



**NORTHLAND
POWER**

Burk's Falls West Solar Project Natural Heritage Records Review Report

November 16, 2011



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

Natural Heritage
Records Review Report

Burk's Falls West Solar Project

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Project Report

November 16, 2011

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

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).

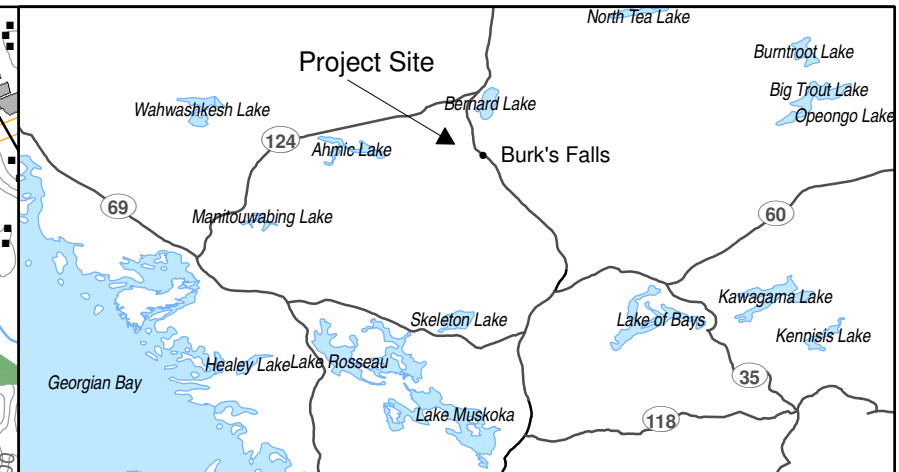
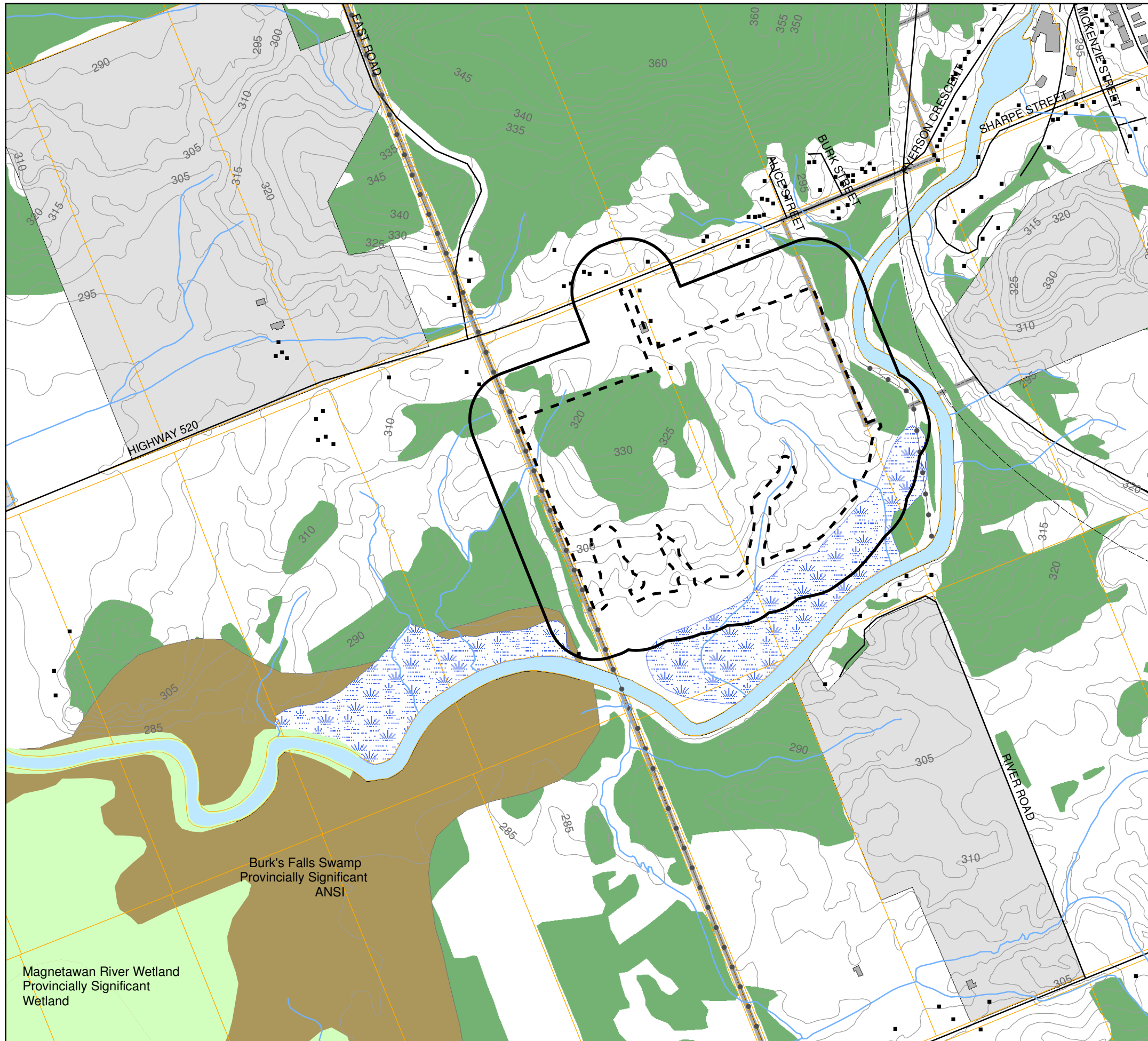
Natural Feature is defined in Section 1. (1) of the REA Regulation to be all or part of

- 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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Legend

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



Notes:
 1. Base and Environmental data downloaded from LIO, Feb 18, 2011.
 2. Produced by Hatch under licence from Ontario Ministry of Natural Resources, Copyright (c) Queens Printer 2011.
 3. Spatial referencing UTM NAD 83.

Figure 1.1
 Northland Power Inc.
Burk's Falls West Solar Project
 Natural Heritage Features **HATCH™**

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.

Table 2.1 Reptiles and Amphibians Potentially Occurring within the Project Area and their Conservation Status¹

Species		Conservation Rank ²			At Risk Status		
		Global GRANK	Canada NRANK ⁴	Ontario SRANK ³	COSEWIC	SARO	SARA
Common Name	Scientific Name						
Salamanders							
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>	-	-	-	-	-	-
Jefferson / Blue-spotted Salamander polyploids	<i>Ambystoma jeffersonianum - laterale</i> polyploids	-	-	-	-	-	-
Yellow-spotted Salamander	<i>Ambystoma maculatum</i>	G5	N5	S4	-	-	-
Northern Two-lined Salamander	<i>Eurycea bislineata</i>	G5	N5	S4	-	-	-
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	G5	N5	S5	-	-	-
Eastern Newt	<i>Notophthalmus viridescens</i>	G5T5	N5	S5	-	-	-
Frogs and Toads							
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		-	-	-
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	NAR

Species		Conservation Rank ²			At Risk Status		
		Global GRANK	Canada NRANK ⁴	Ontario SRANK ³	COSEWIC	SARO	SARA
Common Name	Scientific Name						
Northern Leopard Frog	<i>Rana pipiens</i>	G5	N5	S5	NAR	NAR	-
Mink Frog	<i>Rana septentrionalis</i>	G5	N5	S5	-	-	-
Wood Frog	<i>Rana sylvatica</i>	G5	N5	S5	-	-	-
Turtles							
Snapping Turtle	<i>Chelydra serpentina</i>	G5	N5	S3	SC	SC	-
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)
Lizards							
Five-Lined Skink	<i>Eumeces fasciatus</i>	G5T4	N4	S3	SC	SC	SC (Schedule 1)
Snakes							
Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>	G5T5	N5	S5	-	-	-
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 Ring-necked Snake	<i>Diadophis punctatus edwardsii</i>	G5	N5	S4	-	-	-
Milksnake	<i>Lampropeltis triangulum</i>	G5	N5	S3	SC	SC	SC (Schedule 1)

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

² Accessed from NHIC, 2008b

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

⁴ 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 (<http://www.armourtownship.ca/>) 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.

Table 2.2 Mammals Potentially Occurring within the Project Area and their Conservation Status¹

Species		Conservation Rank ²			At Risk Status		
		Global GRANK	Canada NRANK ⁴	Ontario SRANK ³	COSEWIC	SARO	SARA
Common Name	Scientific Name						
Shrews and Moles							
Common Shrew	<i>Sorex cinereus</i>	G5	N5	S5	-	-	-
Northern Short-tailed Shrew	<i>Blarina brevicauda</i>	G5	N5	S5	-	-	-
Smoky Shrew	<i>Sorex fumeus</i>	G5	N5	S5	-	-	-
Hairy-tailed Mole	<i>Parascalops breweri</i>	G5	N4	S4	-	-	-
Star-nosed Mole	<i>Condylura cristata</i>	G5	N5	S5	-	-	-
Bats							
Little Brown Bat	<i>Myotis lucifuga</i>	G5	N5	S5	-	-	-
Big Brown Bat	<i>Eptesicus fuscus</i>	G5	N5	S5	-	-	-
Hoary Bat	<i>Lasiurus cinereus</i>	G5	N5	S4	-	-	-
Rabbits and Hares							
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	-	-	-
Rodents							
Least Chipmunk	<i>Tamias minimus</i>	G5	N5	S5	-	-	-
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	-	-	-
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	-	-	-
Southern Red-backed Vole	<i>Clethrionomys gapperi</i>	G5	N5	S5	-	-	-
Meadow Vole	<i>Microtus pennsylvanicus</i>	G5	N5	S5	-	-	-
Muskrat	<i>Ondatra zibethicus</i>	G5	N5	S5	-	-	-
Southern Bog Lemming	<i>Synaptomys cooperi</i>	G5	N5	S4	-	-	-
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	-	-	-
Carnivores							
Coyote	<i>Canis latrans</i>	G5	N5	S5	-	-	-
Gray Wolf	<i>Canis lupus</i>	G4	N4	S4	-	-	-
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	-	-	-

Species		Conservation Rank ²			At Risk Status		
		Global GRANK	Canada NRANK ⁴	Ontario SRANK ³	COSEWIC	SARO	SARA
Common Name	Scientific Name						
Fisher	<i>Martes pennanti</i>	G5	N5	S5	-	-	-
Ermine	<i>Mustela erminea</i>	G5	N5	S5	-	-	-
Long-tailed Weasel	<i>Mustela frenata</i>	G5	N5	S4	-	-	-
Least Weasel	<i>Mustela nivalis</i>	G5	N5	SU	-	-	-
Mink	<i>Mustela vison</i>	G5	N5	S4	-	-	-
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	-	-	-
Ungulates							
White-tailed Deer	<i>Odocoileus virginianus</i>	G5	N5	S5	-	-	-
Moose	<i>Alces alces</i>	G5	N5	S5	-	-	-

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

² Accessed from NHIC, 2008b

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

⁴ 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.

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	
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 science)?	No	The nearest earth science ANSI is located several kilometres from the Project location.

Determination to be Made	Yes/No	Description
Is the Project within 120 m of a natural feature that is not an ANSI (earth science)?	Yes	There is a wetland community 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 done		
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
33	36	36	105	60	26	34	120	23	34	19	6

Region summary (#28: Parry Sound)

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
85	85	85	169	182	1292	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.

SPECIES	Code		%	
	1st	2nd	1st	2nd
Canada Goose		NE	1	74
Trumpeter Swan †			0	1
Wood Duck	T	FY	58	80
Gadwall			1	2
American Wigeon ‡			0	1
American Black Duck	T	FY	58	51
Mallard	FY	FY	75	85
Blue-winged Teal	T	H	23	9
Northern Shoveler	FY	H	1	4
Northern Pintail			1	1
Green-winged Teal			0	10
Ring-necked Duck			11	25
Bufflehead †			0	0
Common Goldeneye ‡			0	2
Hooded Merganser			37	49
Common Merganser		FY	63	70
Red-breast Merganser			10	10
Ruffed Grouse		FY	72	87
Spruce Grouse			5	15
Wild Turkey ‡			0	11
Common Loon	A	T	91	95
Pied-billed Grebe			10	20
Double-crest Cormorant §			10	17
American Bittern		H	49	58
Least Bittern †			0	0
Great Blue Heron §	H	H	96	90
Green Heron §	H	H	10	11
Black-crown N.-Heron † §			1	2
Turkey Vulture	H	H	55	88

SPECIES	Code		%	
	1st	2nd	1st	2nd
Osprey			35	42
Bald Eagle †			1	4
Northern Harrier	H	H	38	32
Sharp-shinned Hawk		H	27	41
Cooper's Hawk		H	9	18
Northern Goshawk			12	23
Red-should Hawk †		H	27	41
Broad-winged Hawk	CF	H	85	89
Red-tailed Hawk	H	H	50	48
American Kestrel	CF	AE	54	44
Merlin		T	1	48
Yellow Rail †			0	0
Virginia Rail			17	16
Sora	T		5	14
Common Moorhen			0	0
American Coot			0	0
Sandhill Crane			1	37
Killdeer	FY	H	81	57
Rock Dove	H	H	34	47
Spotted Sandpiper	FY	H	75	68
Solitary Sandpiper			0	1
Upland Sandpiper			3	8
Common Snipe	T	T	57	48
American Woodcock		D	50	52
Wilson's Phalarope †			0	0
Little Gull †			1	0
Ring-billed Gull §			7	17
Herring Gull §	H	AE	83	88
Great Black-backed Gull †			0	1

SPECIES	Code		%	
	1st	2nd	1st	2nd
Caspian Tern †			4	1
Black Tern † §			1	1
Common Tern §			14	16
Mourning Dove	P	P	30	69
Yellow-billed Cuckoo			2	3
Black/Yell-billed Cuckoo			0	14
Black-billed Cuckoo		T	31	64
Eastern Screech-Owl ‡			0	0
Great Horned Owl			10	23
Northern Hawk Owl ‡			0	0
Barred Owl	P	T	45	58
Long-eared Owl ‡			0	2
Short-eared Owl †			0	1
Boreal Owl ‡			0	3
North Saw-whet Owl	H	H	47	28
Common Nighthawk	T	T	45	27
Whip-poor-will			42	25
Chimney Swift	T	H	74	28
Ruby-thr Hummingbird	H	FY	91	92
Belted Kingfisher	NU	NU	83	84
Red-headed Woodpecker †			3	2
Red-bell Woodpecker ‡			0	0
Yellow-bellied Sapsucker	FY	NY	89	90
Downy Woodpecker	H	CF	78	88
Hairy Woodpecker	P	H	87	92
Black-backed Woodpecker	H		25	29
Northern Flicker	NU	FY	95	94
Pileated Woodpecker		H	74	89
Olive-sided Flycatcher	S		62	51

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Ontario Breeding Bird Atlas - Summary Sheet for Square 17PL25 (page 2 of 3)

SPECIES	Code		%		SPECIES	Code		%		SPECIES	Code		%	
	1st	2nd	1st	2nd		1st	2nd	1st	2nd		1st	2nd	1st	2nd
Eastern Wood-Pewee	S	S	87	70	House Wren	S	S	23	48	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	A	S	74	87	Sedge Wren			21	14	Pine Warbler	S	S	36	80
Willow Flycatcher		S	1	7	Marsh Wren			3	9	Prairie Warbler †			4	7
Least Flycatcher	S	S	88	84	Golden-crown Kinglet	P	S	57	72	Bay-breasted Warbler			5	12
Eastern Phoebe	A	S	83	94	Ruby-crown Kinglet	S	T	65	52	Cerulean Warbler †			0	0
Gr Crested Flycatcher	P	H	91	94	Eastern Bluebird		AE	30	44	Black-white Warbler	S	P	94	98
Eastern Kingbird	CF	H	97	83	Veery	A	S	94	92	American Redstart	A	S	95	98
Yellow-throated Vireo			5	7	Swainson's Thrush		T	64	67	Ovenbird	A	DD	91	96
Blue-headed Vireo	S	A	44	81	Hermit Thrush	FY	S	85	82	North Waterthrush	S	S	71	74
Warbling Vireo	D	S	62	51	Wood Thrush	S	S	82	76	Louis Waterthrush †			0	1
Philadelphia Vireo		H	10	24	American Robin	FY	NY	94	92	Mourning Warbler	CF	S	83	75
Red-eyed Vireo	A	S	96	98	Gray Catbird	CF	S	89	77	Common Yellowthroat	CF	A	97	98
Gray Jay		T	35	37	Northern Mockingbird ‡			1	4	Wilson's Warbler ‡			1	1
Blue Jay	FY	A	90	96	Brown Thrasher	T	S	74	65	Canada Warbler	A	S	80	78
American Crow	FY	FY	91	94	European Starling	NY	CF	83	78	Scarlet Tanager		S	75	80
Common Raven	FY	CF	85	95	Cedar Waxwing	D	P	94	97	Eastern Towhee	H		25	28
Horned Lark			4	2	Golden-winged Warbler		S	40	20	Chipping Sparrow	A	CF	91	92
Purple Martin	P		30	9	Blue/Gold-wing Warbler			0	8	Clay-colored Sparrow ‡			2	5
Tree Swallow	FY	FY	97	85	Brewster's Warbler †			1	0	Field Sparrow	H		20	15
North Rgh-wing Swallow	FY	H	35	18	Tennessee Warbler			10	12	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	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	P	CF	91	96	Chestn-sided Warbler	FY	CF	94	96	Song Sparrow	CF	DD	98	98
Boreal Chickadee		T	3	12	Magnolia Warbler	A	NE	84	95	Lincoln's Sparrow			11	27
Red-breast Nuthatch	S	CF	88	92	Cape May Warbler	P	S	25	28	Swamp Sparrow	CF	S	91	89
White-breast Nuthatch	S	T	61	74	Black-thr Blue Warbler	S	S	69	89	White-throat Sparrow	A	CF	95	97
Brown Creeper		P	48	68	Yellow-rumped Warbler	FY	P	94	98	Dark-eyed Junco	S	P	48	50

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

SPECIES	Code		%	
	1st	2nd	1st	2nd
Northern Cardinal			2	10
Rose-breast Grosbeak	A	S	88	88
Indigo Bunting	A	P	68	74
Bobolink	CF	S	58	51
Red-wing Blackbird	NE	A	98	90
Eastern Meadowlark	T	T	37	43
Rusty Blackbird			5	7
Brewer's Blackbird			1	3
Common Grackle	CF	CF	92	92
Brown-head Cowbird	D	H	81	56
<u>Baltimore Oriole</u>	CF		67	38
Purple Finch	P	FY	91	88
House Finch		S	0	7
Red Crossbill			10	0
White-winged Crossbill	H	D	16	31
Pine Siskin	H	H	52	40
American Goldfinch	P	D	88	87
Evening Grosbeak	H	H	62	67
House Sparrow	NY	H	31	20

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 (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 <http://www.birdsontario.org/atlas/summaryform.jsp?squareID=17PL25>

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