands. Nests in exposed earthen banks along shorelines and in artificial sites such as gravel pits. ⁶	Possible breeding habitat present along the Credit Riverbank on site, however, breeding bird surveys did not detect this species.
Barn Swallow (Source: OBBA, CVC, MECP, Burnside)	<i>Hirundo rustica</i>	S4B	THR	THR	THR	1	Prefers farmland, lake/river shorelines, wooded clearings, urban populated areas, rocky cliffs, and wetlands. Nests inside or on exterior of buildings; under bridges and in road culverts; on rock faces, and in caves, etc. ⁷	No nests were observed within any of the structures present on the site. Foraging habitat present over the open areas of the site (i.e., meadows).
Bobolink (Source: OBBA, Burnside)	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR	THR	1	Generally prefers open grasslands and hay fields for nesting, typically featuring relatively tall vegetation. Sometimes uses large fields of winter wheat and rye in southwestern Ontario. Sensitive to vegetation structure and composition. Positively associated with high grass-to-forb ratios; moderate litter depth; tolerate wetter portions of fields compared to Eastern Meadowlark (EAME) and more likely to nest closer to field centres rather than field margins. Lower tolerance to presence of patches of bare ground. Appear to prefer larger fields than EAME. ⁸	Confirmed breeding habitat present in M7 in a meadow.
Chimney Swift (Source: OBBA)	<i>Chaetura pelagica</i>	S4B, S4N	THR	THR	THR	1	Historically nested in large hollow trees, other tree cavities and cracks in cliffs. Currently, most are found in developed areas in large, uncapped chimneys. Proximity to lakes is also a preferred habitat feature as they will forage for flying insects close to water. ⁶	Chimneys present on site were inspected and confirmed to be capped/sealed; therefore, no suitable breeding/roosting habitat is present. None observed during breeding bird surveys.
Common Nighthawk (Source: OBBA)	<i>Chordeiles minor</i>	S4B	SC	SC	THR	1	Nests in open habitats, in forests and in urban areas. It prefers rock outcrops, alvars, sand barrens, bogs, fens, and in forests, openings created by clearcuts and burns. In southern Ontario, grasslands, agricultural fields, gravel pits, prairies, and alvars and at airports. In	Possible breeding habitat present, however, breeding bird surveys did not detect this species. No targeted crepuscular surveys were conducted for this species.

COMMON NAME **(Source)	SCIENTIFIC NAME	Provincial S-RANK ¹	Provincial SARO Status ²	COSEWIC ³	Federal SARA Status ³	Federal SARA Schedule ⁴	Habitat Description ⁵	Habitat Present in Study Area?
							cities, it nests mostly on flat, graveled roofs but occasionally on railways and footpaths. ⁶	
Eastern Meadowlark (Source: OBBA)	<i>Sturnella magna</i>	S4B	THR	THR	THR	1	Generally prefers grassy pastures, meadows and hay fields. Prefers moderately tall grass with abundant litter cover, a high proportion of grass cover, moderate forb density, low proportions of shrub and woody vegetation cover, and low percent of bare ground. Prefers to nest in drier sites and frequently nests around field margins. ⁸	Marginal breeding habitat present. None observed during targeted breeding bird surveys for this species.
Eastern Wood-Pewee (Source: OBBA, CVC, MECP, Burnside)	<i>Contopus virens</i>	S4B	SC	SC	SC	1	Prefers open space near the nest in the form of forest edges, clearings, roadways, and water. Does not require large areas of woods but occurs less frequently in woodlots surrounded by development than in those without. ⁶	Confirmed breeding habitat present in W4, W5, Rip1, M8 and Rip3 in woodlots and riparian habitat.
Henslow's Sparrow (Source: NHIC)	<i>Ammodramus henslowii</i>	SHB	END	END	END	1	Nests in large, open, usually moist to wet, often flat fields with a high graminoid to forb/shrub ratio. Vegetation must be dense and over 30 cm in height. In Ontario, this species has nested in regenerating old fields, lightly used pastures, hayfields, wet meadows, and sedge marshes. ⁶	No suitable breeding habitat present. None observed during breeding bird surveys. According to the NHIC, this species does not occur in the Mississauga area.
Peregrine Falcon (Source: OBBA)	<i>Falco peregrinus</i>	S3B	SC	NAR	SC	1	Nests on cliffs near water bodies, or at urban sites such as tall buildings, bridges, and smokestacks. ⁶	No suitable breeding habitat present. None observed during breeding bird surveys.
Wood Thrush (Source: OBBA, CVC, MECP)	<i>Hylocichla mustelina</i>	S4B	SC	THR	THR	1	Inhabits and breeds in woodlands ranging from small (3 ha) and isolated to large and contiguous. The presence of tall trees and a thick understorey are usually prerequisites for site occupancy. ⁶	Possible breeding habitat present in W4 and W5 as well as in the large Meadowvale Station Woods (life science Area of Natural and Scientific Interest (ANSI)) just east of the site, however, breeding bird surveys did not detect this species.
Fish								
American Eel (Source: Recovery Strategy for the American Eel (<i>Anguilla rostrata</i>) in Ontario, MECP)	<i>Anguilla rostrata</i>	S1?	END	THR	No status	No schedule	All freshwater, estuaries and coastal marine waters that are accessible to the Atlantic Ocean; 12-mile Creek watershed and Lake Ontario. ¹³	Occupied reach of stream for this species confirmed in Credit River on site by the MECP.
Redside Dace (Source: NHIC, MNRF,	<i>Clinostomus elongatus</i>	S2	END	END	END	1	Found in pools and slow-moving areas of small streams and headwaters with a gravel	Occupied habitat for this species confirmed in Fletcher's Creek on site.

COMMON NAME **(Source)	SCIENTIFIC NAME	Provincial S-RANK ¹	Provincial SARO Status ²	COSEWIC ³	Federal SARA Status ³	Federal SARA Schedule ⁴	Habitat Description ⁵	Habitat Present in Study Area?
MECP)							bottom. Generally found in areas with overhanging grasses and shrubs. During spawning, they are found in shallow parts of streams. ⁹	
Insects								
Monarch (Source: CVC, MECP, Burnside)	<i>Danaus plexippus</i>	S2N, S4B	SC	END	SC	1	Throughout their life cycle, Monarchs use three different types of habitat. Only the caterpillars (larvae) feed on milkweed plants and are confined to meadows and open areas where milkweed grows. Adult butterflies can be found in more diverse habitats where they feed on nectar from a variety of wildflowers. Monarchs spend the winter in Oyamel Fir forests found in central Mexico. The largest threat to Ontario Monarchs is habitat loss and fragmentation at overwintering sites in central Mexico where forests are being logged and converted into agricultural fields and pastures. Widespread pesticide and herbicide use throughout the Monarch's range may also limit recovery. ⁹	Confirmed. Observed a few individuals during field surveys in habitat units M6, M7 and M11. Milkweed also observed in Rip2 habitat unit on site (host plant for Monarch larvae).
Mammals								
Eastern Small-footed Myotis (Source: MECP, Burnside)	<i>Myotis leibii</i>	S2S3	END	END	No status	No schedule	Overwintering habitat: Caves and abandoned mines. According to the Recovery Strategy for the Eastern Small-footed Myotis in Ontario, summer / roosting habitats used by the species in Ontario are poorly understood, but elsewhere in its range it primarily roosts in open, sunny rocky habitats, and, occasionally, in buildings. Summer roosts for this species are believed to be located in close proximity to their hibernacula (i.e., less than 100 m). The species' preference for rocky habitats in summer may limit an individual's home range to those rocky areas which also contain hibernacula (i.e., karst areas and Canadian Shield areas containing abandoned mines with adits). ¹²	No suitable overwintering habitat present. No suitable roosting habitat present. No targeted acoustic surveys were conducted for this species.

COMMON NAME **(Source)	SCIENTIFIC NAME	Provincial S-RANK ¹	Provincial SARO Status ²	COSEWIC ³	Federal SARA Status ³	Federal SARA Schedule ⁴	Habitat Description ⁵	Habitat Present in Study Area?
Little Brown Myotis (Source: MECP, Burnside)	<i>Myotis lucifugus</i>	S4	END	END	END	1	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius. Maternal Roosts: Often associated with buildings (attics, barns etc.). Occasionally found in trees (25-44 cm dbh). ¹¹	No suitable overwintering habitat present. Suitable roosting habitat present as determined by ELC surveys and sheds and house found on site. No targeted acoustic surveys were conducted for this species.
Northern Myotis (Source: MECP, Burnside)	<i>Myotis septentrionalis</i>	S3	END	END	END	1	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius. Maternal Roosts: Often associated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.) ¹¹	No suitable overwintering habitat present. Suitable roosting habitat present as determined by ELC surveys and sheds and house found on site. No targeted acoustic surveys were conducted for this species.
Tri-colored Bat (Source: MECP, Burnside)	<i>Perimyotis subflavus</i>	S3?	END	END	END	1	Overwintering habitat: Deepest parts of caves and mines where temperature is the least variable. Maternal Roosts: Less is known about roosts of Tri-colored Bats. Most roost sites found within forested habitats. May roost in clumps of dead foliage and lichens. In more anthropogenically modified landscapes, maternity roosts may be barns or similar human-made structures. ¹¹	No suitable overwintering habitat present. Suitable roosting habitat present as determined by ELC surveys and sheds and house found on site. No targeted acoustic surveys were conducted for this species.
Plants								
Butternut (Source: CVC, MECP)	<i>Juglans cinerea</i>	S2?	END	END	END	1	Butternut grows best in rich, moist and well-drained soils or limestone gravel sites. They are less commonly found in dry, rocky and sterile soils. They generally grow alone or in small groups in deciduous forests that are commonly comprised of Basswood, Black Cherry, Beed, Black Walnut, Elm, Hemlock, Hickory, Oak, Red Maple, Sugar Maple, Poplar, White Ash and Yellow Birch. In Ontario, they can be found throughout southern Ontario, south of the Canadian Shield. ⁹	Suitable habitat present. Butternut identified in woodland by rural property.
Reptiles and Amphibians								
Blanding's Turtle (Source: ORAA)	<i>Emydoidea blandingii</i>	S3	THR	END	THR	1	Generally occur in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. They prefer	Suitable habitat present. None observed during field surveys.

COMMON NAME **(Source)	SCIENTIFIC NAME	Provincial S-RANK ¹	Provincial SARO Status ²	COSEWIC ³	Federal SARA Status ³	Federal SARA Schedule ⁴	Habitat Description ⁵	Habitat Present in Study Area?
							shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams. ¹³	
Eastern Milksnake (Source: ORAA)	<i>Lampropeltis triangulum</i>	S4	No status	SC	SC	1	Habitat generalist. Found in wide variety of habitats, from open woodlands, bogs, swamps, woodland edges, marshes, lakeshores, old fields, pastures, farmyards, parks, gardens. Often in or near farm outbuildings, barns, and sheds, and are attracted to piles of rocks, logs, firewood, or building materials, or any place that offers shelter to snakes and their prey (rodents). ¹⁰	Suitable habitat present. None observed during field surveys.
Eastern Ribbonsnake (Source: ORAA)	<i>Thamnophis sauritus</i>	S4	SC	SC	SC	1	Generally occur along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting. ¹³	Suitable habitat present. None observed during field surveys.
Midland Painted Turtle (Source: ORAA, Burnside)	<i>Chrysemys picta marginata</i>	S4	NAR	SC	NAR	No schedule	Generally prefers waterbodies such as ponds, marshes, lakes and slow-moving creeks that have a soft bottom and provide abundant basking sites and aquatic vegetation. ¹⁰	Confirmed. Observed one individual during field surveys basking on trail in habitat unit H2.
Northern Map Turtle (Source: ORAA)	<i>Graptemys geographica</i>	S3	SC	SC	SC	1	Highly aquatic. Inhabit slow moving water in larger lakes, rivers, reservoirs, oxbow sloughs, and open marshes, including some of the bays and inlets of the Great Lakes themselves with soft mud to sand, gravel, or marl bottom substrates. Less common in smaller lakes and streams; juveniles may reside in small ponds. Require high-quality water that supports the female's mollusc prey. ¹⁴	Suitable habitat present. None observed during field surveys.

COMMON NAME **(Source)	SCIENTIFIC NAME	Provincial S-RANK ¹	Provincial SARO Status ²	COSEWIC ³	Federal SARA Status ³	Federal SARA Schedule ⁴	Habitat Description ⁵	Habitat Present in Study Area?
Jefferson Salamander (Source: ORAA, CVC, MECP)	<i>Ambystoma jeffersonianum</i>	S2	END	END	END	1	Inhabits deciduous and mixed deciduous forests with suitable breeding areas which generally consist of ephemeral (temporary) bodies of water that are fed by spring runoff, groundwater, or springs. ¹⁰	Possible habitat present. None observed during field surveys.
Unisexual Ambystoma (Jefferson Salamander dependent population) (Source: MECP)	<i>Ambystoma laterale</i> -(2) <i>jeffersonianum</i>	S2	END	END	No status	No schedule	Inhabits deciduous and mixed deciduous forests with suitable breeding areas which generally consist of ephemeral (temporary) bodies of water that are fed by spring runoff, groundwater, or springs. ¹⁰	Possible habitat present. None observed during field surveys.

** Sources: Credit Valley Conservation (CVC) RQ0411 species list obtained on June 17, 2018; Natural Heritage Information Centre (NHIC) database of records searched on April 30, 2019 (2- 1x1 km² Squares: 17PJ0329, 17PJ0229); Ontario Breeding Bird Atlas (2001-2005) searched on April 30, 2019 (Square 17PJ02); Ontario Reptile and Amphibian Atlas (ORAA) searched on April 30, 2019 (Square 17PJ02); MNRF email correspondence, received on May 1, 2019 (MNRF Aurora District, Bohdan Kowalyk, District Planner); Ministry of Environment, Conservation and Parks (MECP) email correspondence, received on October 22, 2019 (MECP Aurora District, Aurora McAllister, Management Biologist); R.J. Burnside & Associates (Burnside) observations in 2019; MacGregor, R., J. Casselman, L. Greig, J. Dettmers, W. A. Allen, L. McDermott, and T. Haxton. 2013. Recovery Strategy for the American Eel (*Anguilla rostrata*) in Ontario. Ontario Recovery Strategy Series. Prepared for Ontario Ministry of Natural Resources, Peterborough, Ontario. x + 119 pp.

¹**S-Ranks (provincial)**
Provincial (or Subnational) ranks are used by the Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario (Please refer to: <http://explorer.natureserve.org/nsranks.htm>)

SX — Presumed Extirpated - Species or community is believed to be extirpated from the province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
SH — Possibly Extirpated (Historical) - Species or community occurred historically in the province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20–40 years. A species or community could become SH without such a 20-40 year delay if the only known occurrences in a province were destroyed or if it had been extensively and unsuccessfully looked for. The SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences.
S1 — Critically Imperiled - Critically imperiled in the province or state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the province.
S2 — Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the province.
S3 — Vulnerable - Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4 — Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5 — Secure - Common, widespread, and abundant in the province.
SNR — Unranked - Province conservation status not yet assessed.
SU — Unrankable - Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA — Not Applicable - A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
S#S# — Range Rank - A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).
S#? – Inexact or Uncertain - Denotes inexact or uncertain numeric rank.

Breeding Status Qualifiers
B – Breeding Conservation status refers to the breeding population of the species in the nation or state/province.
N – Nonbreeding Conservation status refers to the non-breeding population of the species in the province.
M – Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the province.

²**SARO Endangered Species Act, 2007**
(provincial status from <http://www.ontario.ca/environment-and-energy/how-species-risk-are-listed#section-3>)
The provincial review process is implemented by the MNRF’s Committee on the Status of Species at Risk in Ontario (COSSARO).

Extinct - A species that no longer exists anywhere.
Extirpated (EXT) - Lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario.
Endangered (END) - Lives in the wild in Ontario but is facing imminent extinction or extirpation.
Threatened (THR) - Lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
Special concern (SC) - Lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.
Not at Risk (NAR) - A species that has been evaluated and found to be not at risk.
Data Deficient (DD) - A species for which there is insufficient information for a provincial status recommendation.

³**SARA (Federal Species at Risk Act) Status and Schedule (includes COSEWIC Status)**
The Act establishes Schedule 1, as the official list of wildlife species at risk. It classifies those species as being either Extirpated, Endangered, Threatened, or Special Concern. Once listed, the measures to protect and recover a listed wildlife species are implemented.

Extinct - A wildlife species that no longer exists.
Extirpated (EXT) - A wildlife species that no longer exists in the wild in Canada, but exists elsewhere.
Endangered (END) - A wildlife species facing imminent extirpation or extinction.
Threatened (THR) - A wildlife species that is likely to become an endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
Special Concern (SC) - A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
Data Deficient (DD) - A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.
Not At Risk (NAR) - A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.

⁴SARA Schedule

Schedule 1: is the official list of species that are classified as extirpated, endangered, threatened, and of special concern.
Schedule 2: species listed in Schedule 2 are species that had been designated as endangered or threatened and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.
Schedule 3: species listed in Schedule 3 are species that had been designated as special concern and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

The Act establishes Schedule 1 as the official list of wildlife species at risk. However, please note that while Schedule 1 lists species that are extirpated, endangered, threatened and of special concern, the prohibitions do not apply to species of special concern.

Species that were designated at risk by COSEWIC prior to October 1999 (Schedule 2 & 3) must be reassessed using revised criteria before they can be considered for addition to Schedule 1 of SARA. After they have been assessed, the Governor in Council may on the recommendation of the Minister, decide on whether or not they should be added to the List of Wildlife Species at Risk.

⁵Sources:

⁶Cadman, M.D., et al. (eds). 2007. Atlas of the Breeding Birds of Ontario, 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp
⁷Species at Risk Public Registry <http://www.sararegistry.gc.ca>
⁸McCracken, J.D. et al. 2013. Recovery Strategy for the Bobolink (*Dolichonyx oryzivorus*) and Eastern Meadowlark (*Sturnella magna*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario, viii + 88 pp.
⁹MNRF SARO List Species Descriptions (http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/MNR_SAR_CSSR_SARO_LST_EN.html)
¹⁰Ontario Nature Reptile and Amphibian Atlas (<https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas/species/>)
¹¹Environment Canada. 2015. Recovery Strategy for Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Canada [Proposed]. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. lx + 110 pp.
¹²Humphrey, C. 2017. Recovery Strategy for the Eastern Small-footed Myotis (*Myotis leibii*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario. vii + 76 pp.
¹³MNRF. 2018. City of Niagara Falls Species at Risk Table. Guelph District.
¹⁴Harding, J.H., 1997. Amphibians and Reptiles of the Great Lakes Region. The University of Michigan Press. Ann Arbor, Michigan.