



**NORTHLAND  
POWER**

# Rideau Lakes Solar Project Natural Heritage Records Review Report

August 15, 2011



Northland Power Inc.  
on behalf of  
Northland Power Solar  
Rideau Lakes L.P.  
Toronto, Ontario

Natural Heritage  
Records Review Report

Rideau Lakes Solar Project

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Project Report

August 15, 2011

**Northland Power Inc.  
Rideau Lakes Solar Project**

**Natural Heritage Records Review Report**

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## 1. Introduction

### 1.1 Project Description

Northland Power Inc. on behalf of Northland Power Solar Rideau Lakes L.P. (hereinafter referred to as “Northland”) is proposing to develop a 10-megawatt (MW) solar photovoltaic project titled the Rideau Lakes Solar Project (hereinafter referred to as the “Project”). The Project site will be located on approximately 50 hectares (ha) of land, located in the Township of Rideau Lakes, within the United Counties of Leeds and Grenville (Figure 1.1).

### 1.2 REA 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. 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 require a 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 a provincial park or conservation reserve 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.

In respect of woodlands and valleylands, Section 1 (1) of O. Reg. 359/09 requires that these features be located south and east of the Canadian Shield as shown in Figure 1 in the Provincial Policy Statement issued under section 3 of the *Planning Act*. This Figure shows that the proposed Project

site is located on the Canadian Shield, and therefore valleylands and woodlands as defined by O. Reg. 359/09 cannot be located on the Project site.

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.

### 1.3 MNR Approval and Permitting Requirements

Beyond the REA legislative requirements identified in Section 1.2, additional information on site conditions must be identified in order to determine if Ministry of Natural Resources’ (MNR) approvals and permits separate from the REA are required. Consideration of the following features is needed in order to make this determination:

- Presence of natural hazard lands – Hazardous lands are defined in Section 28(25) of the Conservation Authorities Act as “land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock”. If Project components are to be located in these areas, approval must be obtained from the local Conservation Authority/MNR.
- Presence of petroleum resource operations – Approval is required if Project components are to be located within 75 m of a petroleum resource operation.
- Crown-owned forest resources – If Project components are located in an area of Crown-owned forest resources, then authorization must be obtained from MNR prior to clearing of timber on that land.

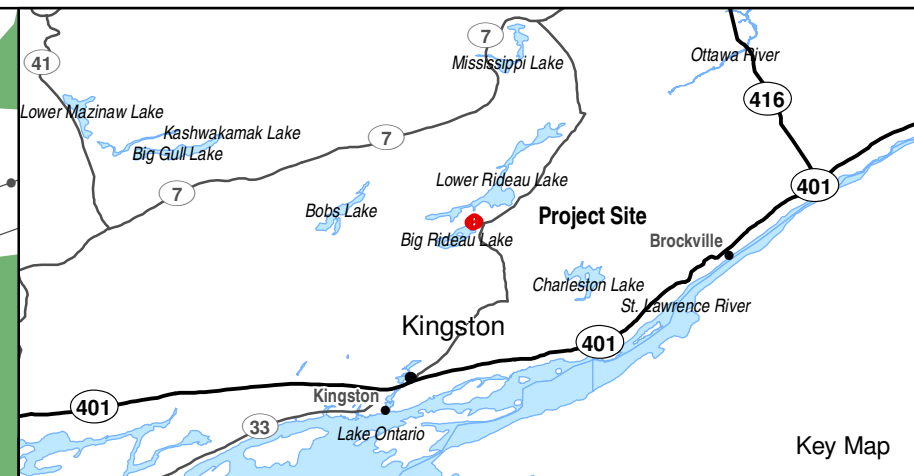
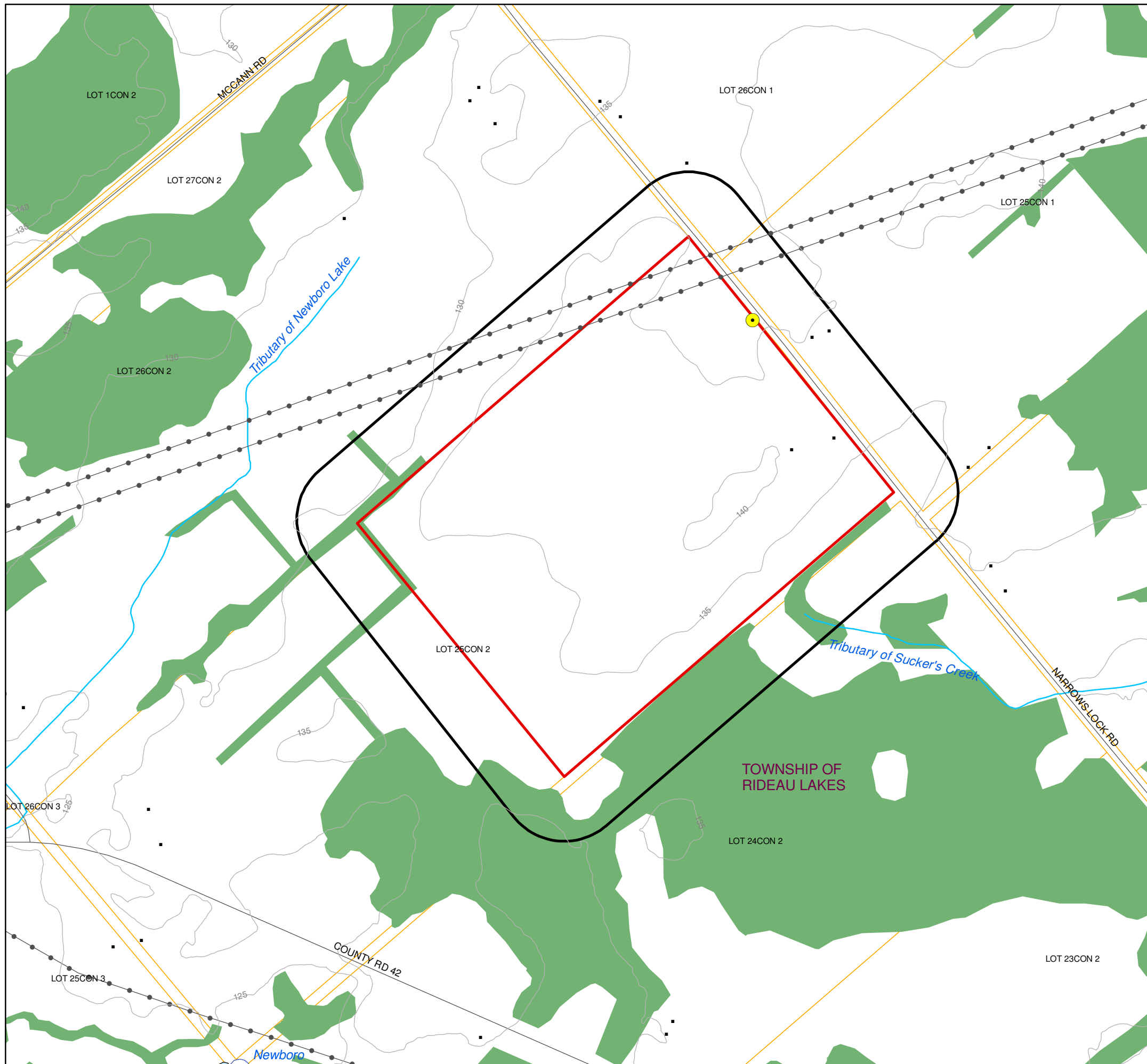
## 2. Background Information Review and Results

This Records Review Report is based on a review of published and non-published information on natural heritage features and species at risk identified on or in close proximity to the Project site. The background documents reviewed were obtained from the municipality, local planning staff, local conservation authority, and provincial and federal government agencies.

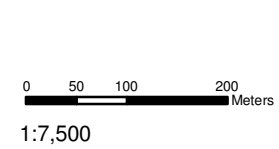
Records were searched within a minimum distance of 1 km from the Project site. Results are discussed below in relation to the distances specified between the Project and natural features as defined in Section 25 of the REA Regulation (see Section 1.2).

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.

There are no planning boards, municipal planning authorities, local roads boards or local services boards within the jurisdiction of the Project site. Also, the Project site is not located within the Niagara Escarpment Commission Plan Area. Therefore, records review for these governing bodies was not conducted.



- Legend**
- Building
  - Connection Point With Distribution Line
  - Roads
  - Transmission Line
  - Topographic Contour (5m interval)
  - Watercourse
  - ▭ Project Site
  - ▭ Study Area
  - ▭ Parcels
  - ▭ Waterbody
  - ▭ Wetland Area
  - ▭ Wooded Area



**Notes:**  
 1. OBM and NRVIS data downloaded from LIO, with permission.  
 2. Spatial referencing UTM NAD 83.



Figure 1.1  
 Northland Power Inc.  
**Rideau Lakes Solar Energy Project**  
**Natural Heritage Features**

Back of figure



## 2.1 Ministry of Natural Resources Records

The following MNR on-line records were reviewed:

- Ontario Crown Land Use Atlas Mapping (<http://crownlanduseatlas.mnr.gov.on.ca/clupa.html>)
- Ontario Base Maps (OBM) and natural feature layers from Land Information Ontario (LIO) (<http://www.geographynetwork.ca/website/obm/viewer.htm>)
- 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>).

### 2.1.1 Results

#### 2.1.1.1 Ontario Crown Land Use Atlas Mapping

A review of the Crown Land Use Policy Atlas interactive map, accessed on May 21, 2010, did not indicate any Crown land within 1 km of the Project site.

#### 2.1.1.2 MNR LIO Mapping

Mapping data provided by LIO identified the following natural features within 1 km of the Project site:

- there are watercourses located within 1 km of the Project site
- there is a large wooded area adjacent to the southern boundary of the Project site
- Newboro Lake is located approximately 800 m southwest of the Project site
- there are no nesting sites identified on or within 1 km of the Project site
- there are no wintering areas identified on or within 1 km of the Project site
- there are no ANSIs on or within 1 km of the Project site.
- no provincial parks or conservation reserves were identified on or within 120 m of the Project location.

#### 2.1.1.3 Natural Heritage Information Centre Database

The Natural Heritage Information Centre (NHIC) database was accessed on May 21, 2010 and a geographic search using the Biodiversity Explorer tool was completed for a 1-km radius surrounding the Project site. The Biodiversity Explorer tool provides information on rare species and plant communities, wildlife concentration areas, natural areas and invasive species occurrences.

The results of the queries determined that there have been occurrences of two uncommon species [Prairie Warbler (*Dendroica discolor*) and Early Hairstreak (*Erora laeta*)] within 1 km of the Project Site, however consultation with the MNR regarding these records within the region determined that they were not relevant for this Project location (MNR, 2010). There were no records of rare plant communities, wildlife concentration areas occurrences within 1 km of the Project site.

In addition to searching the NHIC database, a request for natural heritage and species at risk information was requested from the Kemptville District MNR office on June 12, 2010. Information was received on July 12, 2010.

The information from the Kemptville MNR District office identified the woodlands within 120 m of the Project site and indicated that Butternut (*Juglans cinerea*), which are designated as Endangered under the Ontario *Endangered Species Act* (ESA), may occur within this woodlands. The information received also identified an occurrence of Prairie Warbler, a provincially tracked species adjacent to the Project site. As previously discussed additional consultation with the MNR determined that this record is not relevant to the Project location (MNR, 2010).

#### 2.1.1.4 Ontario Herpetofaunal Summary Atlas

The Ontario Herpetofaunal Summary Atlas identified several species of reptiles and amphibians whose ranges may overlap with the Project site (Table 2.1). Of these species, several species at risk were identified whose ranges potentially overlapped with the Project site. These species are as follows, and discussed further in Section 3:

- Blanding's Turtle (*Emydoidea blandingi*)
- Snapping Turtle (*Chelydra serpentina*)
- Northern Map Turtle (*Graptemys geographica*)
- Common Musk Turtle (*Sternotherus odoratus*)
- Western Chorus Frog (*Pseudacris triseriata*)
- Eastern Milksnake (*Lampropeltis triangulum*)
- Eastern Ribbonsnake (*Thamnophis sauritus septentrionalis*)
- Gray Ratsnake (*Elaphe obsoleta*)
- Five-lined Skink (*Eumeces fasciatus*)

## 2.2 Federal Government Records

Natural Resources Canada's Amphibians and Reptiles of Ontario Climate Domain Maps were reviewed.

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)) were also reviewed.

### 2.2.1 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); indicated that the range of the Spotted Turtle (*Clemmys guttata*) and Four-toed Salamander (*Hemidactylum scutatum*) overlap with the Project site.

A review of the Canadian Wildlife Service and Environment Canada websites resulted in no further information about the Project site.

## 2.3 Conservation Authority Records

The Project site is located on the boundaries of the Cataraqui Region Conservation Authority (CRCA). Information was received from the CRCA on June 30, 2010, identifying any natural heritage features and hazard lands that have been recorded within the vicinity of the Project site. This information can be found in Appendix B.

### 2.3.1 Results

Information received from CRCA did not identify any hazard lands which may pose a constraint to development. The information did identify “The Bog Marsh” a Class 3 PSW located 700 m south of the Project site as the closest natural heritage feature (CRCA, 2010).

**Table 2.1 Reptiles and Amphibians Potentially Occurring within the Project Area and their Conservation Status<sup>1</sup>**

Species		Conservation Rank <sup>2</sup>			At Risk Status		
		Global GRANK	Canada NRANK <sup>4</sup>	Ontario SRANK <sup>3</sup>	COSEWIC	SARO	Species at Risk Act (SARA)
Common Name	Scientific Name						
<b>Salamanders</b>							
Mudpuppy	<i>Necturus maculosus</i>	G5	N4	S4	NAR	NAR	-
Red-spotted Newt	<i>Notophthalmus viridescens viridescens</i>	G5	N5	S5	-	-	-
Blue-spotted Salamander Complex	<i>Ambystoma jeffersonianum-laterale "complex"</i>	-	-	-	-	-	-
Yellow-spotted Salamander	<i>Ambystoma maculatum</i>	G5	N5	S4	-	-	-
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	G5	N5	S5	-	-	-
Eastern Newt	<i>Notophthalmus viridescens</i>	G5T5	N5	S5	-	-	-
<b>Frogs and Toads</b>							
American Toad	<i>Bufo americanus</i>	G5	N5	S5	-	-	-
Spring Peeper	<i>Pseudacris crucifer</i>	G5	N5	S5	-	-	-
Western Chorus Frog (Great Lakes/St. Lawrence population)	<i>Pseudacris triseriata</i>	G5TNR	-	S3	THR	NAR	THR (Schedule 1)
Gray Treefrog	<i>Hyla versicolor</i>	G5	N5	S5	-	-	-
Wood Frog	<i>Rana sylvatica</i>	G5	N5	S5	-	-	-
American Bullfrog	<i>Rana castebiana</i>	G5	N5	S4	-	-	-
Green Frog	<i>Rana clamitans</i>	G5	N5	S5	-	-	-
Pickerel Frog	<i>Rana palustris</i>	G5	N5	S4	NAR	NAR	-
Northern Leopard Frog	<i>Rana pipiens</i>	G5	N5	S5	NAR	NAR	-
Wood Frog	<i>Rana sylvatica</i>	G5	N5	S5	-	-	-
<b>Turtles</b>							
Snapping Turtle	<i>Chelydra serpentina</i>	G5	N5	S3	SC	SC	-
Common Musk Turtle	<i>Sternotherus odoratus</i>	G5		S3	THR	THR	THR (Schedule 1)
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	G5T5	N5	S5	-	-	-
Northern Map Turtle	<i>Graptemys geographica</i>	G5	-	S3	SC	SC	SC (Schedule 1)
Blanding's Turtle	<i>Emydoidea blandingi</i>	G4	N4	S3	THR	THR	THR (Schedule 1)
Lizard							

Species		Conservation Rank <sup>2</sup>			At Risk Status		
		Global GRANK	Canada NRANK <sup>4</sup>	Ontario SRANK <sup>3</sup>	COSEWIC	SARO	Species at Risk Act (SARA)
Common Name	Scientific Name						
Five-Lined Skink	<i>Eumeces fasciatus</i>	G5	N4	S3	SC		SC (Schedule 1, Great Lakes/St. Lawrence Population)
<b>Snakes</b>							
Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>	G5T5	N5	S5	-	-	-
Eastern Ribbonsnake	<i>Thamnophis sauritus septentrionalis</i>	G5	-	S3	SC	SC	SC (Schedule 1, Great Lakes Population)
Northern Watersnake	<i>Nerodia sipedon sipedon</i>	G5T5	N5	S5	NAR	NAR	-
Red-bellied Snake	<i>Storeria occipitomaculata</i>	G5T5	N5	S5	-	-	-
Dekay's Brownsnake	<i>Storeria dekayi</i>	G5	N5	S5	NAR	NAR	-
Smooth Green Snake	<i>Opheodrys vernalis</i>	G5	N5	S4	-	-	-
Northern Ringneck Snake	<i>Diadophis punctatus edwardsi</i>	G5T5	T5	S4	-	-	-
Gray Ratsnake	<i>Pantherophis spiloides</i>	G5T3		S3	THR	THR	THR (Schedule 1) (Frontenac Population/Great Lakes/St. Lawrence Population)
Milksnake	<i>Lampropeltis triangulum</i>	G5	N5	S3	SC	SC	SC (Schedule 1)

<sup>1</sup> As determined from potential climatic domain maps in McKenney et al (2007) and range maps provided in Oldham and Weller (2002).

<sup>2</sup> Accessed from NHIC, 2010.

<sup>3</sup> SRANK = Provincial Status (NHIC, 2010); S = Sub-national Rank (Ontario), 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, E = Exotic, U = Unknown

<sup>4</sup> NRANK = National Status (NatureServe (www.natureserve.org), in conjunction with Conservation Data Centres, such as NHIC); N = National Rank (Canada), 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, E = Exotic

## 2.4 Municipal Records - Township of Rideau Lakes

The Project site is located within the Township of Rideau Lakes, a lower-tiered municipality. A review of the official website (<http://www.twprideaulakes.on.ca/>) was conducted to find information regarding the natural heritages on or within 120 m of the Project site.

### 2.4.1 Results

The Official Plan of the Township of Rideau Lakes (TRL) was reviewed on May 28, 2010, and it does not have specific information regarding the Project site. It does not identify any natural heritage feature, such as provincial significant wetlands or ANSIs on or within 120 m of the Project site (TRL, 2004).

## 2.5 Municipal Records - United Counties of Leeds and Grenville

The Project site is located within the United Counties of Leeds and Grenville. A review of the official County website (<http://www.uclg.ca/en/index.asp>) was undertaken to determine if there was any additional natural heritage information available on the Project site.

### 2.5.1 Results

A review of the official County website on May 28, 2010 resulted in finding an on-line community map that did show the Project site and it did not indicate that the Project area was near any provincial parks. No further information regarding any natural features was found on the website.

## 2.6 Other Records

In addition to the information sources previously discussed, the following documents were reviewed:

- Ontario Breeding Bird Atlas (OBBA) (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>)
- Ontario Oil, Gas and Salt Resources – Petroleum Well Mapping (<http://maps.ogsrlibrary.com/>).

### 2.6.1 Results

#### 2.6.1.1 Ontario Breeding Bird Atlas

The OBBA on-line database was accessed on May 19, 2010 to determine which breeding bird species have been recorded within the vicinity of the Project site. The database is organized by region and each region is divided into 10-km<sup>2</sup> blocks which are given a map square number. The Project site is located within map square 18UQ94. The square coverage summary sheet was downloaded and the results are provided in Appendix A. Of the species that were recorded, ten species at risk were identified whose ranges overlap that of the Project site. These species are as follows, and discussed in Section 3:

- Loggerhead Shrike (*Lanius ludovicianus migrans*)
- Least Bittern (*Ixobrychus exilis*)
- Cerulean Warbler (*Dendroica cerulean*)
- Canada Warbler (*Wilsonia canadensis*)
- Golden-winged Warbler (*Vermivora chrysoptera*)
- Chimney Swift (*Chaetura pelagica*)
- Bobolink (*Dolichonyx oryzivorus*)
- Whip-poor-will (*Caprimulgus vociferus*)
- Black Tern (*Chlidonias niger*)
- Red-headed Woodpecker (*Melanerpes erythrocephalus*).

#### 2.6.1.2 Atlas of the Mammals of Ontario

The Atlas of the Mammals of Ontario (Dobbyn, 1994) identified several species of mammals whose ranges may overlap with the Project site. The list of these species is provided in Table 2.2. None of these species are considered to be species at risk under the federal *Species At Risk Act* (SARA) or the Ontario ESA.

**Table 2.2 Mammals Potentially Occurring within the Project Area and their Conservation Status<sup>1</sup>**

Species		Conservation Rank <sup>2</sup>			At Risk Status		
		Global GRANK	Canada NRANK <sup>4</sup>	Ontario SRANK <sup>3</sup>	COSEWIC	SARO	SARA
Common Name	Scientific Name						
<b>Shrews and Moles</b>							
Common Shrew	<i>Sorex cinereus</i>	G5	N5	S5	-	-	-
Smoky Shrew	<i>Sorex fumeus</i>	G5	N5	S5	-	-	-
Northern Short-tailed Shrew	<i>Blarina brevicauda</i>	G5	N5	S5	-	-	-
Star-nosed Mole	<i>Condylura cristata</i>	G5	N5	S5	-	-	-
<b>Bats</b>							
Eastern Small-footed Bat	<i>Myotis leibii</i>	G3	-	S2S3	-	-	-
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	G4	N4	S3?	-	-	-
Little Brown Bat	<i>Myotis lucifuga</i>	G5	N5	S5	-	-	-
Big Brown Bat	<i>Epstesicus fuscus</i>	G5	N5	S5	-	-	-
Eastern Red Bat	<i>Lasiurus borealis</i>	G5	N4N5	S4	-	-	-
<b>Rabbits and Hares</b>							
Eastern Cottontail	<i>Sylvilagus floridanus</i>	G5	N5	S5	-	-	-
Snowshoe Hare	<i>Lepus americanus</i>	G5		S5	-	-	-
European Hare	<i>Lepus europeanus</i>	G5	NE	SE	-	-	-
<b>Rodents</b>							
Eastern Chipmunk	<i>Tamias striatus</i>	G5	N5	S5	-	-	-
Woodchuck	<i>Marmota monax</i>	G5	N5	S5	-	-	-
Gray Squirrel	<i>Sciurus carolinensis</i>	G5	N5	S5	-	-	-
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	G5	N5	S5	-	-	-
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>	G5	-	S5	-	-	-
Southern Flying Squirrel	<i>Glaucomys volans</i>	G5	N3	S4	-	-	-
Beaver	<i>Castor canadensis</i>	G5	N5	S5	-	-	-
White-footed Mouse	<i>Peromyscus leucopus</i>	G5	N5	S5	-	-	-
Deer Mouse	<i>Peromyscus maniculatus</i>	G5	N5	S5	-	-	-
Meadow Vole	<i>Microtus pennsylvanicus</i>	G5	N5	S5	-	-	-
Muskrat	<i>Ondatra zibethicus</i>	G5	N5	S5	-	-	-
Norway Rat	<i>Rattus norvegicus</i>	G5	NE	SE	-	-	-
House Mouse	<i>Mus musculus</i>	G5	NE	SE	-	-	-
Meadow Jumping Mouse	<i>Zapus hudsonius</i>	G5	N5	S5	-	-	-
Woodland Jumping Mouse	<i>Napaeozapus insignis</i>	G5	N5	S5	-	-	-
Porcupine	<i>Erethizon dorsatum</i>	G5	-	S5	-	-	-
<b>Carnivores</b>							
Coyote	<i>Canis latrans</i>	G5	N5	S5	-	-	-
Red Fox	<i>Vulpes vulpes</i>	G5	N5	S5	-	-	-
Black Bear	<i>Ursus americanus</i>	G5	N5	S5	-	-	-
Raccoon	<i>Procyon lotor</i>	G5	N5	S5	-	-	-
Marten	<i>Martes Americana</i>	G5	N5	S5	-	-	-
Fisher	<i>Martes pennanti</i>	G5	N5	S5	-	-	-
Ermine	<i>Mustela erminea</i>	G5	N5	S5	-	-	-
Mink	<i>Mustela vison</i>	G5	N5	S4	-	-	-

Species		Conservation Rank <sup>2</sup>			At Risk Status		
		Global GRANK	Canada NRANK <sup>4</sup>	Ontario SRANK <sup>3</sup>	COSEWIC	SARO	SARA
Common Name	Scientific Name						
Striped Skunk	<i>Mephitis mephitis</i>	G5	N5	S5	-	-	-
River Otter	<i>Lontra canadensis</i>	G5	N5	S5	-	-	-
Canada Lynx	<i>Lynx canadensis</i>	G5	N5	S5	-	-	-
<b>Ungulates</b>							
White-tailed Deer	<i>Odocoileus virginianus</i>	G5	N5	S5	-	-	-

<sup>1</sup> As determined from Dobbyn (1994).

<sup>2</sup> Accessed from NHIC, 2010.

<sup>3</sup> SRANK = Provincial Status (NHIC, 2010); S = Sub-national Rank (Ontario), 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, E = Exotic, U = Unknown

<sup>4</sup> NRANK = National Status (NatureServe ([www.natureserve.org](http://www.natureserve.org)), in conjunction with Conservation Data Centres, such as NHIC); N = National Rank (Canada), 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, E = Exotic

### 2.6.1.3 Important Bird Areas of Canada

A review of the Project area indicates that the Project is not within any Important Bird Areas for Canada.

### 2.6.1.4 Ontario Oil, Gas and Salt Resources – Petroleum Well Mapping

A review of the Oil, Gas & Salt Resources Library resulted in no references to the Project site.

## 3. Species at Risk

As identified in Section 2, several species at risk may potentially occur on the Project site. These species and their likelihood of occurrence on the Project site are addressed below.

### 3.1 Birds

- **Loggerhead Shrike** – Listed as endangered under SARA and ESA. This species can be found in open ranges with the occasional shrub or tree for nesting habitat. Loggerhead Shrike were observed in potential breeding habitat within the 10- by 10-km survey square which overlaps the Project site during the first OBBA (1981 to 1985), though none were observed in the second (2001 to 2005) (Bird Studies Canada et al, 2006). However, given the lack of suitable habitat, none are expected to be found on the Project site.
- **Red-headed Woodpecker** – Listed as threatened under SARA and as being of special concern under ESA. This species can be found in field edges and farmyards with a few large trees (Government of Canada, 2009b). Habitat of this type is available on the Project site, and fledged young were observed within the 10 by 10-km survey square which overlaps the Project site during the first OBBA (1981 to 1985), though none were observed in the second (2001 to 2005) (Bird Studies Canada et al, 2006). It is possible that Red-headed Woodpeckers could occur along the woodlot bordering the Project site.
- **Least Bittern** – Listed as threatened under SARA and ESA. This species can be found in freshwater marshes and swamps where there is a mix of dense emergent vegetation and open water (Government of Canada, 2009c). Suitable habitat is not found on the Project site.

- **Forest-Breeding Birds** – Several forest-breeding birds (Cerulean Warbler, listed as being of special concern under SARA and the ESA, Canada Warbler and Golden-winged Warbler, both listed as being of special concern under SARA and threatened under ESA, and Whip-poor-will, listed as threatened under the ESA) are known to occur in the 10 by 10-km OBBA survey square which overlaps the Project site. These species may occur in the woodlands within 120 m to the Project site.
- **Black Tern** – Listed as special concern on ESA. Black Terns nest in colonies on shallow marshes. No nesting colonies are present within the vicinity of the Project site and suitable habitat is not found on the Project site; therefore, Black Terns are not expected to occur on the Project site.
- **Chimney Swift** – Listed a threatened under SARA and ESA. This species can be found in cave walls, hollow trees as well as man-made structures, such as chimneys. Such habitat is not found on the Project site and Chimney Swifts are not expected to occur.
- **Bobolink** – Listed as threatened under ESA. Bobolink are commonly observed on pasturelands and hayfields. Habitat of this type is available on the Project site.

### 3.2 Reptiles and Amphibians

- **Five-lined Skink** – Listed as being of Special Concern under SARA and ESA. The habitat of the Five-lined Skink varies from region to region and includes rocky outcrops, dunes, fields, and deciduous forests. Since the Five-lined Skink is prone to dehydration, its habitat must include a permanent water body. Suitable habitat is not found on the Project site.
- **Milksnake** – Listed as being of Special Concern under SARA and ESA. This species lives in open woodlands, fields and farm buildings (McKenney et al, 2007). Habitat of this type is available on and adjacent to the Project site.
- **Gray Ratsnake** – Listed as threatened under SARA and ESA. The Gray Ratsnake favours open vegetative cover, such as open woods, and fields. Habitat of this type is available on the Project site and Ratsnake may occur on the Project site.
- **Eastern Ribbonsnake** – Listed as being of Special Concern under SARA and ESA. The Eastern Ribbonsnake is commonly found in wet area, including weedy shorelines. Habitat of this is not available on the Project site.
- Several species of turtle, including **Northern Map** and **Snapping** (listed as being of Special Concern under SARA and ESA), and **Blanding's** and **Common Musk** (listed as threatened under SARA and ESA), may potentially occur within the area. As waterbodies are not found on the Project site, these are not expected to occur.
- **Western Chorus Frog** – Listed as Threatened under SARA, the western chorus frog is commonly found in humid prairie, moist woods or meadows, with reproduction occurring in vernal pools within woodlands. Such habitat is not found on the Project site.



### 3.3 Vegetation

- **Butternut** – Listed as endangered under SARA and ESA. The Butternut is commonly observed on rich, moist, and well-drained soils, often along streams. It may also be found on well-drained gravel sites, especially those made up of limestone (Government of Canada, 2009j).

## 4. Summary of Results

Table 4.1 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 4.1 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	The nearest such features are located more than 120 m away from the Project location.
Is the Project in a natural feature?	No	The Project site is not located in a natural feature.
Is the Project within 50 m of an ANSI (earth science)?	No	There is no ANSI located within 50 m of the Project site.
Is the Project within 120 m of a natural feature that is not an ANSI (earth science)?	No	There are no natural features within 120 m of the Project site

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. In addition, the potential for species at risk identified in Section 3 will be considered during the site investigation.

## 5. References

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# Appendix A

## Ontario Breeding Bird Data



**Square Summary (18UQ94)**

#species (1st atlas)				#species (2nd atlas)				#hours		#pc done	
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
13	43	62	118	30	26	65	121	74	72	64	4

**Region summary (#21: Kingston)**

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
75	75	75	194	193	2753	1875

**Target number of point counts in this square:** 21 road side, 4 off road (1 in open wetlands, 1 in treed wetlands, 1 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	52	97	Pied-billed Grebe		S	61	78	Spotted Sandpiper	P	H	90	78
Mute Swan ‡			0	8	Double-crest Cormorant §			14	21	Upland Sandpiper	P		73	58
Trumpeter Swan †		FY	0	9	American Bittern	T	T	92	88	Common Snipe	NE	NE	98	98
Tundra Swan †			0	0	Least Bittern †		S	46	37	American Woodcock	D	T	97	81
Wood Duck	FY	AE	92	94	Great Blue Heron §	H	H	97	89	Wilson's Phalarope †			6	4
Gadwall			24	21	Green Heron §	H	FY	97	86	Ring-billed Gull §			17	18
American Wigeon			16	14	Black-crown N.-Heron † §			13	4	Herring Gull §	H	H	26	32
American Black Duck	P		81	29	Turkey Vulture	P	T	84	94	Great Black-backed Gull †			2	5
Mallard	FY	FY	100	98	Osprey	NY	NY	52	77	Caspian Tern †			10	5
Blue-winged Teal	P	P	98	66	Bald Eagle †		NY	5	12	Black Tern † §	H		54	45
Northern Shoveler			18	16	Northern Harrier		H	89	76	Common Tern §			18	17
Northern Pintail			24	17	Sharp-shinned Hawk	H		52	58	Forster's Tern † §			0	2
Green-winged Teal			0	37	Cooper's Hawk		P	29	49	Mourning Dove	FY	FY	100	98
Canvasback †			0	0	Northern Goshawk			18	18	Budgerigar ‡			0	0
Redhead †			8	1	Red-should Hawk †	T	NY	42	54	Yellow-billed Cuckoo		S	62	49
Ring-necked Duck			22	30	Broad-winged Hawk	H	P	50	49	Black/Yell-billed Cuckoo		S	0	41
Lesser Scaup ‡			2	1	Red-tailed Hawk	NY	AE	100	93	Black-billed Cuckoo	T	H	98	89
Common Goldeneye ‡			0	1	American Kestrel	AE	CF	98	84	Barn Owl †			1	0
Hooded Merganser		AE	40	62	Merlin	H		2	34	Eastern Screech-Owl	T	S	74	76
Common Merganser	H		18	33	Peregrine Falcon †			1	0	Great Horned Owl	T	D	96	76
Red-breast Merganser			12	8	King Rail †			1	2	Barred Owl	T	T	40	65
Ruddy Duck †			1	5	Virginia Rail	P	S	86	89	Long-eared Owl			41	16
Gray Partridge			20	1	Sora	T	FY	81	76	Short-eared Owl †			22	8
Ring-necked Pheasant		FY	34	28	Common Moorhen	T	S	80	56	North Saw-whet Owl			61	10
Ruffed Grouse	FY	FY	92	88	American Coot			26	12	Common Nighthawk	D	NE	86	54
Sharp-tailed Grouse †			0	1	Coot/Moorhen		S	0	8	Chuck-will's-widow †			1	0
Wild Turkey		FY	4	80	Sandhill Crane ‡			0	4	Whip-poor-will	NY	T	89	69
Northern Bobwhite †			1	0	Killdeer	DD	FY	98	97	Chimney Swift	AE		76	50
Common Loon	FY	FY	84	85	Rock Dove	FY	H	96	93	Ruby-thr Hummingbird	AE	H	92	96

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## Ontario Breeding Bird Atlas - Summary Sheet for Square 18UQ94 (page 2 of 3)

SPECIES	Code		%	
	1st	2nd	1st	2nd
Belted Kingfisher	P	P	97	97
Red-headed Woodpecker †			54	8
Red-bell Woodpecker ‡			0	20
Yellow-bellied Sapsucker	AE	FY	68	72
Downy Woodpecker	FY	FY	96	98
Hairy Woodpecker	FY	P	97	98
Three-toed Woodpecker ‡			1	0
Black-backed Woodpecker ‡			1	0
Northern Flicker	AE	AE	100	98
Pileated Woodpecker	CF	AE	86	93
Olive-sided Flycatcher ‡			2	4
Eastern Wood-Pewee	FY	T	98	98
Yellow-bellied Flycatcher			8	4
Alder Flycatcher	T	S	74	88
Willow Flycatcher	T	A	73	80
Least Flycatcher	T	AE	97	97
Eastern Phoebe	NE	AE	98	98
Gr Crested Flycatcher	AE	AE	98	98
Eastern Kingbird	NE	NE	100	98
Loggerhead Shrike †	H		34	18
Yellow-throated Vireo	FY	T	64	61
Blue-headed Vireo		H	5	28
Warbling Vireo	NY	A	98	98
Philadelphia Vireo	T		9	9
Red-eyed Vireo	CF	CF	98	98
Blue Jay	V	FY	97	98
American Crow	FY	FS	98	98
Common Raven		FY	22	77
Horned Lark	P	H	85	65

SPECIES	Code		%	
	1st	2nd	1st	2nd
Purple Martin	FY	NY	84	73
Tree Swallow	FY	AE	100	98
North Rgh-wing Swallow	AE	FY	92	78
Bank Swallow §	AE	AE	88	68
Cliff Swallow §	AE		62	60
Barn Swallow	FY	AE	100	98
Black-capped Chickadee	NY	AE	98	98
Tufted Titmouse †			0	2
Red-breast Nuthatch	A	S	58	74
White-breast Nuthatch	T	CF	97	97
Brown Creeper	P		61	58
Carolina Wren ‡			2	10
House Wren	AE	FY	98	97
Winter Wren			42	57
Sedge Wren			34	24
Marsh Wren		NU	74	81
Golden-crown Kinglet			5	14
Ruby-crown Kinglet ‡			1	0
Blue-gr Gnatcatcher			22	21
Eastern Bluebird	FY	CF	62	85
Veery	T	T	93	94
Swainson's Thrush			5	4
Hermit Thrush	T	S	36	53
Wood Thrush	T	T	97	98
American Robin	NY	CF	100	98
Gray Catbird	CF	CF	98	98
Northern Mockingbird			22	29
Brown Thrasher	CF	T	100	94
European Starling	FY	CF	100	98

SPECIES	Code		%	
	1st	2nd	1st	2nd
Cedar Waxwing	D	H	98	98
Blue-winged Warbler			9	18
Golden-winged Warbler	T	P	46	60
Blue/Gold-wing Warbler			0	29
Lawrence's Warbler †			1	1
Brewster's Warbler †			1	9
Tennessee Warbler			4	2
Nashville Warbler	NE		77	82
Northern Parula ‡			1	8
Yellow Warbler	NY	FY	100	98
Chestn-sided Warbler	CF	T	80	96
Magnolia Warbler	T	S	24	60
Black-thr Blue Warbler			20	44
Yellow-rumped Warbler	S	S	53	85
Black-thr Green Warbler		S	48	76
Blackburnian Warbler	T		46	54
Pine Warbler	T	NY	58	80
Prairie Warbler †			12	10
Cerulean Warbler †	T	S	25	26
Black-white Warbler	T	S	86	89
American Redstart	NE	CF	96	98
Ovenbird	T	CF	90	94
North Waterthrush	AE	H	82	88
Louis Waterthrush †			6	6
Mourning Warbler		H	25	25
Common Yellowthroat	NE	FY	98	98
Hooded Warbler †			0	0
Wilson's Warbler ‡			1	0
Canada Warbler	S		36	21

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## Ontario Breeding Bird Atlas - Summary Sheet for Square 18UQ94 (page 3 of 3)

SPECIES	Code		%	
	1st	2nd	1st	2nd
Yellow-breast Chat †			4	0
Scarlet Tanager	CF	T	90	92
Eastern Towhee	AE	FY	97	90
Chipping Sparrow	FY	FY	100	98
Clay-colored Sparrow	S		9	33
Field Sparrow	FY	FY	96	94
Vesper Sparrow	T	P	93	74
Savannah Sparrow	FY	CF	98	97
<u>Grasshopper Sparrow</u>			50	58
Henslow's Sparrow †			17	1
Song Sparrow	NY	FY	100	98
Lincoln's Sparrow			5	4
Swamp Sparrow	AE	FY	97	97
White-throat Sparrow	T	S	92	85
Dark-eyed Junco		FY	12	16
Northern Cardinal	S	T	61	88
Rose-breast Grosbeak	CF	T	98	98
Indigo Bunting	CF	FY	97	94
Bobolink	FY	FY	98	96
Red-wing Blackbird	NY	AE	100	98
Eastern Meadowlark	FY	FY	97	94
Common Grackle	CF	FS	100	98
Brown-head Cowbird	FY	P	100	97
Orchard Oriole ‡			1	12
Baltimore Oriole	CF	AE	100	98
Pine Grosbeak ‡			0	0
Purple Finch	P	H	68	84
House Finch		T	22	72
<u>Red Crossbill</u>	P		18	4

SPECIES	Code		%	
	1st	2nd	1st	2nd
White-winged Crossbill			5	2
Pine Siskin	P		54	14
American Goldfinch	N	NB	100	98
Evening Grosbeak			17	10
House Sparrow	AE	FS	98	92

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #21 (Kingston). 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 18UQ94 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 #21). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), or † (provincially rare). Current as of 6/07/2010. An up-to-date version of this sheet is available from <http://www.birdsontario.org/atlas/summaryform.jsp?squareID=18UQ94>

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**Square Summary (18UQ94)**

#species (1st atlas)				#species (2nd atlas)				#hours		#pc done	
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
13	43	62	118	30	26	65	121	74	72	64	4

**Region summary (#21: Kingston)**

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
75	75	75	194	193	2753	1875

**Target number of point counts in this square:** 21 road side, 4 off road (1 in open wetlands, 1 in treed wetlands, 1 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	52	97	Pied-billed Grebe		S	61	78	Spotted Sandpiper	P	H	90	78
Mute Swan ‡			0	8	Double-crest Cormorant §			14	21	Upland Sandpiper	P		73	58
Trumpeter Swan †		FY	0	9	American Bittern	T	T	92	88	Common Snipe	NE	NE	98	98
Tundra Swan †			0	0	Least Bittern †		S	46	37	American Woodcock	D	T	97	81
Wood Duck	FY	AE	92	94	Great Blue Heron §	H	H	97	89	Wilson's Phalarope †			6	4
Gadwall			24	21	Green Heron §	H	FY	97	86	Ring-billed Gull §			17	18
American Wigeon			16	14	Black-crown N.-Heron † §			13	4	Herring Gull §	H	H	26	32
American Black Duck	P		81	29	Turkey Vulture	P	T	84	94	Great Black-backed Gull †			2	5
Mallard	FY	FY	100	98	Osprey	NY	NY	52	77	Caspian Tern †			10	5
Blue-winged Teal	P	P	98	66	Bald Eagle †		NY	5	12	Black Tern † §	H		54	45
Northern Shoveler			18	16	Northern Harrier		H	89	76	Common Tern §			18	17
Northern Pintail			24	17	Sharp-shinned Hawk	H		52	58	Forster's Tern † §			0	2
Green-winged Teal			0	37	Cooper's Hawk		P	29	49	Mourning Dove	FY	FY	100	98
Canvasback †			0	0	Northern Goshawk			18	18	Budgerigar ‡			0	0
Redhead †			8	1	Red-should Hawk †	T	NY	42	54	Yellow-billed Cuckoo		S	62	49
Ring-necked Duck			22	30	Broad-winged Hawk	H	P	50	49	Black/Yell-billed Cuckoo		S	0	41
Lesser Scaup ‡			2	1	Red-tailed Hawk	NY	AE	100	93	Black-billed Cuckoo	T	H	98	89
Common Goldeneye ‡			0	1	American Kestrel	AE	CF	98	84	Barn Owl †			1	0
Hooded Merganser		AE	40	62	Merlin	H		2	34	Eastern Screech-Owl	T	S	74	76
Common Merganser	H		18	33	Peregrine Falcon †			1	0	Great Horned Owl	T	D	96	76
Red-breast Merganser			12	8	King Rail †			1	2	Barred Owl	T	T	40	65
Ruddy Duck †			1	5	Virginia Rail	P	S	86	89	Long-eared Owl			41	16
Gray Partridge			20	1	Sora	T	FY	81	76	Short-eared Owl †			22	8
Ring-necked Pheasant		FY	34	28	Common Moorhen	T	S	80	56	North Saw-whet Owl			61	10
Ruffed Grouse	FY	FY	92	88	American Coot			26	12	Common Nighthawk	D	NE	86	54
Sharp-tailed Grouse †			0	1	Coot/Moorhen		S	0	8	Chuck-will's-widow †			1	0
Wild Turkey		FY	4	80	Sandhill Crane ‡			0	4	Whip-poor-will	NY	T	89	69
Northern Bobwhite †			1	0	Killdeer	DD	FY	98	97	Chimney Swift	AE		76	50
Common Loon	FY	FY	84	85	Rock Dove	FY	H	96	93	Ruby-thr Hummingbird	AE	H	92	96

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## Ontario Breeding Bird Atlas - Summary Sheet for Square 18UQ94 (page 2 of 3)

SPECIES	Code		%		SPECIES	Code		%		SPECIES	Code		%	
	1st	2nd	1st	2nd		1st	2nd	1st	2nd		1st	2nd	1st	2nd
Belted Kingfisher	P	P	97	97	Purple Martin	FY	NY	84	73	Cedar Waxwing	D	H	98	98
Red-headed Woodpecker †			54	8	Tree Swallow	FY	AE	100	98	Blue-winged Warbler			9	18
Red-bell Woodpecker ‡			0	20	North Rgh-wing Swallow	AE	FY	92	78	Golden-winged Warbler	T	P	46	60
Yellow-bellied Sapsucker	AE	FY	68	72	Bank Swallow §	AE	AE	88	68	Blue/Gold-wing Warbler			0	29
Downy Woodpecker	FY	FY	96	98	Cliff Swallow §	AE		62	60	Lawrence's Warbler †			1	1
Hairy Woodpecker	FY	P	97	98	Barn Swallow	FY	AE	100	98	Brewster's Warbler †			1	9
Three-toed Woodpecker ‡			1	0	Black-capped Chickadee	NY	AE	98	98	Tennessee Warbler			4	2
Black-backed Woodpecker ‡			1	0	Tufted Titmouse †			0	2	<u>Nashville Warbler</u>	NE		77	82
Northern Flicker	AE	AE	100	98	Red-breast Nuthatch	A	S	58	74	Northern Parula ‡			1	8
Pileated Woodpecker	CF	AE	86	93	White-breast Nuthatch	T	CF	97	97	Yellow Warbler	NY	FY	100	98
Olive-sided Flycatcher ‡			2	4	<u>Brown Creeper</u>	P		61	58	Chestn-sided Warbler	CF	T	80	96
Eastern Wood-Pewee	FY	T	98	98	Carolina Wren ‡			2	10	Magnolia Warbler	T	S	24	60
Yellow-bellied Flycatcher			8	4	House Wren	AE	FY	98	97	Black-thr Blue Warbler			20	44
Alder Flycatcher	T	S	74	88	<u>Winter Wren</u>			42	57	Yellow-rumped Warbler	S	S	53	85
Willow Flycatcher	T	A	73	80	Sedge Wren			34	24	Black-thr Green Warbler		S	48	76
Least Flycatcher	T	AE	97	97	Marsh Wren		NU	74	81	<u>Blackburnian Warbler</u>	T		46	54
Eastern Phoebe	NE	AE	98	98	Golden-crown Kinglet			5	14	Pine Warbler	T	NY	58	80
Gr Crested Flycatcher	AE	AE	98	98	Ruby-crown Kinglet ‡			1	0	Prairie Warbler †			12	10
Eastern Kingbird	NE	NE	100	98	Blue-gr Gnatcatcher			22	21	Cerulean Warbler †	T	S	25	26
Loggerhead Shrike †	H		34	18	Eastern Bluebird	FY	CF	62	85	Black-white Warbler	T	S	86	89
Yellow-throated Vireo	FY	T	64	61	Veery	T	T	93	94	American Redstart	NE	CF	96	98
Blue-headed Vireo		H	5	28	Swainson's Thrush			5	4	Ovenbird	T	CF	90	94
Warbling Vireo	NY	A	98	98	Hermit Thrush	T	S	36	53	North Waterthrush	AE	H	82	88
<u>Philadelphia Vireo</u>	T		9	9	Wood Thrush	T	T	97	98	Louis Waterthrush †			6	6
Red-eyed Vireo	CF	CF	98	98	American Robin	NY	CF	100	98	Mourning Warbler		H	25	25
Blue Jay	V	FY	97	98	Gray Catbird	CF	CF	98	98	Common Yellowthroat	NE	FY	98	98
American Crow	FY	FS	98	98	Northern Mockingbird			22	29	Hooded Warbler †			0	0
Common Raven		FY	22	77	Brown Thrasher	CF	T	100	94	Wilson's Warbler ‡			1	0
Horned Lark	P	H	85	65	European Starling	FY	CF	100	98	<u>Canada Warbler</u>	S		36	21

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## Ontario Breeding Bird Atlas - Summary Sheet for Square 18UQ94 (page 3 of 3)

SPECIES	Code		%	
	1st	2nd	1st	2nd
Yellow-breast Chat †			4	0
Scarlet Tanager	CF	T	90	92
Eastern Towhee	AE	FY	97	90
Chipping Sparrow	FY	FY	100	98
Clay-colored Sparrow	S		9	33
Field Sparrow	FY	FY	96	94
Vesper Sparrow	T	P	93	74
Savannah Sparrow	FY	CF	98	97
<u>Grasshopper Sparrow</u>			50	58
Henslow's Sparrow †			17	1
Song Sparrow	NY	FY	100	98
Lincoln's Sparrow			5	4
Swamp Sparrow	AE	FY	97	97
White-throat Sparrow	T	S	92	85
Dark-eyed Junco		FY	12	16
Northern Cardinal	S	T	61	88
Rose-breast Grosbeak	CF	T	98	98
Indigo Bunting	CF	FY	97	94
Bobolink	FY	FY	98	96
Red-wing Blackbird	NY	AE	100	98
Eastern Meadowlark	FY	FY	97	94
Common Grackle	CF	FS	100	98
Brown-head Cowbird	FY	P	100	97
Orchard Oriole ‡			1	12
Baltimore Oriole	CF	AE	100	98
Pine Grosbeak ‡			0	0
Purple Finch	P	H	68	84
House Finch		T	22	72
<u>Red Crossbill</u>	P		18	4

SPECIES	Code		%	
	1st	2nd	1st	2nd
White-winged Crossbill			5	2
Pine Siskin	P		54	14
American Goldfinch	N	NB	100	98
Evening Grosbeak			17	10
House Sparrow	AE	FS	98	92

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #21 (Kingston). 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 18UQ94 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 #21). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), or † (provincially rare). Current as of 6/07/2010. An up-to-date version of this sheet is available from <http://www.birdsontario.org/atlas/summaryform.jsp?squareID=18UQ94>

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# Appendix B

## Cataraqui Region Conservation Authority Data



**CATARAQUI REGION CONSERVATION AUTHORITY**

1641 Perth Road, P.O. Box 160 Glenburnie, Ontario K0H 1S0

Phone: (613) 546-4228 Fax: (613) 547-6474

E-mail: crca@cataraquiregion.on.ca Website: www.cataraquiregion.on.ca

June 30, 2010

File: GI-RL  
OPS 3-7-3-10

**E –MAILED AND MAILED**

Hatch Ltd.  
Suite 500, 4342 Queen Street  
Niagara Falls, ON  
L2E 7J7  
Attention: Caleb Coughlin

Dear Mr. Coughlin:

**Re: PROPERTY INQUIRY  
LOT 25, CONC. 2; NARROWS LOCK ROAD  
TOWNSHIP OF RIDEAU LAKES  
ASSESSMENT ROLL #: 0831836051048000000**

Staff of the Cataraqui Region Conservation Authority (CRCA) are writing in response to your inquiry regarding the proposed development of a solar facility. The site was not visited.

**Site Description**

The property is approximately 49.3 hectares in area with approximately 610 metres of frontage on Narrows Lock Road. The lot currently contains a residence and several farm buildings to the northeast of the lot. The remainder of the lot appears to be entirely used for agricultural purposes. An electrical transmission corridor does cross the northwest corner of the lot. The topography of the site is generally quite flat.

**Applicable Environmental Policies and Regulations**

The subject lands are designated 'Rural' in the Official Plan for the Township of Rideau Lakes, and are zoned 'Rural' in the implementing Zoning By-law.

These lands do not appear to be subject to Ontario Regulation 148/06: Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses, which is implemented by the CRCA. The purpose of the regulation is to make sure that proposed changes (e.g. development and site alteration) to a property are not affected by natural hazards, such as flooding and erosion, and that the changes do not put other properties at greater risk from these hazards.

## Discussion

Any proposal for development and site alteration on the subject lands will not require consideration under Ontario Regulation 148/06.

### Natural Hazards

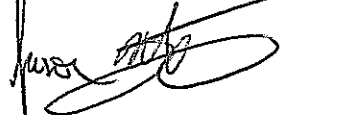
Staff has considered your proposal under Ontario Regulation 148/06: Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses and our implementing policies. The property does not appear to contain any wetlands, watercourses or shorelines and is therefore not subject to flooding or erosion hazards. Setbacks from wetlands, watercourses or shorelines do not extend onto this property.

### Natural Heritage

"The Bog Marsh", a Class 3 Provincially Significant Wetland (PSW) exists approximately 700 metres south of the southernmost portion of the property. This is the closest natural heritage feature to this lot. Development restrictions from the "The Bog Marsh" PSW do not extend onto this property.

We trust that the above has addressed your inquiry. Please note that these comments reflect our understanding, at the time of writing, of the best available data, applicable policies and regulations, and the proposal. Changes in one or more of these factors may affect our comments. You are therefore encouraged to contact the CRCA prior to making a formal application, particularly if more than twelve months have passed since the date of this correspondence. If you have any questions, please contact the undersigned at (613) 546-4228 extension 286 or by email at [jmessenger@cataraquieregion.on.ca](mailto:jmessenger@cataraquieregion.on.ca).

Yours truly,



Jason Messenger, BSc  
Development Technician



# Property Inquiry

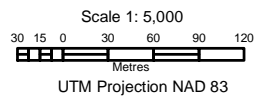
## Narrow Locks Road

### Township of Rideau Lakes



**Legend**

- Watercourses
- Contours
- Parcel of Interest
- Regulated Area



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Aerial Photography © Groupe Alta, 2010

While the CRCA makes every effort to insure that the information presented is accurate for the intended uses of this map, there is an inherent error in all mapping products, and accuracy of the mapping cannot be guaranteed for all possible uses. All end-users must therefore determine for themselves if the information is suitable for their purposes.

