

# RE ORILLIA 3 SOLAR PROJECT

Natural Heritage Records Review Report

August 3, 2011

RECURRENT  
ENERGY





RE Orillia 3 ULC

Natural Heritage  
Records Review Report

RE Orillia 3 Solar Project

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Project Report

August 3, 2011

**RE Orillia 3 ULC**  
**RE Orillia 3 Solar Project**

**Natural Heritage Records Review Report**

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## 1. Introduction

### 1.1 Project Description

RE Orillia 3 ULC is proposing to develop and operate a 6.5-megawatt (MW) solar photovoltaic (Solar PV) facility, on an approximately 15-hectare (ha) parcel of land located about 7 km west-southwest of Orillia in the Township of Oro-Medonte in County of Simcoe (Figure 1.1); herein referred to as “RE Orillia 3” or the “Project”.

### 1.2 Legislative Requirements

Ontario Regulation (O. Reg.) 359/09 – *Renewable Energy Approvals Under Part V.0.1 of the Act*, (herein referred to as the REA Regulation) made under the *Environmental Protection Act* identifies the Renewable Energy Approval (REA) requirements for renewable energy projects in Ontario. As per Section 4 of the REA Regulation, ground-mounted solar facilities with a nameplate capacity greater than 10 kilowatts (kW) are classified as Class 3 solar facilities and do require an REA.

Section 25 of the REA Regulation requires proponents of Class 3 solar projects to undertake a natural heritage records review to identify whether the Project is

1. in or within 120 m of a provincial park or conservation reserve
2. in a natural feature
3. within 50 m of an area of natural and scientific interest (earth science), or
4. within 120 m of a natural feature that is not an area of natural and scientific interest (earth science).

Natural Features are defined in Section 1.1 of the REA Regulation to be all or part of

- a) an area of natural and scientific interest (ANSI) (earth science)
- b) an ANSI (life science)
- c) a coastal wetland
- d) a northern wetland
- e) a southern wetland
- f) a valleyland
- g) a wildlife habitat, or
- h) a woodland.

Subsection 3 of Section 25 of the REA Regulation requires the proponent to prepare a report “setting out a summary of the records searched and the results of the analysis” (O. Reg. 359/09). This Natural Heritage Records Review Report has been prepared to meet these requirements.

## 2. Methodology and Results

The following sections document the records that were searched and analyzed and the results of the analysis, with the focus on identifying whether or not the Project was located within or adjacent to any of the natural features listed in Section 1.2. The sections are organized as identified in Column 1 of the table in Section 25 of the REA Regulation.

As indicated in Figure 1.1, Project components will be limited to the Project location (denoted by the red boundary). The Study Area (delineated by the black boundary) includes an additional 120 m of lands adjacent to the Project. The contents of this Report are based on an assessment of the natural heritage features captured within the Study Area for the Project. Records were searched within a minimum distance of 1 km from the Study Area. Results are discussed below in relation to the distances specified between the Project and natural features as defined in Section 25 of the REA Regulation (see Section 1.2).

Based on the definitions of the following authorities within O. Reg. 359/09, there are no planning boards, local roads boards or local services boards with jurisdiction over the Project location. Also, the Project location is not located within the Niagara Escarpment Commission Plan Area. Therefore, records review for these additional governing bodies was not conducted.

Municipal planning authorities are discussed in relation to the relevant upper and lower tier municipality.

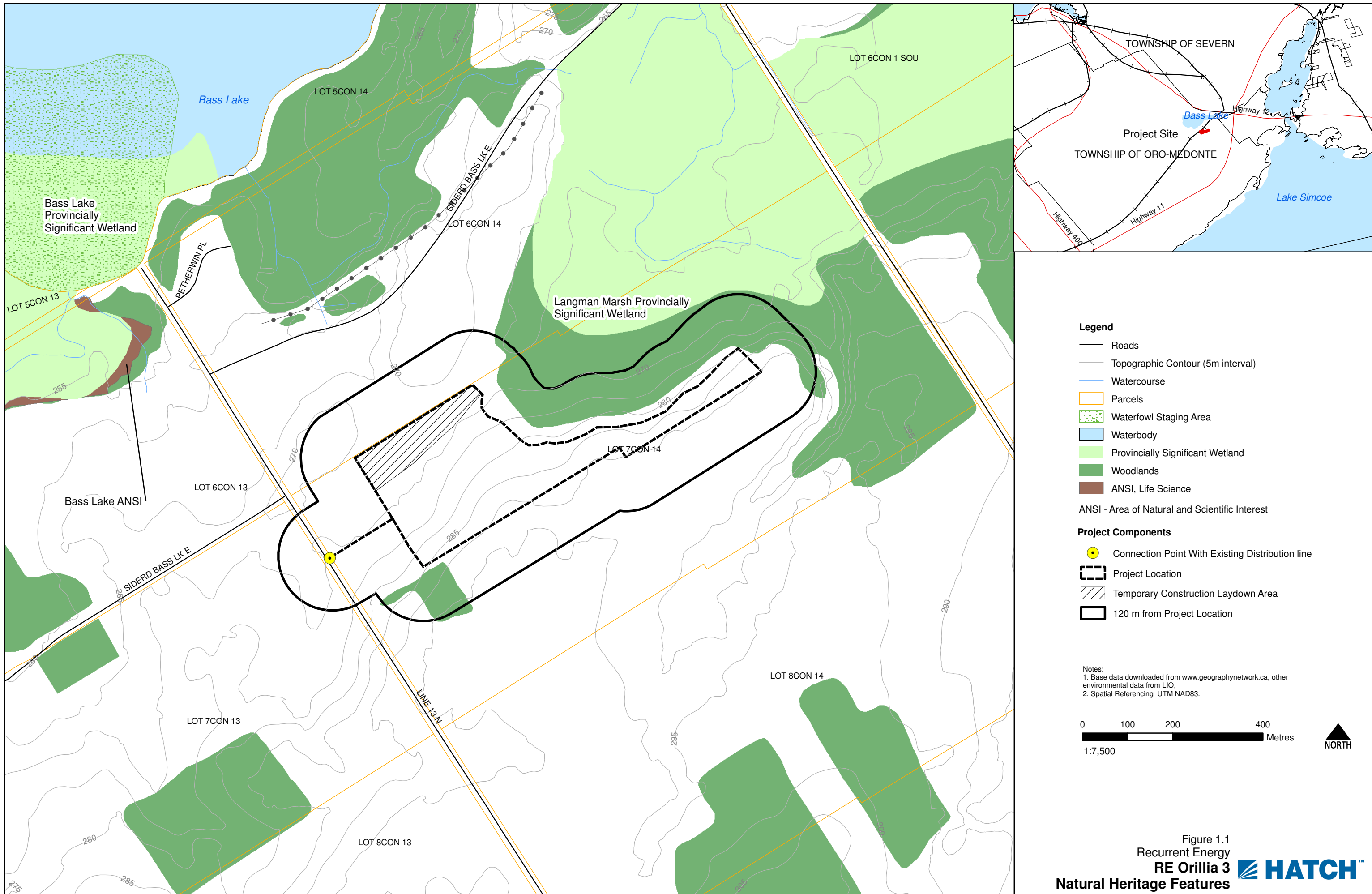
### 2.1 Ministry of Natural Resources Records

#### 2.1.1 Methodology

The following Ministry of Natural Resources (MNR) on-line records were reviewed:

- Ontario Crown Land Use Mapping (<http://crownlanduseatlas.mnr.gov.on.ca/clupa.html>)
- Ontario Base Maps and natural feature layers from Land Information Ontario (LIO) (<http://www.geographynetwork.ca/website/obm/viewer.htm>)
- Natural Heritage Information Centre (NHIC) on-line mapping ([http://nhic.mnr.gov.on.ca/nhic\\_.cfm](http://nhic.mnr.gov.on.ca/nhic_.cfm))
- NHIC Biodiversity Explorer (<http://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp>)
- NHIC Ontario Herpetofaunal Summary Atlas (<http://nhic.mnr.gov.on.ca/MNR/nhic/herps/ohs.html>).

The Midhurst District MNR office was also asked to provide any information they had available regarding natural features on or adjacent to the Project area. This information was received on May 4, 2010 (MNR, 2010).



**Legend**

- Roads
- Topographic Contour (5m interval)
- Watercourse
- ▭ Parcels
- ▨ Waterfowl Staging Area
- ▭ Waterbody
- ▭ Provincially Significant Wetland
- ▭ Woodlands
- ▭ ANSI, Life Science

ANSI - Area of Natural and Scientific Interest

**Project Components**

- Connection Point With Existing Distribution line
- ▭ Project Location
- ▨ Temporary Construction Laydown Area
- ▭ 120 m from Project Location

Notes:

1. Base data downloaded from www.geographynetwork.ca, other environmental data from LIO.
2. Spatial Referencing UTM NAD83.

0 100 200 400 Metres

1:7,500

NORTH

Figure 1.1  
 Recurrent Energy  
 RE Orillia 3  
 Natural Heritage Features **HATCH™**

Back of figure

### 2.1.2 Results

Mapping data obtained from LIO is illustrated in Figure 1.1. Based on the LIO mapping, there are several natural features identified on or within 120 m of the Project location. These include

- woodlands within 120 m of the Project location
- the Langman Marsh Provincially Significant Wetland (PSW) is located within 120 m of the Project location (Ferguson and Maguire 1985).
- no specific wildlife habitat features, ANSIs or valleylands were identified on or within 120 m of the Project location.
- there are no provincial parks or conservation reserves on or within 120 m of the Project location.

Records received from the NHIC identified occurrences of Yellow Bartonian (*Bartonia virginica*) and Ram’s-Head Lady’s-Slipper (*Cypripedium arietinum*), species of conservation concern, within the vicinity of the Project location (NHIC, 2008a).

The Ontario Herpetofaunal Summary Atlas identified several species of reptile and amphibian whose ranges may overlap with that of the Project location (Table 2.1). Of these species, several species of conservation concern were identified:

- Milksnake (*Lampropeltis triangulum*)
- Snapping Turtle (*Chelydra serpentina*)
- Western Chorus Frog (*Pseudacris triseriata*).

As species of conservation concern, potential habitat for these species, if present on or within 120 m of the Project location, would be considered candidate significant wildlife habitat.

**Table 2.1 Reptiles and Amphibians Potentially Occurring on or within 120 m of the Project Location and their Conservation Status<sup>1</sup>**

Species		Conservation Status <sup>2</sup>
Common Name	Scientific Name	Ontario SRANK <sup>3</sup>
<b>Salamanders</b>		
Mudpuppy	<i>Necturus maculosus</i>	S4
Yellow-spotted Salamander	<i>Ambystoma maculatum</i>	S4
Four-toed Salamander	<i>Hemidactylium scutatum</i>	S4
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	S5
Eastern Newt	<i>Notophthalmus viridescens</i>	S5
<b>Frogs and Toads</b>		
American Toad	<i>Bufo americanus</i>	S5
Western Chorus Frog	<i>Pseudacris triseriata triseriata</i>	S4
Gray Treefrog	<i>Hyla versicolor</i>	S5
Spring Peeper	<i>Pseudacris crucifer</i>	S5
American Bullfrog	<i>Rana castebiana</i>	S4
Green Frog	<i>Rana clamitans</i>	S5
Pickerel Frog	<i>Rana palustris</i>	S4
Northern Leopard Frog	<i>Rana pipiens</i>	S5

Species		Conservation Status <sup>2</sup>
Common Name	Scientific Name	Ontario SRANK <sup>3</sup>
Wood Frog	<i>Rana sylvatica</i>	S5
<b>Turtles</b>		
Snapping Turtle	<i>Chelydra serpentina</i>	S5
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	S5
<b>Snakes</b>		
Eastern Milksnake	<i>Lampropeltis triangulum</i>	S3
Smooth Green Snake	<i>Opheodrys vernalis</i>	S4
Dekay's Brownsnake	<i>Storeria dekayi</i>	S5
Red-bellied Snake	<i>Storeria occipitomaculata</i>	S5
Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>	S5

<sup>1</sup> As determined from potential climatic domain maps in McKenney et al. (2007) and range maps provided in Oldham and Weller (2000).

<sup>2</sup> Accessed from NHIC, 2008b.

<sup>3</sup> SRANK = Provincial Status (NHIC, 2008b); S = Sub-national Rank (Ontario), 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, E = Exotic, U = Unknown

## 2.2 Federal Government Records

### 2.2.1 Methodology

A review of federal government sources included Natural Resources Canada's Amphibians and Reptiles of Ontario Climate Domain Maps, along with the websites of the Canadian Wildlife Service ([www.cws-scf.ec.gc.ca](http://www.cws-scf.ec.gc.ca)) and Environment Canada ([www.ec.gc.ca](http://www.ec.gc.ca)). Findings are discussed in the following section.

### 2.2.2 Results

The Natural Resources Canada's Amphibians and Reptiles of Ontario Climate Domain Maps was reviewed and compared with the results of the Ontario Herpetofaunal Summary Atlas (discussed in Section 2.1); no additional information was discovered in the federal records.

No information relevant to the Project location or lands within 120 m of the Project location was available from the Canadian Wildlife Service or Environment Canada.

## 2.3 Conservation Authority Records

### 2.3.1 Methodology

The proposed Project is situated within the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA). The NVCA was asked to provide any information available regarding the natural features on or within 120 m of the Project location.

### 2.3.2 Results

Information provided by the conservation authorities did not identify any natural features beyond those identified through LIO mapping.

## 2.4 Municipal Records

### 2.4.1 Methodology

#### *County of Simcoe*

The Project is located within the upper tier municipality of the County of Simcoe. Information regarding natural features was requested from County staff from the planning department during a meeting between the County of Simcoe, Hatch, and RE Orillia 3 ULC on March 2, 2010. The County recommended reviewing their on-line mapping database (<http://maps.simcoe.ca/index.html>), which shows the general environmental and infrastructure features within the County, as well as high-resolution satellite imagery.

This information was obtained and reviewed (County of Simcoe, 2009).

#### *Township of Oro-Medonte*

The Project is also located within the lower tier municipality of the Township of Oro-Medonte (TOM). Information regarding natural features was requested from Township staff from the planning department during a meeting between the Township of Oro-Medonte, Hatch, and RE Orillia 3 ULC on March 8, 2010. The Township recommended reviewing their Official Plan (TOM, 2007) and Zoning By-Law (TOM, 2005).

These documents were searched to find any records of natural features.

### 2.4.2 Results

Based on a review of municipal information, natural features identified in these sources were already known from LIO mapping information, and are shown in Figure 1.1.

## 2.5 Other Records

### 2.5.1 Methodology

In addition to the sources identified above, the following records were also reviewed:

- Ontario Breeding Bird Atlas data (Bird Studies Canada et al., 2006)
- Atlas of the Mammals of Ontario (Dobbyn, 1994)
- Important Bird Areas of Canada website (<http://www.ibacanada.ca/mapviewer.jsp?lang=en>)

### 2.5.2 Results

Map square 17PK13 in the Ontario Breeding Bird Atlas overlaps the Project location. Results from surveys within this square were reviewed to determine what bird species can be expected to occur on the Project location (results of the surveys within this square are provided in Appendix A). Of the species that were recorded, several species of conservation concern were identified whose ranges include or overlap with the Project location:

- Olive-sided Flycatcher (*Contopus cooperi*) – Listed as Special Concern under the ESA
- Black Tern (*Chlidonias niger*) – Listed as Special Concern under the ESA
- Common Nighthawk (*Chordeiles minor*) – Listed as Special Concern under the ESA

- Red-headed Woodpecker (*Melanerpes erythrocephalus*) – Listed as Special Concern under the ESA
- Cerulean Warbler (*Dendroica cerulea*) – Listed as Special Concern under the ESA
- Golden-winged Warbler (*Vermivora chrysoptera*) – Listed as Special Concern under the ESA
- Canada Warbler (*Wilsonia canadensis*) – Listed as Special Concern under the ESA.

As species of conservation concern, potential habitat for Olive-sided Flycatcher, Red-headed Woodpecker, Black Tern, Cerulean Warbler, Golden-winged Warbler, and Canada Warbler, if present on or within 120 m of the Project location, would be considered candidate significant wildlife habitat.

No Important Bird Areas are on or within 120 m of the Project location.

The Atlas of the Mammals of Ontario (Dobbyn, 1994) identified several species of mammals that may overlap with the Project location. This list of these species is provided in Table 2.2. None of these species are considered to be species of conservation concern.

**Table 2.2 Mammal Species Potentially Occurring on or within 120 m of the Project Location<sup>1</sup>**

Species		Conservation Rank <sup>2</sup>
Common Name	Scientific Name	Ontario SRANK <sup>3</sup>
<b>Shrews and Moles</b>		
Smoky Shrew	<i>Sorex fumeus</i>	S5
Common Shrew	<i>Sorex cinereus</i>	S5
Water Shrew	<i>Sorex palustris</i>	S5
Hairy-tailed Mole	<i>Parascalops breweri</i>	S4
Star-nosed Mole	<i>Condylura cristata</i>	S5
Northern Short-tailed Shrew	<i>Blarina brevicauda</i>	S5
<b>Bats</b>		
Little Brown Bat	<i>Myotis lucifuga</i>	S5
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	S4
Big Brown Bat	<i>Epstesicus fuscus</i>	S5
Eastern Red Bat	<i>Lasiurus borealis</i>	S4
Hoary Bat	<i>Lasiurus cinereus</i>	S4
<b>Rabbits and Hares</b>		
Eastern Cottontail	<i>Sylvilagus floridanus</i>	S5
European Hare	<i>Lepus europaeus</i>	SNA
Snowshoe Hare	<i>Lepus americanus</i>	S5
<b>Rodents</b>		
Eastern Chipmunk	<i>Tamias striatus</i>	S5
Woodchuck	<i>Marmota monax</i>	S5
Grey Squirrel	<i>Sciurus carolinensis</i>	S5
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	S5
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>	S5
Beaver	<i>Castor canadensis</i>	S5
White-footed Mouse	<i>Peromyscus leucopus</i>	S5
Deer Mouse	<i>Peromyscus maniculatus</i>	S5
Meadow Vole	<i>Microtus pennsylvanicus</i>	S5

Species		Conservation Rank <sup>2</sup>
Common Name	Scientific Name	Ontario SRANK <sup>3</sup>
Muskrat	<i>Ondatra zibethicus</i>	S5
Porcupine	<i>Erethizon dorsatum</i>	S5
Norway Rat	<i>Rattus norvegicus</i>	SE
House Mouse	<i>Mus musculus</i>	SE
Woodland Jumping Mouse	<i>Napaeozapus insignis</i>	S5
Meadow Jumping Mouse	<i>Zapus hudsonius</i>	S5
<b>Carnivores</b>		
Coyote	<i>Canis latrans</i>	S5
Grey Wolf	<i>Canis lupus</i>	S4
Black Bear	<i>Ursus americanus</i>	S5
Red Fox	<i>Vulpes vulpes</i>	S5
Raccoon	<i>Procyon lotor</i>	S5
Ermine	<i>Mustela erminea</i>	S5
Fisher	<i>Martes pennanti</i>	S5
Mink	<i>Mustela vison</i>	S5
River Otter	<i>Lontra Canadensis</i>	S5
Striped Skunk	<i>Mephitis mephitis</i>	S5
<b>Ungulates</b>		
Moose	<i>Alces alces</i>	S5
White-tailed Deer	<i>Odocoileus virginianus</i>	S5

<sup>1</sup> Based on Range Maps provided in Dobbyn, 1994.

<sup>2</sup> Accessed from NHIC, 2008b.

<sup>3</sup> SRANK = Provincial Status (NHIC, 2008b); S = Sub-national Rank (Ontario), E = Exotic species, 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, ? = Rank Uncertain, NA = Not Applicable

### 3. Summary of Results

Table 3.1 summarizes the results of the records review according to the features identified in Section 1.2. A map depicting the identified natural features on and in proximity to the site is provided in Figure 1.1.

**Table 3.1 Summary of Records Review Determinations**

Determination to be Made	Yes/No	Description
Is the Project in or within 120 m of a provincial park or conservation reserve?	No	
Is the Project in a natural feature?	No	The Project location not in a natural feature.
Is the Project within 50 m of an ANSI (earth science)?	No	The nearest earth science ANSI is located several kilometres from the Project location.
Is the Project within 120 m of a natural feature that is not an ANSI (earth science)?	Yes	There are woodlands and wetlands within 120 m of the Project location.

As per Section 26 of the REA Regulation, a site investigation will be required to confirm the features identified during this records review. The site investigation will (i) identify if any corrections to the information presented herein are required, (ii) determine whether any additional natural features exist on or adjacent to the Project site, (iii) confirm the boundaries of the natural features within 120 m of the Project, and (iv) determine the distance from the Project to the natural feature boundary.

#### 4. References

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Township of Oro-Medonte. 2005. Township of Oro-Medonte Zoning By-Law. Available on-line at <http://www.oro-medonte.ca/Government/ZoningBy-law/index.htm>. Accessed February 24, 2010.

# Appendix A

## Ontario Breeding Bird Data



**Square Summary (17PK13)**

#species (1st atlas)				#species (2nd atlas)			#hours		#pc done		
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
19	40	40	99	33	50	35	118	78	65	36	6

**Region summary (#13: Simcoe County)**

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
68	63	65	181	190	2075	850

**Target number of point counts in this square:** 21 road side, 4 off road (3 in deciduous forest, 1 in mixed forest). Please try to ensure that each off-road station is located such that the entire 100m radius circle is within the prescribed habitat.

SPECIES	Code		%		SPECIES	Code		%		SPECIES	Code		%	
	1st	2nd	1st	2nd		1st	2nd	1st	2nd		1st	2nd	1st	2nd
Canada Goose	FY	NE	58	95	Black-crown N.-Heron † §			12	9	Caspian Tern †		X	1	3
Trumpeter Swan †		A	0	43	Yellow-crn N.-Heron †			0	0	Black Tern † §			30	21
Wood Duck	FY	P	76	78	Turkey Vulture	T	H	77	84	Common Tern §			34	23
Gadwall ‡			6	4	Osprey	NY	NB	42	53	Forster's Tern † §			0	1
American Wigeon			6	12	Northern Harrier	T		76	66	Mourning Dove	T	T	95	95
American Black Duck	P	T	44	47	Sharp-shinned Hawk	H		50	60	Yellow-billed Cuckoo			6	18
Mallard	NE	FY	93	95	Cooper's Hawk		AE	17	47	Black/Yell-billed Cuckoo			0	18
Blue-winged Teal	FY	H	79	53	Northern Goshawk		AE	15	27	Black-billed Cuckoo	AE	FY	58	75
Northern Shoveler			11	10	Red-should Hawk †		FY	17	44	Eastern Screech-Owl			12	49
Northern Pintail			14	7	Broad-winged Hawk	T	H	58	66	Great Horned Owl	T	NY	74	55
Green-winged Teal			0	18	Red-tailed Hawk	T	H	92	81	Barred Owl	S	P	20	49
Redhead †			3	1	American Kestrel	V	H	85	76	Long-eared Owl ‡			3	4
Ring-necked Duck			4	21	Merlin ‡			1	21	Short-eared Owl †			1	4
Lesser Scaup ‡			1	1	Yellow Rail †			3	3	North Saw-whet Owl			9	12
Hooded Merganser			25	30	King Rail †			3	3	Common Nighthawk	S		63	40
Common Merganser	D		36	46	Virginia Rail		S	36	47	Whip-poor-will	T	T	60	38
Red-breast Merganser			9	20	Sora			31	43	Chimney Swift	AE		63	32
Gray Partridge ‡			0	1	Common Moorhen			17	12	Ruby-thr Hummingbird	D	FY	88	95
Ring-necked Pheasant	H		15	10	American Coot		H	15	12	Belted Kingfisher	N	S	95	92
Ruffed Grouse	S	FY	92	81	Coot/Moorhen			0	0	Red-headed Woodpecker †	H		65	29
Wild Turkey		D	0	81	Sandhill Crane ‡			0	21	Yellow-bellied Sapsucker	CF	NY	80	95
Common Loon	S		28	52	Killdeer	FY	FY	96	96	Downy Woodpecker	T	FY	95	96
Pied-billed Grebe			22	32	Rock Dove	D	T	87	84	Hairy Woodpecker	T	NY	95	93
Double-crest Cormorant §			11	27	Spotted Sandpiper	H	H	95	78	Northern Flicker	T	T	98	95
American Bittern	S		50	44	Upland Sandpiper	A		60	38	Pileated Woodpecker	T	T	80	93
Least Bittern †			12	23	Common Snipe	S	A	79	61	Olive-sided Flycatcher		S	22	20
Great Blue Heron §	NY		77	63	American Woodcock	FY	S	79	72	Eastern Wood-Pewee	T	T	96	96
Great Egret †			0	1	Ring-billed Gull §			6	33	Alder Flycatcher		S	47	76
Green Heron §	A	H	84	70	Herring Gull §		H	49	38	Willow Flycatcher	S	S	42	55

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## Ontario Breeding Bird Atlas - Summary Sheet for Square 17PK13 (page 2 of 3)

SPECIES	Code		%		SPECIES	Code		%		SPECIES	Code		%	
	1st	2nd	1st	2nd		1st	2nd	1st	2nd		1st	2nd	1st	2nd
Least Flycatcher	T	S	88	89	Marsh Wren	T	T	42	33	Kirtland's Warbler †			1	0
Eastern Phoebe	FY	S	95	96	Golden-crown Kinglet		S	7	21	Prairie Warbler †			6	9
Gr Crested Flycatcher	AE	FY	98	96	Ruby-crown Kinglet		H	6	7	Bay-breasted Warbler ‡			1	3
Eastern Kingbird	NE	NY	98	95	Blue-gr Gnatcatcher ‡			14	24	Cerulean Warbler †			12	16
Loggerhead Shrike †			15	3	Eastern Bluebird	FY	FY	57	73	Black-white Warbler	A	T	84	93
Yellow-throated Vireo ‡			30	26	Veery	T	CF	95	96	American Redstart	S	T	85	90
Blue-headed Vireo		T	9	38	Swainson's Thrush		T	14	20	Ovenbird	T	NY	98	96
Warbling Vireo	S	T	92	93	Hermit Thrush	S	T	39	69	North Waterthrush		S	61	86
Philadelphia Vireo ‡			1	4	Wood Thrush	T	A	90	92	Mourning Warbler		T	63	81
Red-eyed Vireo	T	T	93	96	American Robin	NE	CF	98	96	Common Yellowthroat	CF	T	92	95
Blue Jay	NE	CF	96	96	Gray Catbird	FY	S	98	96	Canada Warbler		S	46	56
American Crow	CF	T	98	96	Northern Mockingbird		S	6	18	Scarlet Tanager	T	T	79	86
Common Raven		S	7	55	Brown Thrasher	T	S	96	92	Eastern Towhee		S	53	73
<u>Horned Lark</u>	T		68	47	European Starling	NE	CF	98	96	Chipping Sparrow	NE	D	96	96
Purple Martin		AE	61	27	Cedar Waxwing	T	T	98	96	Clay-colored Sparrow			14	36
Tree Swallow	NE	AE	98	96	Blue-winged Warbler			4	24	Field Sparrow	T	T	84	87
North Rgh-wing Swallow	H	T	68	56	Golden-winged Warbler			30	43	Vesper Sparrow	A	NY	84	70
Bank Swallow §	H	AE	88	58	Blue/Gold-wing Warbler ‡			0	15	Savannah Sparrow	T	T	88	81
Cliff Swallow §	FY	AE	82	63	Brewster's Warbler †			0	3	Grasshopper Sparrow		T	38	41
Barn Swallow	NY	T	96	95	Nashville Warbler	CF	T	74	84	Song Sparrow	AE	T	98	96
Black-capped Chickadee	NE	FY	96	96	Northern Parula		S	12	21	Swamp Sparrow	CF	T	84	86
Tufted Titmouse †			1	0	Yellow Warbler	T	T	98	92	White-throat Sparrow	CF	T	95	87
Red-breast Nuthatch	CF	T	52	90	Chestn-sided Warbler		T	68	95	<u>Dark-eyed Junco</u>	S		25	21
White-breast Nuthatch	T	FY	87	93	Magnolia Warbler		T	20	58	Northern Cardinal	P	S	66	84
Brown Creeper	H	S	55	60	Black-thr Blue Warbler		S	22	63	Rose-breast Grosbeak	FY	FY	95	93
Carolina Wren ‡			1	6	Yellow-rumped Warbler		T	41	78	Indigo Bunting	T	T	90	93
House Wren	FY	P	87	95	Black-thr Green Warbler		T	34	90	Bobolink	NE	P	87	83
Winter Wren	T	T	68	95	Blackburnian Warbler		T	28	58	Red-wing Blackbird	NY	CF	96	96
Sedge Wren		S	19	20	Pine Warbler		T	26	80	Eastern Meadowlark	AE	T	88	83

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## Ontario Breeding Bird Atlas - Summary Sheet for Square 17PK13 (page 3 of 3)

SPECIES	Code		%	
	1st	2nd	1st	2nd
Western Meadowlark ‡			6	1
Yellow-h Blackbird †			1	0
Rusty Blackbird ‡			1	1
Brewer's Blackbird ‡			3	7
Common Grackle	CF	CF	96	96
Brown-head Cowbird	FY	T	98	95
Orchard Oriole ‡			0	1
Baltimore Oriole	NE	FY	96	96
Purple Finch	S	FY	66	73
House Finch		S	3	72
Red Crossbill ‡			7	1
White-winged Crossbill ‡			1	3
Pine Siskin			17	18
American Goldfinch	T	FY	98	96
Evening Grosbeak			15	15
House Sparrow	NE	H	88	75

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #13 (Simcoe County). Underlined species are those that you should try to add to this square. They have not yet been reported during the 2nd atlas, but were found during the 1st atlas in this square or have been reported in more than 50% of the squares in this region during the 2nd atlas so far. In the species table, "BE 2nd" and "BE 1st" are the codes for the highest breeding evidence for that species in square 17PK13 during the 2nd and 1st atlas respectively. The % columns give the percentage of squares in that region where that species was reported during the 2nd and 1st atlas (this gives an idea of the expected chance of finding that species in region #13). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), or † (provincially rare). Current as of 17/02/2010. An up-to-date version of this sheet is available from <http://www.birdsontario.org/atlas/summaryform.jsp?squareID=17PK13>

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