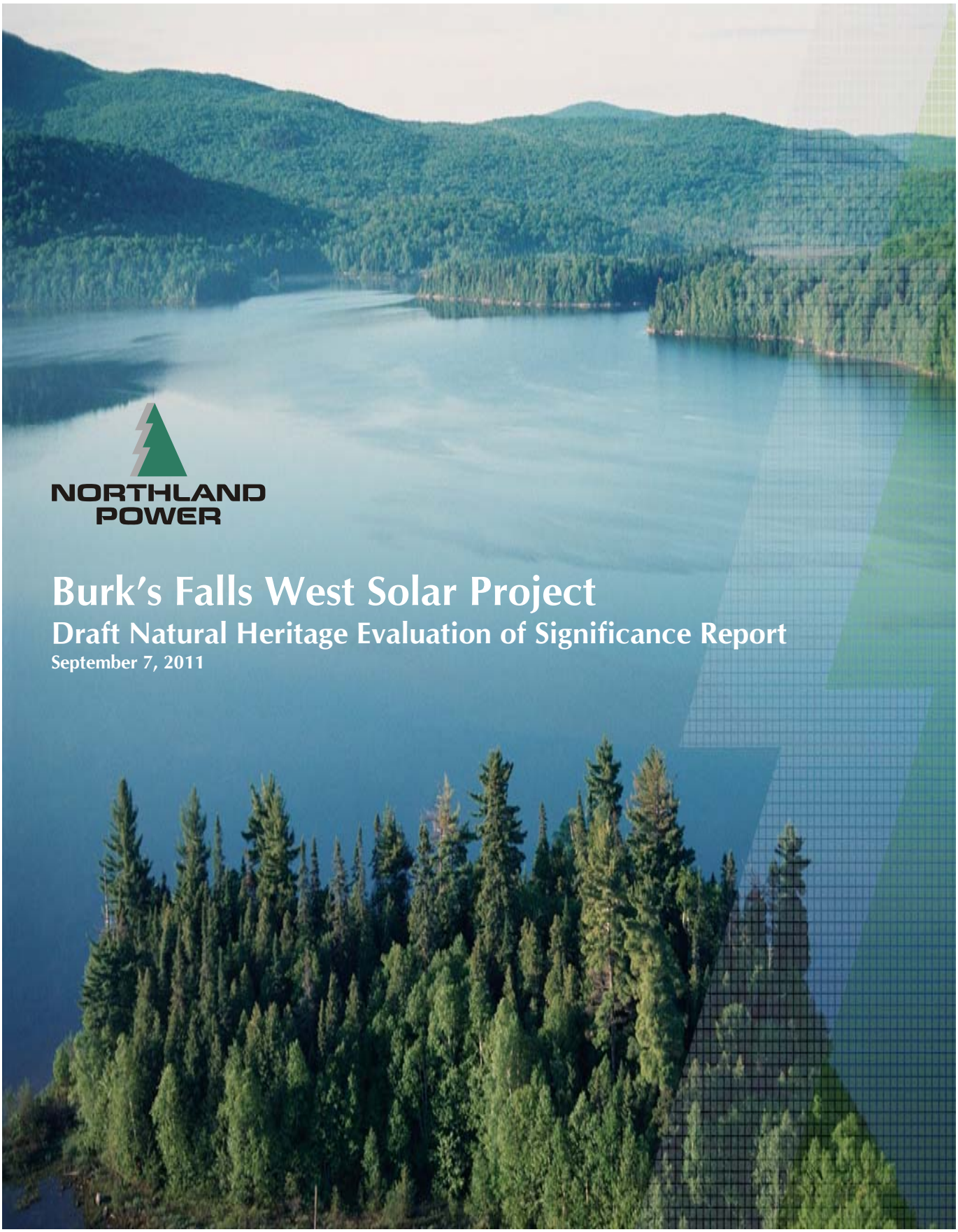

NORTHLAND POWER

Burk's Falls West Solar Project

Draft Natural Heritage Evaluation of Significance Report

September 7, 2011

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

Draft Natural Heritage Evaluation of Significance

Burk's Falls West Solar Project

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Rev. 0
September 7, 2011

Project Report

September 7, 2011

Northland Power Inc.
Burk's Falls West Solar Project

DRAFT Natural Heritage Evaluation of Significance

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1. Introduction

1.1 Project Description

Northland Power Solar 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 Legislative Requirements

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

Section 24(1) of O. Reg. 359/09 requires proponents of Class 3 solar projects to undertake a natural heritage assessment consisting of a records review report, site investigation report and an evaluation of significance report for each natural feature identified during the records review and site investigation.

Natural Features are defined in Section 1(1) of O. Reg. 359/09 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 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.

1.2.1 Records Review Report

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

(a) in a natural feature

(b) within 50 m of an area of natural and scientific interest (earth science)

(c) within 120 m of a natural feature that is not an area of natural or scientific interest (earth science)." (O. Reg. 359/09, s. 25, Table).

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). The Natural Heritage Records Review Report (Hatch Ltd., 2011a) was prepared to meet these requirements.

1.2.2 Site Investigation Report

Section 26 of the REA Regulation requires proponents of Class 3 solar projects to undertake a natural heritage site investigation for the purpose of determining

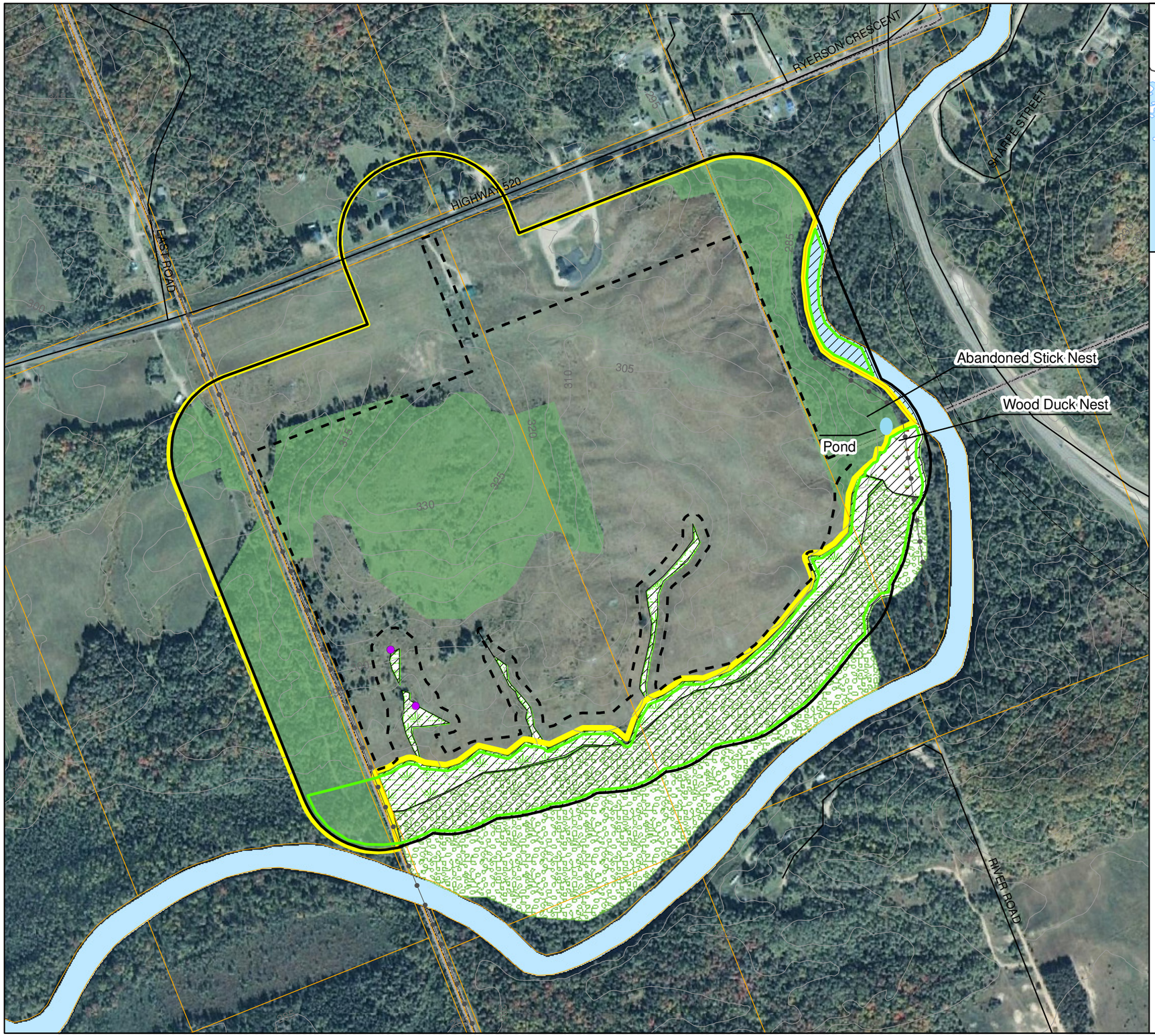
- whether the results of the analysis summarized in the Natural Heritage Records Review Report prepared under Subsection 25(3) are correct or require correction, and identifying any required corrections
- whether any additional natural features exist, other than those that were identified in the (Natural Heritage Records Review) report prepared under Subsection 25(3)
- the boundaries, located within 120 m of the project location, of any natural feature that was identified in the records review or the site investigation
- the distance from the project location to the boundaries determined under Clause (c).

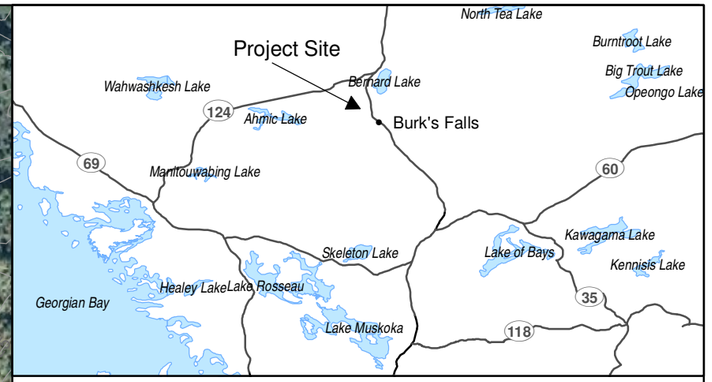
The Natural Heritage Site Investigation Report (Hatch Ltd., 2011b) was prepared to meet these requirements.

1.2.3 Evaluation of Significance Report

Section 27 of the REA Regulation requires proponents of Class 3 solar projects to undertake an evaluation of significance for natural heritage features identified during the records review and site investigation and prepare a report that sets out

- a determination of whether the natural feature is
  - provincially significant
  - significant
  - not significant
  - not provincially significant
- a summary of the evaluation criteria or procedures used to make the determinations
- the name and qualifications of any person who applied to evaluation criteria or procedures.





Legend

- Seepage Area
- Road
- Railway
- Trail
- Transmission Line
- Topographic Contour (5 m Interval)
- Project Location
- 120 m from Project Location
- Parcel
- Woodland

Significant Natural Heritage Features

- Milksnake Habitat
- Waterfowl Stopover and Staging Area / Turtle Over-wintering Sites
- Animal Movement Corridor
- Snapping Turtle / Northern Map Turtle Habitat

Wetlands (complexed to Magnetawan River Provincially Significant Wetland)

- Mineral Mixed Swamp
- Mineral Alder Thicket Swamp
- Mineral Meadow Marsh

0 50 100 200 Metres

NORTH

1:6,000

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.
4. Satellite imagery obtained from Google Earth Pro, captured 2007.

Figure 1.1
Northland Power Inc.

Burk's Falls West Solar Project
Project Location and Significant Natural Heritage Features

HATCH™

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The Evaluation of Significance must consider any information available relating to natural features, including all information obtained during

- the records review conducted in accordance with Section 25
- the site investigation conducted in accordance with Section 26
- consultations conducted under Sections 16, 17 and 18. O. Reg. 359/09, s. 27 (1).

This Evaluation of Significance (EOS) Report for the natural features identified on and within 120 m of the Project location has been prepared to meet these requirements.

1.3 Evaluation of Significance Report Format

Section 1 of this EOS has identified the legislative requirements for an EOS under the REA Regulation and identified the reasons why an EOS is required for the Project. Section 2 provides a summary of the results of the records review and site investigation. Section 3 identifies any input to the evaluation of significance determined through consultation activities. Section 4 provides the evaluation of significance for wildlife habitat, while Section 5 provides the evaluation of significance for the wetlands. Section 6 identifies the conclusions of the evaluation of significance, and the references are provided in Section 7.

2. Summary of Results of Records Review and Site Investigation

As stated above, natural features requiring an evaluation of significance are identified through the records review (Hatch Ltd., 2011a) and site investigation (Hatch Ltd., 2011b) required under Sections 25 and 26 of the REA Regulation, respectively. These studies have already been completed, and the results are summarized in Table 2.1. This report provides the evaluations for the features identified in Table 2.1.

No additional information relating to natural features was obtained through consultations with the public, local municipality, or aboriginal communities required under Sections 16, 17, and 18.

Table 2.1 Natural Features on and within 120 m of the Project Location

Natural Feature	Project Location	Adjacent Lands (within 120 m)	Notes
ANSI – Earth Science	No	No	
ANSI – Life Science	No	No	
Wetland	No	Yes	There is a wetland located within 120 m of the Project location.
Wildlife Habitat	Yes	Yes	Candidate significant wildlife habitats were identified on and within 120 m of the Project location.

3. Input to Evaluation of Significance from Consultation Activities

As required by Section 27 of O.Reg. 359/09, the evaluation of significance must consider information obtained through consultation with the public, aboriginal communities and

municipalities and local authorities. Results of these consultation activities in relation to the evaluation of significance are discussed below.

3.1 Public Consultation

A notice of the Project has been advertised in the Almaguin News, and a public meeting has been held for the Project. In addition, landowners within 120 m of the Project location have been mailed notices of the proposed Project.

To date, no information relating to natural features relevant to the evaluation of significance has been obtained through these consultation activities.

3.2 Aboriginal Consultation

Aboriginal communities identified by the Ministry of the Environment as communities to be consulted through the Renewable Energy Approval process have been mailed letters requesting information relating to the Project, along with meeting notices and copies of the Project Description Report.

To date, no information relating to natural features relevant to the evaluation of significance has been obtained through these consultation activities.

3.3 Municipal/Local Authority Consultation

Meetings have been held with staff of the Township of Armour. In addition, the Township has received a notice of the public meeting, copies of the Project Description Report, and a municipal consultation form.

To date, no information relating to natural features relevant to the evaluation of significance has been obtained through these consultation activities.

4. Wildlife Habitat

Several types of candidate significant wildlife habitats were identified during the site investigation:

- habitat for species of conservation concern (Milksnake, Western Chorus Frog, Snapping Turtle, Northern Map Turtle)
- seasonal concentration areas (waterfowl stopover and staging area, waterfowl nesting area, raptor winter feeding and roosting area)
- specialized habitat for wildlife (raptor nesting habitat, woodland supporting amphibian breeding habitat, wetlands supporting amphibian breeding habitat, turtle over-wintering sites and seepage areas)
- animal movement corridors

4.1 Evaluation Criteria and Guidelines for Wildlife Habitat, and Determination of Significance

The criteria and processes outlined in the Ministry of Natural Resources (MNR) Natural Heritage Reference Manual (NHRM) (MNR, 2010) and Significant Wildlife Habitat Technical Guide (SWHTG) (MNR, 2000) are used to evaluate the significance of wildlife habitat. The specific criteria used in the evaluation from these sources are discussed by habitat type below.

4.1.1 Seasonal Concentration Areas

Criteria for evaluation of seasonal concentration areas are identified within Table Q-1 of Appendix Q of the SWHTG. The criteria that were considered during the evaluations of the features are discussed in respect of the individual features below.

4.1.1.1 Raptor winter feeding and roosting area

Woodlands and cultural meadows present on and within 120 m of the Project location are identified as candidate significant raptor winter feeding and roosting areas. The criteria for raptor winter feeding and roosting areas include the following:

- Relative importance of the site – Complexes of grasslands and forest communities are common within the area, and therefore this site is not of relative importance.
- Presence of species of conservation concern/Species diversity/abundance – No raptor species that are known to winter in the area were identified during the site investigation. Raptor species that may use the area are currently unknown.
- Size of site – The size of the both the grassland and woodland areas are greater than 20 ha, which exceeds the criteria.
- Level of disturbance – There are nearby roadways, residential properties, and agricultural operations within close proximity of the area, therefore disturbance is moderate.
- Location of site – There are other open grasslands and forest communities present in the area.
- Quality of habitat – Though abundance of prey is unknown, habitat is believed to be reflective of the quality of habitat available within the region.
- Historical Use – Historical use of the feature is unknown.

Based on the low relative importance of this site and the nearby disturbances, this feature is determined to be not significant.

4.1.1.2 Waterfowl Nesting Area

A wood duck waterfowl nesting area was identified within the woodland/mixed swamp community within 120 m of the Project location. The criteria for waterfowl nesting areas are as follows:

- Relative importance of the site – As only one Wood Duck nest was observed, this feature is determined to be of low importance.
- Presence of species of conservation concern – Wood Duck are not considered to be a species of conservation concern.
- Species Diversity – A single species, Wood Duck, was recorded within the waterfowl nesting area
- Abundance – A single Wood Duck nest was identified.
- Size of area – The area of suitable potential breeding habitat is small (1 to 2 ha).
- Quality of habitat – The habitat is of good quality given presence of a few cavity support trees, and proximity of the Magnetawan River.

- Location of site – There are no roads separating the nesting location from the Magnetawan River.
- Nest predation – Nest predation levels are unknown.
- Level of disturbance – the site is located near the community of Burk's Falls; an active camp location was identified near the nest site, therefore disturbance is moderate.

Therefore, given that a single nest was observed, and the minimum requirement for significant waterfowl nesting is three nests (MNR, 2009), this habitat is determined to be not significant.

4.1.1.3 Waterfowl Stopover and Staging Area

Waterfowl stopover and staging areas have been identified by MNR along the Magnetawan River. The criteria for waterfowl stopover and staging areas are as follows:

- Relative importance of site – As one of the major watercourses within this area, this site is considered to be of importance to migratory waterfowl.
- Presence of species of conservation concern/Species Diversity/Abundance – Species composition and abundance of waterfowl using the stopover and staging area are unknown.
- Quality of habitat – Quality of habitat for waterfowl stopover and staging is considered to be high given the presence of the Magnetawan River and associated provincially significant wetland areas.
- Size of site – The size of the potential habitat is large, extending along the length of the Magnetawan River and associated wetlands.

Therefore, based on the size, quality, and relative importance of the site, the Magnetawan River, with portions located within 120 m of the Project location, is considered to be a significant waterfowl stopover and staging area.

4.1.2 Specialized Habitat for Wildlife

Criteria for evaluation of specialized habitat for wildlife are identified within Table Q-2 of Appendix Q of the SWHTG. The criteria that were considered during the evaluations of the features are discussed in respect of the individual features below.

4.1.2.1 Specialized Raptor Nesting Habitat

Potential raptor nesting habitat was identified within the woodland communities within 120 m of the Project location. In order to confirm occupancy of the habitat, call playback surveys were completed during Site Investigations 1 and 2. Survey methodologies are described within the Site Investigation Report (Hatch 2011b). No raptors were recorded in response to the call playbacks, and no raptors were observed during any of the site investigations. A single abandoned stick nest was identified within 120 m of the Project location, no raptor activity was noted at this nest location during any of the site investigations.

Therefore, as there is no active raptor nesting occurring on or within 120 m of the Project location, this wildlife habitat is not occupied and therefore there it is not significant raptor nesting habitat.

4.1.2.2 Wetlands Supporting Amphibian Breeding Habitat

Two amphibian calling surveys were completed from the wetlands providing amphibian breeding pond associated with the woodland supporting amphibian breeding habitat, associated with Site Investigations 1 and 3. Survey methodologies are documented within the Site Investigation Report (Hatch 2011b). The results of the surveys determined that

- during Site Investigation 1: full chorus (more than 20) of Spring Peepers, 2 Wood Frogs
- during Site Investigation 2: 16 Spring Peepers, 5 American Toads, 1 Northern Leopard Frog, 1 Gray Tree Frog.

Criteria for evaluating the significance of wetlands supporting amphibian breeding habitat are identified below.

- Provision of significant wildlife habitats – There are additional candidate significant wildlife habitats associated with the wetland community, i.e., habitat for species of conservation concern.
- Degree of permanence – The wetland community is likely to contain some permanent water throughout the summer.
- Species diversity of pond – As is noted above, 5 species were identified within the pond, and therefore diversity is good. Of these species, 4 are listed species within the Ecoregion Criteria Schedules (MNR, 2009), however, for only one of these species, Spring Peeper, was more than 20 individuals of the species detected during the survey, which is the minimum number for significant amphibian breeding habitat.
- Presence of rare species – No rare amphibian species were recorded during the site investigations.
- Size and number of ponds – The wetland community is of a fairly large size.
- Diversity of submergent and emergent vegetation – A diversity of submergent and emergent vegetation was not observed within the habitats.
- Presence of shrubs, logs at edge of pond – The wetland community is a thicket swamp and therefore shrubs are present within the wetland community, and this criteria is met.
- Adjacent forest habitat – The wetland community is adjacent to forest habitat along the eastern and western edges, therefore this criteria is met.
- Water quality – Water quality is presumed to be good, and therefore this criteria is met.
- Level of disturbance – Level of disturbance between the wetland and woodlands is low given that portions of the wetland occur adjacent to the woodland.

Given that the minimum numbers of the four listed species were not detected during baseline investigations, this feature does not meet the criteria for a significant wetland supporting amphibian breeding habitat.

4.1.2.3 *Woodlands Supporting Amphibian Breeding Habitat*

Two amphibian calling surveys were completed from the amphibian breeding pond associated with the woodland supporting amphibian breeding habitat, associated with Site Investigations 1 and 3. Survey methodologies are documented within the Site Investigation Report (Hatch 2011b). The results of the surveys determined that

- during Site Investigation 1: 8 Spring Peepers, 2 Western Chorus Frogs
- during Site Investigation 2: 7 Spring Peepers, 4 Gray Tree Frogs, and 3 Green Frogs.

Criteria for evaluating the significance of woodlands supporting amphibian breeding habitat are identified below.

- Provision of significant wildlife habitats – There are no other significant wildlife habitat features associated with this woodland..
- Degree of permanence – The pond was determined to be likely to contain permanent water.
- Species diversity of pond – As is noted above, 4 species of amphibians were identified within the pond, therefore diversity is good. Of these species, 3 are listed species within the Ecoregion Criteria Schedules (MNR, 2009), however, there were fewer than 20 individuals of each species detected during the survey, which is the minimum number for significant amphibian breeding habitat.
- Presence of rare species – No rare amphibian species were recorded during the site investigations.
- Size and number of ponds – The area of open water is neither large, nor were numerous ponds identified.
- Diversity of submergent and emergent vegetation – A diversity of submergent and emergent vegetation was not observed within the habitats.
- Presence of shrubs, logs at edge of pond – Shrubs are present along the edge of the pond, therefore this criteria is met.
- Adjacent forest habitat – The pond is adjacent to woodland habitats, therefore this criteria is met.
- Water quality – Water quality is presumed to be good, and therefore this criteria is met.
- Level of disturbance – Level of disturbance between the pond and woodlands is low given that the features are adjacent to one another.

As the minimum number of individuals of the three listed species was not detected during baseline surveys at the pond, the woodlands supporting amphibian breeding habitat are determined to not be significant.

4.1.2.4 *Turtle Over-Wintering Habitat*

There are no criteria within the SWHTG for turtle over-wintering areas. As the Magnetawan River is a major watercourse within this portion of Ontario, it is presumed that this feature is of high relative importance for over-wintering turtles, and is therefore determined to be a significant wildlife habitat feature.

4.1.2.5 Seepage Areas

Two seepage areas were identified on the Project location. The criteria for seepage areas include the following:

- Abundance of seeps – Two seepage areas were identified during the site investigation, therefore this criteria is not met.
- Duration of surface water – Surface water remains present within the seeps during a dry summer.
- Nature of adjacent area – The seepage areas are surrounded by agricultural lands.
- Presence of rare species – No rare or uncommon species were identified in association with the seepage areas.
- Location of seeps – The seepage areas are not located within a woodland.

Therefore, based on the criteria identified above, the seepage areas are not considered to be significant.

4.1.3 Habitat for Species of Concern

Criteria for evaluation habitat of conservation concern are identified within Table Q-3 of Appendix Q of the SWHTG. The criteria that were considered during this evaluation include

- degree of rarity of species found at site (i.e., habitat of rare species is significant)
- documented significant decline in a species and/or its critical habitat
- species whose range is solely or primarily found in Ontario
- condition of existing habitat at site (i.e., sites with minimal disturbances, non-invasive sp., etc)
- size of species population at site
- size and location of habitat
- potential for long-term protection of habitat
- evidence of use of the habitat.

The species of conservation with potential habitat on the Project location are discussed further in relation to these criteria below:

- Milksnake – Given that Milksnake are habitat generalists, the entire Project location was considered to be suitable habitat for Milksnake. As Milksnake are difficult to detect, use of the area was unconfirmed, and the size of the population is uncertain. Milksnake are identified as a species of Special Concern on the Species at Risk in Ontario (SARO) list, and therefore though use is unconfirmed, the area is treated as significant wildlife habitat and carried forward in the EIS.
- Western Chorus Frog – Western Chorus Frog were recorded as breeding within the pond within the woodland community within 120 m east of the Project location. Two calling males were recorded during Site Investigation 1, while no males were heard calling during the second amphibian breeding survey conducted during Site Investigation 3. Western Chorus Frogs are

considered to have secure populations within the province, though declines have been documented. Their range is not solely or primarily found in Ontario. The condition of the habitat is determined to be good, though the available area of habitat is small. The size of the population at the site is also determined to be small. The pond is located on private land. Therefore, based on the small size of the habitat and population within the feature, it is determined that this is not significant wildlife habitat.

- Northern Map and Snapping Turtle – Both turtle species are listed as Special Concern on the SARO list, and may be found within the Magnetawan River and the wetland habitat within 120 m south of the Project location. The Magnetawan River may provide year-round habitat for either species, while the wetland habitat within 120 m south of the Project location would likely only be used as foraging habitat during the summer months. No candidate turtle nesting sites were identified on or within 120 m of the Project location during the site investigations. As the habitat is that of a movement corridor, and would not provide critical habitat functions for either of these species, this area will be considered in relation to animal movement corridors (see Section 3.1.4), and is not considered to be significant habitat for species of conservation concern.

4.1.4 Animal Movement Corridors

Potential animal movement corridors were identified in the woodlands on and adjacent to the Project location, and the Magnetawan River which is within 120 m east of the Project location.

Evaluation methodology of animal movement corridors is identified within Section 8.7 of the SWHTG. The criteria for significance are outlined in Table Q-4 of Appendix Q in the SWHTG, and include the following:

- Importance of areas to be linked by corridor – Areas linking critical habitats/significant areas.
- Importance of corridor to survival of target species – Corridors linking significant or critical habitat for a target species.
- Dimensions of corridor – Most significant corridors should be at least 200 m wide.
- Continuity of corridor – Corridor should be unbroken.
- Habitat and habitat structure of corridor – Corridor with several layers of vegetation and other structures, such as watercourses.
- Species found in corridor or presumed to be using corridor – Corridors with high species diversity are significant.
- Risk of mortality for species using corridor – Corridors with low risk of road kills or adjacent to residential areas.
- Opportunity for protection – Corridors within areas that may be protected, such as undeveloped shorelines or borders of conservation areas.
- Provision of other related values (such as erosion protection).

Woodlands and the Magnetawan River are discussed separately below.

- Magnetawan River (including shoreline/riparian areas), and adjacent wetlands, within 120 m east of the Project location – Target species for this corridor would be turtles and ducks within the river, along with a variety of mammals and birds along the shoreline and within riparian areas. The corridor is mostly continuous, with the exception of dams which disrupt the watercourse and riparian habitats, and the risk of mortality is low. As a major waterbody within the region, this corridor is believed to be of high relative importance to wildlife. The corridor is associated with a waterbody, and therefore long-term protection is assured. Much of the river and associated shoreline/riparian areas are encompassed within the Magnetawan River Provincially Significant Wetland. There are no other related values identified for this corridor. As several criteria appear to be met, this feature is considered to be a significant animal movement corridor.
- Woodlands on and within 120 m of the Project location – Though there are woodland areas identified on and within 120 m of the Project location, the features are relatively small and do not connect various natural features that would provide critical wildlife habitat. Though animal movement occurs within these features, movement would be diffuse given the absence of targeted critical habitat features for movement to occur between, and therefore no true animal movement corridor is expected. As a result, this habitat type is not found in association with the woodland communities.

4.2 Date of Beginning and Completion of Evaluation

The evaluation of wildlife habitat commenced with records reviews in March 2011 and was finalized with the completion of this Report in July 2011. Site visits were completed in association with this evaluation on May 3, 4, and 31, and June 1 and 15, 2011.

4.3 Overall Conclusion

Based on the evaluation above, the following significant wildlife habitat features were identified:

- waterfowl stopover and staging areas
- turtle over-wintering sites
- habitat for species of Conservation Concern (Milksnake, Snapping Turtle, Northern Map Turtle)
- Magnetawan River (including shoreline/riparian areas), and adjacent wetlands, within 120 m east and south of the Project location as a significant animal movement corridor.

4.4 Name and Qualifications of Evaluator

Evaluations of wildlife habitat were completed by Sean K. Male of Hatch.

Sean K. Male, M.Sc. is a Terrestrial Ecologist specializing in assessments of terrestrial habitat, flora and fauna. Sean received his Bachelors of Science (Honours) in Biology from Queen's University, where he completed his Honour's thesis under Dr. Raleigh J. Robertson, studying the impacts of nestbox density in Tree Swallows (*Tachycineta bicolor*) on nest-building behaviour. He then completed a Master's of Science degree in the Watershed Ecosystem Graduate Program at Trent University under Dr. Erica Nol. Sean's thesis focussed on examining the impacts of a Canadian diamond mine on a population of breeding passerines. For his thesis, Sean spent two summers in the Canadian arctic studying populations of Lapland Longspurs (*Calcarius lapponicus*) around the Ekati Diamond Mine, located 300 km northeast of Yellowknife. While at Trent, Sean participated in the Northern Saw-whet Owl (*Aegolius acadicus*) Migration Banding Project at the Oliver Centre.

Following his time at Trent, Sean participated in the Landscape Monitoring Program, participating in a study of the impacts of woodlot size on breeding birds.

Sean joined Hatch as a Terrestrial Ecologist in 2006. Since joining Hatch, Sean has participated in several environmental assessments, REAs and other regulatory approvals for hydro, wind and solar power developments as the terrestrial biologist specializing in field investigations identifying flora and fauna species, including species of significance. He has developed and implemented baseline monitoring and impact assessment programs for both terrestrial wildlife and plant communities, including detailed bird and bat studies for several wind power developments, including the proposed 100-MW Coldwell wind power development near Marathon, Ontario, a proposed 20-MW facility near Port Dover, Ontario, and a proposed 110-MW wind facility in southwestern Ontario. Sean has also conducted terrestrial and wetland vegetation surveys for several proposed hydropower projects totalling over 40 MW in southern and northern Ontario and has participated in fisheries surveys for several of these projects.

5. Wetlands

Wetland boundaries on the Project location were delineated during the site investigation. As a result of the newly determined wetland boundaries, the wetland community is now within 750 m of the existing Magnetawan River Provincially Significant Wetland and is hydrologically connected to the wetland through the Magnetewan River. As a result, the wetland communities within 120 m of the Project location are assumed to be complexed to the Magnetawan River Provincially Significant Wetland.

5.1 Dates of Beginning and Completion of Assessment

The evaluation of the wetland commenced with records reviews in March 2011 and was finalized with the completion of this Report in July 2011. Site visits were completed in association with this evaluation on May 3, 4, 31, and June 1 and 15, 2011.

5.2 Names and Qualifications of Assessors

The assessment of the wetland was completed by Caleb Coughlin. Caleb Coughlin has been trained in the Southern Ontario Wetland Evaluation System.

6. Conclusions

Results of the evaluation of significance are summarized in Table 6.1. Based on the evaluation of significance outlined above, there is significant wildlife habitat on and within 120 m of the Project location, and the wetland within 120 m of the Project location is treated as a Provincially Significant Wetland.

An environmental impact study conducted according to the requirements of Section 38(2) of O. Reg. 359/09 will be required in order to construct Project components within 120 m of these features.

Table 6.1 Significant Natural Features on and within 120 m of the Project Location

Natural Feature		Project Location	Adjacent Lands (within 120 m)
SIGNIFICANT	Wildlife Habitat	Yes	Yes
PROVINCIALLY SIGNIFICANT	Wetland	No	Yes (wetland treated as provincially significant)
	Earth Science ANSI	No	No
	Life Science ANSI	No	No

7. References

Hatch Ltd. 2011a. Burk's Falls West Solar Project – Natural Heritage Records Review. Prepared for Northland Power Inc. on behalf of Northland Power Solar Burk's Falls East L.P.

Hatch Ltd. 2011b. Burk's Falls West Solar Project – Natural Heritage Site Investigation. Prepared for Northland Power Inc. on behalf of Northland Power Solar Burk's Falls East L.P.

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