

# **Burk's Falls West Solar Project**

Draft Natural Heritage Records Review Report September 7, 2011



Northland Power Inc. on behalf of Northland Power Solar Burk's Falls West Toronto, Ontario

Draft Natural Heritage Records Review Report

Burk's Falls West Solar Project

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Project Report

September 7, 2011

# Northland Power Inc. Burk's Falls West Solar Project

# **DRAFT Natural Heritage Records Review Report**

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### 1. Introduction

#### **1.1 Project Description**

Northland Power Solar Project Burk's Falls West L.P. (hereinafter referred to as "Northland") is proposing to develop a 10-megawatt (MW) solar photovoltaic project titled Burk's Falls West Solar Project (hereinafter referred to as the "Project"). The Project will be located on approximately 40 hectares (ha) of land, located south of Highway 520 at the border of Armour and Ryerson Townships, in the single tier municipality of Armour Township (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

- i. in a natural feature
- ii. within 50 m of an area of natural and scientific interest (earth science), or
- iii. within 120 m of a natural feature that is not an area of natural and scientific interest (earth science).

Natural Feature is 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 1.1 in the Provincial Policy Statement issued under Section 3 of the *Planning Act*. This figure shows that the proposed Project location is located on the Canadian Shield, and therefore valleylands and woodlands as defined by O. Reg. 359/09 cannot be located on the Project location.

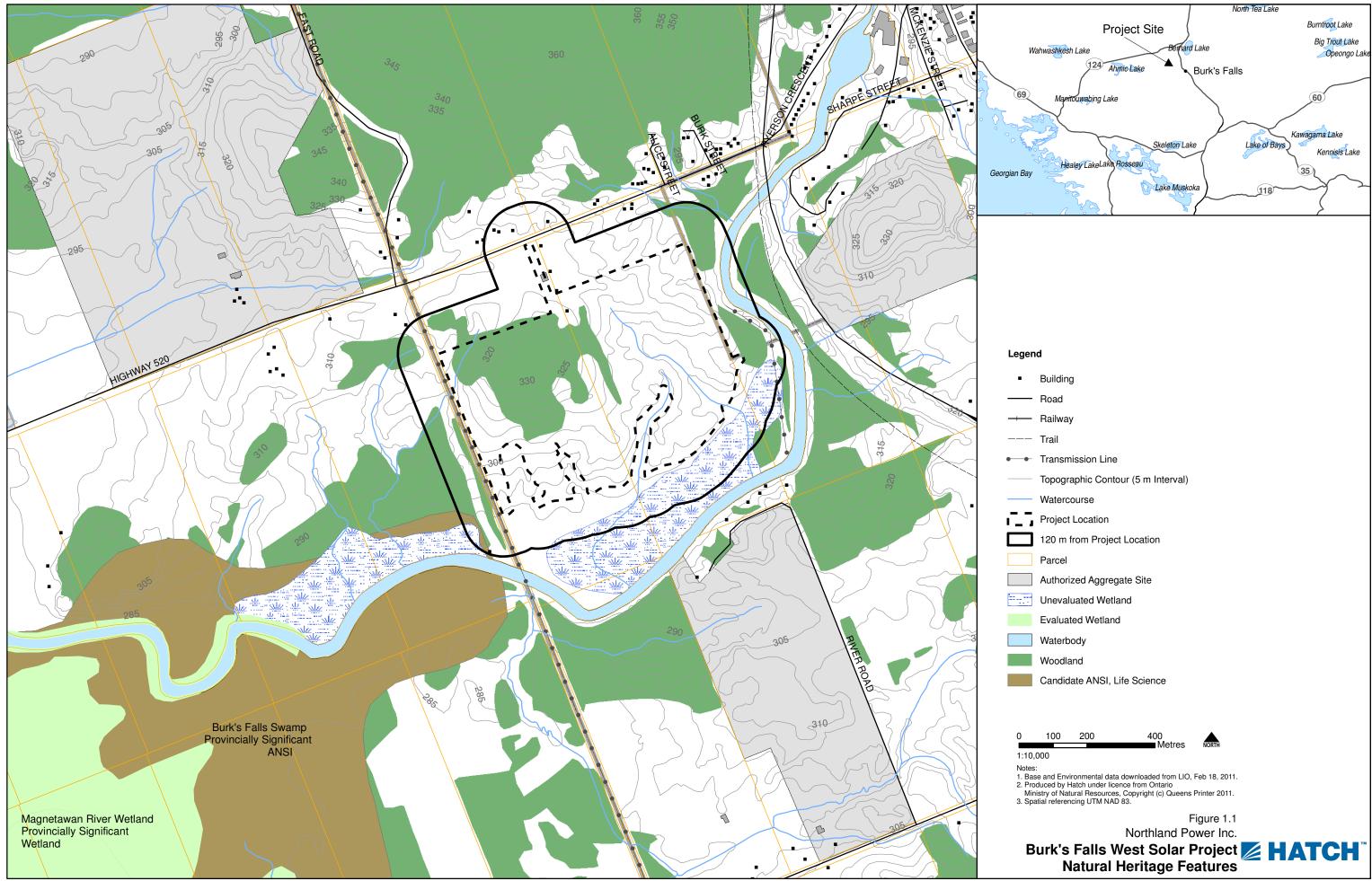
Subsection 3 of Section 25 of the REA Regulation requires the proponent to prepare a report "setting out a summary of the records searched and the results of the analysis" (O. Reg. 359/09). This Natural Heritage Records Review Report has been prepared to meet these requirements.





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	Building
_	Road
	Railway
_	Trail
•	Transmission Line
	Topographic Contour (5 m Interval)
_	Watercourse
7	Project Location
	120 m from Project Location
	Parcel
	Authorized Aggregate Site
	Unevaluated Wetland
	Evaluated Wetland
	Waterbody
	Woodland
	Candidate ANSI, Life Science



Back of Figure





### 2. Background Information Review and Results

This Records Review Report is based on a review of published and unpublished information on natural heritage features and species at risk identified on or in close proximity to the Project location. The background documents reviewed were obtained from various sources, including provincial and federal government agencies.

Records covering areas within a minimum distance of 1 km from the Project location were searched. 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 of this report. The sections are organized as identified in Column 1 of the Table to Section 25 of the REA Regulation.

There are no conservation authorities, 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 governing bodies was not conducted.

Municipal Planning Authorities are discussed in relation to the Township of Armour and the Southeast Parry Sound District Planning Board.

#### 2.1 Ministry of Natural Resources Records

The following Ministry of Natural Resources (MNR) online records were reviewed:

- Ontario Crown Lands Use Atlas 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)
- 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

#### Ontario Crown Land Use Atlas Mapping

A review of the Crown Land Use Policy Atlas interactive map, accessed on June 1, 2010, indicated that the Project location is on privately owned land, and that there are no provincial parks or conservation reserves on or within 1 km of the Project location.

#### MNR LIO Mapping

Mapping data provided by LIO identified the following natural features within 1 km of the Project location.

• There are watercourses located on and within 1 km of the Project location.





- There is an unevaluated wetland within 120 m south of the Project location
- The Magnetawan River Provincially Significant Wetland is located within 1 km of the Project location.
- There are wooded areas identified on and within 120 m of the Project location.
- There are no known significant wildlife habitats, such as deer wintering areas, identified on or within 1 km of the Project location.
- There is a candidate Life Science ANSI, known as Burk's Falls Swamp, within 120 m of the Project location.

#### Natural Heritage Information Centre (NHIC) Database

The NHIC database was accessed on June 1, 2010 and a geographic search using the Biodiversity Explorer tool was completed for a 1 km radius surrounding the Project location. The Biodiversity Explorer tool provides information on rare species, plant communities, wildlife concentration areas, natural areas and invasive species occurrences.

The results of the queries showed that there were no records of occurrences of species of conservation concern on or within 1km of the Project location.

#### MNR Response to Natural Heritage Information Request

In addition to searching the NHIC database, a request for natural heritage information was made to the Parry Sound District MNR office. A conversation between representatives of Northland Power, with MNR Parry Sound on May 20, 2011 identified the following with respect to natural heritage features:

- There are unevaluated wetland communities within 120 m of the Project location, with potential to be complexed to the Magnetawan River Provincially Significant Wetland. The completed evaluation for the Magnetawan River Wetland (Azimuth Environmental Consulting, Inc., 2005) was also provided to Hatch for review; however, specific information relating to the wetlands on or within 120 m of the Project location was not available within the report.
- There is potential for deer wintering areas
- Snapping Turtle (*Chelydra serpentina*), a species of conservation concern, are known to occur within Armour Township
- There is no evaluation of the candidate Burk's Falls Swamp Life Science ANSI planned, therefore this feature will not be considered during the Natural Heritage Assessment as MNR is the sole body with jurisdiction to evaluation ANSIs.

#### **Ontario Herpetofaunal Summary Atlas**

The Ontario Herpetofaunal Summary Atlas identified several species of reptiles and amphibians whose ranges may include the Project location (Table 2.1). These included several species of conservation concern. These species are as follows, and discussed further in Section 3:

- Milksnake (Lampropeltis triangulum).
- Five-lined Skink (*Eumeces fasciatus*).





- Western Chorus Frog (Pseudacris triseriata).
- Snapping Turtle
- Northern Map Turtle (*Graptemys geographica*).

#### 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) and Environment Canada (www.ec.gc.ca) were also reviewed.

C.	•	Con	servation R	ank <sup>2</sup>	A	t Risk Sta	itus
Sr Common Name	oecies Scientific Name	Global GRANK	Canada NRANK⁴	Ontario SRANK <sup>3</sup>	COSEWIC	SARO	SARA
Salamanders	Scientific Name	UKAINK	INKAINK	JKAINK	COSLIVIC	JAKO	JAKA
Mudpuppy	Necturus maculosus	G5	N4	S4	NAR	NAR	-
Red-spotted Newt	Notophthalmus viridescens viridescens	G5	N5	S5	-	-	-
Blue-spotted Salamander Complex	Ambystoma jeffersonianum- laterale "complex	-	-	-	-	-	-
Jefferson / Blue- spotted Salamander polyploids	Ambystoma jeffersonianum - laterale polyploids	-	-	-	-	-	-
Yellow-spotted Salamander	Ambystoma maculatum	G5	N5	S4	-	-	-
Northern Two- lined Salamander	Eurycea bislineata	G5	N5	S4	-	-	-
Eastern Red- backed Salamander	Plethodon cinereus	G5	N5	<b>S</b> 5	-	-	-
Eastern Newt	Notophthalmus viridescens	G5T5	N5	S5	-	-	-
Frogs and Toads							
American Toad	Bufo americanus	G5	N5	S5	-	-	-
Spring Peeper	Pseudacris crucifer	G5	N5	S5	-	-	-
Western Chorus Frog (Great Lakes / St. Lawrence population)	Pseudacris triseriata	G5TNR	-	\$3	THR	NAR	THR (Schedule 1)
Gray Treefrog	Hyla versicolor	G5	N5	S5	-	-	-
Wood Frog	Rana sylvatica	G5	N5		-	-	-
American Bullfrog	Rana castebiana	G5	N5	S4	-	-	-
Green Frog	Rana clamitans	G5	N5	S5	-	-	-
Pickerel Frog	Rana palustris	G5	N5	S4	NAR	NAR	NAR

# Table 2.1Reptiles and Amphibians Potentially Occurring within the Project Area<br/>and their Conservation Status1





Ç.,		Con	servation R	ank <sup>2</sup>	A	t Risk Sta	tus
Sp Common Name	oecies Scientific Name	Global GRANK	Canada NRANK⁴	Ontario SRANK <sup>3</sup>	COSEWIC	SARO	SARA
Northern Leopard Frog	Rana pipiens	G5	N5	\$5	NAR	NAR	-
Mink Frog	Rana septentrionalis	G5	N5	S5	-	-	-
Wood Frog	Rana sylvatica	G5	N5	S5	-	-	-
Turtles							
Snapping Turtle	Chelydra serpentina	G5	N5	<b>S</b> 3	SC	SC	-
Midland Painted Turtle	Chrysemys picta marginata	G5T5	N5	S5	-	-	-
Northern Map Turtle	Graptemys geographica	G5	-	<b>S</b> 3	SC	SC	SC (Schedule 1)
Lizards	•	-	-				•
Five-Lined Skink	Eumeces fasciatus	G5T4	N4	<b>S</b> 3	SC	SC	SC (Schedule 1)
Snakes	•	•					•
Eastern Gartersnake	Thamnophis sirtalis sirtalis	G5T5	N5	S5	-	-	-
Northern Watersnake	Nerodia sipedon sipedon	G5T5	N5	S5	NAR	NAR	-
Red-bellied Snake	Storeria occipitomaculata	G5T5	N5	S5	-	-	-
Dekay's Brownsnake	Storeria dekayi	G5	N5	S5	NAR	NAR	-
Smooth Green Snake	Opheodrys vernalis	G5	N5	S4	-	-	-
Northern Ring- necked Snake	Diadophis punctatus edwardsii	G5	N5	S4	-	-	-
Milksnake	Lampropeltis triangulum	G5	N5	<b>S</b> 3	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 (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
- <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

#### 2.2.1 Results

The Natural Resources Canada's Amphibians and Reptiles of Ontario Climate Domain Maps were reviewed and compared to the results of the Ontario Herpetofaunal Summary Atlas (discussed in Section 2.1); no additional information was discovered in these federal records. A review of the Canadian Wildlife Service and Environmental Canada websites produced no further information on the Project location.





### 2.3 Southeast Parry Sound District Planning Board

The Southeast Parry Sound District Planning Board was contacted for any information about natural heritage features on or within 120 m of the Project location.

#### 2.3.1 Results

The Southeast Parry Sound District Planning Board indicated that they do not maintain records relating to natural heritage features.

#### 2.4 Armour Township

The Project location is located within the Armour Township, a single-tiered municipality. A review of the official township website (<u>http://www.armourtownship.ca/</u>) was undertaken. Information relating to natural features was requested via e-mail in August 2011.

#### 2.4.1 Results

The review of the Armour Township website did not result in any further natural heritage information about the Project location. No records relating to natural features beyond those previously identified were available from the township.

#### 2.5 Other Records

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

- Ontario Breeding Bird Atlas (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).

#### 2.5.1 Results

#### 2.5.1.1 Ontario Breeding Bird Atlas

The Ontario Breeding Bird Atlas online database was accessed on June 1, 2010 to determine which breeding bird species have been recorded within the vicinity of the Project location. The database is organized by Region and each Region is divided into 10- x 10-km blocks which are given a map square number. The Project location is located within map square 17PL25. The square coverage summary sheet was downloaded and the results are provided in Appendix A. Of the species that were recorded, several species of conservation concern were identified with ranges that include the Project location. These species are as follows, and are discussed in Section 3:

- Common Nighthawk (Chordeiles minor).
- Olive-sided Flycatcher (Contopus cooperi).
- Golden-winged Warbler (Vermivora chrysoptera).
- Canada Warbler (*Wilsonia canadensis*).

#### 2.5.1.2 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 location. The list of these species is provided in Table 2.2. None of these species is considered to be species a species of conservation concern.





	•	Сог	nservation Ra	ank <sup>2</sup>	At R	isk Status	
Sp	ecies	Global	Canada	Ontario			
Common Name	Scientific Name	GRANK	NRANK <sup>4</sup>	SRANK <sup>3</sup>	COSEWIC	SARO	SARA
Shrews and Moles				•	•		
Common Shrew	Sorex cinereus	G5	N5	S5	-	-	-
Northern Short-	Blarina brevicauda	CE	N5	S5			
tailed Shrew	Blarina Drevičauda	G5	CNI	55	-	-	-
Smoky Shrew	Sorex fumeus	G5	N5	S5	-	-	-
Hairy-tailed Mole	Parascalops breweri	G5	N4	S4	-	-	-
Star-nosed Mole	Condylura cristata	G5	N5	S5	-	-	-
Bats							
Little Brown Bat	Myotis lucifuga	G5	N5	S5	-	-	-
Big Brown Bat	Epstesicus fuscus	G5	N5	S5	-	-	-
Hoary Bat	Lasiurus cinereus	G5	N5	S4	-	-	-
<b>Rabbits and Hares</b>							
Eastern Cottontail	Sylvilagus floridanus	G5	N5	S5	-	-	-
Snowshoe Hare	Lepus americanus	G5	-	S5	-	-	-
European Hare	Lepus europeanus	G5	NE	SE	-	-	-
Rodents			r	1	1	r	1
Least Chipmunk	Tamias minimus	G5	N5	S5			
Eastern Chipmunk	Tamias striatus	G5	N5	S5	-	-	-
Woodchuck	Marmota monax	G5	N5	S5	-	-	-
Gray Squirrel	Sciurus carolinensis	G5	N5	S5	-	-	-
Red Squirrel	Tamiasciurus hudsonicus	G5	N5	<b>S</b> 5	-	-	-
Northern Flying Squirrel	Glaucomys sabrinus	G5	-	<b>S</b> 5	-	-	-
Beaver	Castor canadensis	G5	N5	S5	-	-	-
White-footed	Peromyscus						
Mouse	leucopus	G5	N5	S5	-	-	-
Deer Mouse	Peromyscus maniculatus	G5	N5	<b>S</b> 5	-	-	-
Southern Red- backed Vole	Clethrionomys gapperi	G5	N5	S5	-	-	-
	Microtus						
Meadow Vole	pennsylvanicus	G5	N5	S5	-	-	-
Muskrat	Ondatra zibethicus	G5	N5	S5	-	-	-
Southern Bog							
Lemming	Synaptomys cooperi	G5	N5	S4	-	-	-
Norway Rat	Rattus norvegicus	G5	NE	SE	-	-	-
House Mouse	Mus musculus	G5	NE	SE	-	_	-
Meadow Jumping Mouse	Zapus hudsonius	G5	N5	\$5	-	-	-
Woodland	Napaeozapus			_			
Jumping Mouse	insignis	G5	N5	S5	-	-	-
Porcupine	Erethizon dorsatum	G5	-	S5	_	-	-
Carnivores		20	1		1	1	1
Coyote	Canis latrans	G5	N5	S5	-	-	-
Gray Wolf	Canis lupus	G4	N4	\$4	_	-	-
Red Fox	Vulpes vulpes	G5	N5	\$5 \$5	_	-	-
Black Bear	Ursus americanus	G5	N5	\$5 \$5	_	-	-
Raccoon	Procyon lotor	G5	N5	\$5 \$5	-	-	-
Marten	Martes americana	G5	N5	\$5 \$5	_	_	_

# Table 2.2Mammals Potentially Occurring within the Project Area<br/>and their Conservation Status1



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<b>S</b> m	ecies	Cor	nservation Ra	unk <sup>2</sup>	At R	isk Status	
sp	ecles	Global	Canada	Ontario			
Common Name	Scientific Name	GRANK	NRANK <sup>4</sup>	SRANK <sup>3</sup>	COSEWIC	SARO	SARA
Fisher	Martes pennanti	G5	N5	S5	-	-	-
Ermine	Mustela erminea	G5	N5	S5	-	-	-
Long-tailed Weasel	Mustela frenata	G5	N5	S4	-	-	-
Least Weasel	Mustela nivalis	G5	N5	SU	-	-	-
Mink	Mustela vison	G5	N5	S4	-	-	-
Striped Skunk	Mephitis mephitis	G5	N5	S5	-	-	-
River Otter	Lontra canadensis	G5	N5	S5	-	-	-
Canada Lynx	Lynx canadensis	G5	N5	S5	-	-	-
Ungulates	•				•		
White-tailed Deer	Odocoileus virginianus	G5	N5	S5	-	-	-
Moose	Alces alces	G5	N5	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
- <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

#### 2.5.1.3 Important Bird Areas of Canada

A review of the available mapping indicates that the Project is not near or within any Important Bird Areas of Canada.

### 3. Species of Conservation Concern

As identified above in Section 2, several species of conservation concern may potentially occur on or within 120 m of the Project location. These species and their likelihood of occurrence on the Project location are addressed below.

#### 3.1.1 Birds

- **Common Nighthawk** Listed as being of special concern on the ESA and threatened on SARA. Common Nighthawk are commonly observed foraging on the wing for insects over clearings, fields, ponds, and other open areas. Preferred nesting sites are bare ground in open areas or gravel rooftops in urban environments (Poulin et al, 1996). Suitable habitat for Common Nighthawk may be found within the agricultural lands or open areas on or within 120 m of the Project location, and they have been observed during OBBA surveys within the 10- x 10-km survey square that overlaps the Project location.
- Olive-sided Flycatcher Listed as threatened on SARA and special concern on the ESA. This species is found in natural or man-made open areas containing tall live trees or snags for perching (Government of Canada, 2009b). Habitat of this type may be available within the local area. Olive-sided Flycatchers were have been observed during the first, but not the second





OBBA survey within the 10- x 10-km survey square that overlaps the Project location (Bird Studies Canada et al., 2006).

- **Golden-winged Warbler** Listed as Special Concern on the ESA. Associated with early successional habitat, such as shrubby, grassy abandoned fields with small deciduous trees bordered by low woodland and wooded swamps. Requires > 10 ha of habitat.
- **Canada Warbler** Listed as Special Concern on the ESA. An interior forest species of dense mixedwood forests with closed canopy and shrubby undergrowth, often requiring at least 30 ha of woodland. Also associated with riparian habitats.

#### 3.1.2 **Reptiles and Amphibians**

- 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 within 120 m of the Project location.
- Several species of turtle, including **Northern Map** (listed as being of special concern under SARA and ESA) and **Snapping** (listed as being of special concern under ESA) turtles, may potentially occur within the vicinity of the Project location. With the watercourse potentially on the Project location, and the Magnetewan River and wetland communities identified south of the Project location, these species may occur in these areas.
- **Five-lined Skink** Listed as being of special concern under SARA and ESA. The Five-lined Skink prefers rocky outcrops where there is access to sunlight within fields or mixed deciduous forest and coniferous forests (Government of Canada, 2009d). Habitat of this type may be present on the Project location.
- 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 may be found within the woodlands or wetlands on or within 120 m of the Project location.

#### 4. Summary of Results

Table 4.1 summarizes the results of the records review according to the features identified in Section 1.3. A map depicting the identified natural features on and in proximity to the site is provided in Figure 1.1.

Determination to be Made	Yes/No	Description
Is the Project in or within 120 m of a	No	
Provincial Park of Conservation Reserve		
Is the Project in a natural feature?	No	There are no known natural features
		identified on the Project location.
Is the Project within 50 m of an ANSI (earth	No	The nearest earth science ANSI is
science)?		located several kilometres from the
		Project location.

 Table 4.1
 Summary of Records Review Determinations





Determination to be Made	Yes/No	Description
Is the Project within 120 m of a natural	Yes	There is a wetland community
feature that is not an ANSI (earth science)?		identified within 120 m of the Project
		location

As per Section 26(1) 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 location, (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.

### 5. References

Azimuth Environmental Consulting, Inc. 2005. Magnetawan River Wetland Evaluation. Prepared for Township of Ryerson in Partnership with Ministry of Natural Resources Parry Sound District.

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# Appendix A Ontario Breeding Bird Atlas Results



Square Summary (17PL25)	
#species (1st atlas) #species (2nd atlas) #hours #pc dor	ne
poss prob conf total poss prob conf total 1st 2nd road of	frd
33 36 36 105 60 26 34 120 23 34 19 0	6

Region summary (#28: Parry Sound)
-----------------------------------

#squares	#sq w	ith data	#spe	cies	#nc done	target #pc
#squares	1st	2nd	1st	2nd	#pc done	target #pc
85	85		169			531

Target number of point counts in this square: 19 road side, 6 off road (2 in deciduous forest, 4 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.

7 1

SPECIES	Co	de	%	,	SPECIES	Code %		6	SPECIES		de	%	,	
	1st	2nd	1st	2nd	SFECIES	1st	2nd	1st	2nd	SPECIES	1st	2nd	1st	2nd
Canada Goose		NE	1	74	Osprey			35	42	Caspian Tern †			4	1
Trumpeter Swan †			0	1	Bald Eagle †			1	4	Black Tern † §			1	1
Wood Duck	Т	FY	58	80	Northern Harrier	Н	Н	38	32	Common Tern §			14	16
Gadwall			1	2	Sharp-shinned Hawk		Н	27	41	Mourning Dove	Ρ	Ρ	30	69
American Wigeon ‡			0	1	Cooper's Hawk		Н	9	18	Yellow-billed Cuckoo			2	3
American Black Duck	Т	FY	58	51	Northern Goshawk			12	23	Black/Yell-billed Cuckoo			0	14
Mallard	FY	FY	75	85	Red-should Hawk †		Н	27	41	Black-billed Cuckoo		Т	31	64
Blue-winged Teal	Т	Н	23	9	Broad-winged Hawk	CF	Н	85	89	Eastern Screech-Owl ‡			0	0
Northern Shoveler	FY	Н	1	4	Red-tailed Hawk	Н	Н	50	48	Great Horned Owl			10	23
Northern Pintail			1	1	American Kestrel	CF	AE	54	44	Northern Hawk Owl ‡			0	0
Green-winged Teal			0	10	Merlin		Т	1	48	Barred Owl	Ρ	Т	45	58
Ring-necked Duck			11	25	Yellow Rail †			0	0	Long-eared Owl ‡			0	2
Bufflehead †			0	0	Virginia Rail			17	16	Short-eared Owl †			0	1
Common Goldeneye ‡			0	2	Sora	Т		5	14	Boreal Owl ‡			0	3
Hooded Merganser			37	49	Common Moorhen			0	0	North Saw-whet Owl	Н	Н	47	28
Common Merganser		FY	63	70	American Coot			0	0	Common Nighthawk	Т	Т	45	27
Red-breast Merganser			10	10	Sandhill Crane			1	37	Whip-poor-will			42	25
Ruffed Grouse		FY	72	87	Killdeer	FY	Н	81	57	Chimney Swift	Т	Н	74	28
Spruce Grouse			5	15	Rock Dove	Н	Н	34	47	Ruby-thr Hummingbird	Н	FY	91	92
Wild Turkey ‡			0	11	Spotted Sandpiper	FY	Н	75	68	Belted Kingfisher	NU	NU	83	84
Common Loon	А	Т	91	95	Solitary Sandpiper			0	1	Red-headed Woodpecker †			3	2
Pied-billed Grebe			10	20	Upland Sandpiper			3	8	Red-bell Woodpecker ‡			0	0
Double-crest Cormorant §			10	17	Common Snipe	Т	Т	57	48	Yellow-bellied Sapsucker	FY	NY	89	90
American Bittern		Н	49	58	American Woodcock		D	50	52	Downy Woodpecker	Н	CF	78	88
Least Bittern †			0	0	Wilson's Phalarope †			0	0	Hairy Woodpecker	Ρ	Н	87	92
Great Blue Heron §	Н	Н	96	90	Little Gull †			1	0	Black-backed Woodpecker	Н		25	29
Green Heron §	Н	Н	10	11	Ring-billed Gull §			7	17	Northern Flicker	NU	FY	95	94
Black-crown NHeron † §			1	2	Herring Gull §	Н	AE	83	88	Pileated Woodpecker		Н	74	89
Turkey Vulture	Н	Н	55	88	Great Black-backed Gull †			0	1	Olive-sided Flycatcher	S		62	51

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SPECIES		Code %			SPECIES		Code %		]	SPECIES		Code		,
SPECIES	1st	2nd	1st	2nd	SPECIES	1st	2nd	1st 2nd		SPECIES	1st	2nd	1st	2nd
Eastern Wood-Pewee	S	S	87	70	House Wren	S	S	23 48	3	Black-thr Green Warbler	S	S	88	95
Yellow-bellied Flycatcher			25	38	Winter Wren	S	S	81 91		Blackburnian Warbler	CF	S	90	90
Alder Flycatcher	А	S	74	87	Sedge Wren			21 14		Pine Warbler	S	S	36	80
Willow Flycatcher		S	1	7	Marsh Wren			39	9	Prairie Warbler †			4	7
Least Flycatcher		S	88	84	Golden-crown Kinglet	Ρ	S	57 72	2	Bay-breasted Warbler			5	12
Eastern Phoebe	А	S	83	94	Ruby-crown Kinglet	S	Т	65 52	2	Cerulean Warbler †			0	0
Gr Crested Flycatcher	Ρ	Н	91	94	Eastern Bluebird		AE	30 44		Black-white Warbler	S	Р	94	98
Eastern Kingbird	CF	Н	97	83	Veery	А	S	94 92	2	American Redstart	А	S	95	98
Yellow-throated Vireo			5	7	Swainson's Thrush		Т	64 67	]	Ovenbird	А	DD	91	96
Blue-headed Vireo	S	A	44	81	Hermit Thrush	FY	S	85 82	2	North Waterthrush	S	S	71	74
Warbling Vireo	D	S	62	51	Wood Thrush	S	S	82 76	5	Louis Waterthrush †			0	1
Philadelphia Vireo		Н	10	24	American Robin	FY	NY	94 92	2	Mourning Warbler	CF	S	83	
Red-eyed Vireo	A	S	96	98	Gray Catbird	CF	S	89 77	]	Common Yellowthroat	CF	A	97	98
Gray Jay		Т	35	37	Northern Mockingbird ‡			1 4	9	Wilson's Warbler ‡			1	1
Blue Jay	FY	A	90	96	Brown Thrasher	Т	S	74 65		Canada Warbler	А	S	80	78
American Crow	FY	FY	91	94	European Starling	NY	CF	83 78	3	Scarlet Tanager		S	75	80
Common Raven	FY	CF	85	95	Cedar Waxwing	D	Р	94 97	]	Eastern Towhee	Н		25	28
Horned Lark			4	2	Golden-winged Warbler		S	40 20	-1	Chipping Sparrow	А	CF	91	92
Purple Martin	Ρ		30	9	Blue/Gold-wing Warbler			0 8	3	Clay-colored Sparrow ‡			2	5
Tree Swallow	FY	FY	97	85	Brewster's Warbler †			1 0	0	Field Sparrow	Н		20	
North Rgh-wing Swallow	FY	Н	35	18	Tennessee Warbler			10 12	2	Vesper Sparrow		FY	41	23
Bank Swallow §	NU	NY	56	23	Nashville Warbler	FY	S	89 94	]	Savannah Sparrow	CF	FY	61	61
Cliff Swallow §	V	AE	62	29	Northern Parula		S	8 38	3	Grasshopper Sparrow ‡			1	3
Barn Swallow	FY	FY	90	74	Yellow Warbler	S	S	96 94		Le Conte's Sparrow ‡			0	1
Black-capped Chickadee	Ρ	CF	91	96	Chestn-sided Warbler	FY	CF	94 96	5	Song Sparrow	CF	DD	98	98
Boreal Chickadee		Т	3	12	Magnolia Warbler	А	NE	84 95	5	Lincoln's Sparrow			11	27
Red-breast Nuthatch	S	CF	88	92	Cape May Warbler	Ρ	S	25 28	3	Swamp Sparrow	CF	S	91	89
White-breast Nuthatch	-	Т	61	74	Black-thr Blue Warbler	S	S	69 89	9	White-throat Sparrow	A	CF	95	97
Brown Creeper		Р	48	68	Yellow-rumped Warbler	FY	Ρ	94 98	3	Dark-eyed Junco	S	Р	48	50

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SPECIES		е	%			
	1st 2	2nd	1st	2nd		
Northern Cardinal			2	10		
Rose-breast Grosbeak	A S	S	88	88		
Indigo Bunting	A	D C	68	74		
Bobolink	CF	S	58	51		
Red-wing Blackbird	NE /	4	98	90		
Eastern Meadowlark	Т	Г	37	43		
Rusty Blackbird			5	7		
Brewer's Blackbird			1	3		
Common Grackle	CF	CF	92	92		
Brown-head Cowbird	DH	4	81	56		
Baltimore Oriole	CF		67	38		
Purple Finch	P	۶Y	91	88		
House Finch		5	0	7		
Red Crossbill			10	0		
White-winged Crossbill	Н	C	16	31		
Pine Siskin	н	4	52	40		
American Goldfinch	P	D	88	87		
Evening Grosbeak	Ηŀ	4	62	67		
House Sparrow	NY	4	31	20		

#### Ontario Breeding Bird Atlas - Summary Sheet for Square 17PL25 (page 3 of 3)

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #28 (Parry Sound). 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 17PL25 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 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 #28). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), or † (provincially rare). Current as of 7/07/2010. An up-to-date version of this sheet is available from <a href="http://www.birdsontario.org/atlas/summaryform.jsp?squarelD=17PL25">http://www.birdsontario.org/atlas/summaryform.jsp?squarelD=17PL25</a>

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