

RE ORILLIA 3 SOLAR PROJECT

Water Body Records Review Report

August 3, 2011

RECURRENT
ENERGY





RE Orillia 3 ULC

Water Body
Records Review Report

RE Orillia 3 Solar Project

H334680-0000-07-124-0089

Rev. 1

August 3, 2011

Disclaimer

This report has been prepared by or on behalf of RE Orillia 3 ULC for submission to the Ontario Ministry of the Environment as part of the Renewable Energy Approval process. The content of this report is not intended for the use of, nor is it intended to be relied upon by, any other person. Neither RE Orillia 3 ULC nor any of its directors, officers, employees, agents or consultants has any liability whatsoever for any loss, damage or injury suffered by any third party arising out of, or in connection with, their use of this report.

Project Report

August 3, 2011

RE Orillia 3 ULC
RE Orillia 3 Solar Project

Water Body Records Review Report

Table of Contents

1. Introduction 3

1.1 Project Description 3

1.2 Legislative Requirements..... 3

2. Methodology and Results 3

2.1 Ministry of Natural Resources Records 4

2.1.1 Methodology..... 4

2.1.2 Results..... 4

2.2 Ontario Ministry of Agriculture, Food and Rural Affairs Records..... 4

2.2.1 Methodology..... 4

2.2.2 Results..... 4

2.3 Federal Government Records 4

2.3.1 Methodology..... 4

2.3.2 Results..... 5

2.4 Conservation Authority Records 5

2.4.1 Methodology..... 5

2.4.2 Results..... 5

2.5 Municipal Records 5

2.5.1 Methodology..... 5

2.5.2 Results..... 6

3. Summary of Results and Next Steps 6

3.1 Summary of Results..... 6

3.2 Next Steps..... 9

4. References..... 9

List of Tables

Table 3.1	Summary of Records Review Determinations	6
-----------	--	---

List of Figures

Figure 3.1	Water Body Features	7
------------	---------------------------	---

1. Introduction

1.1 Project Description

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

1.2 Legislative Requirements

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

Section 30 of the REA Regulation requires proponents of Class 3 solar projects to undertake a Water Records Review to identify “whether the project is

- i. in a water body
- ii. within 120 m of the average annual high water mark of a lake, other than a lake trout lake that is at or above development capacity
- iii. within 300 m of the average annual high water mark of a lake trout lake that is at or above development capacity
- iv. within 120 m of the average annual high water mark of a permanent or intermittent stream
- v. within 120 m of a seepage area.” (O. Reg. 359/09, s. 30, Table).

Subsection 30(2) 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 Water Body Records Review Report has been prepared to meet these requirements. It has also been prepared in accordance with the Ministry of Environment’s DRAFT Technical Bulletin – Guidance for the Preparing the Water Assessment and Water Body Reports (dated January 28, 2011).

2. Methodology and Results

The following sections document the records that were reviewed and analyzed and the results from this analysis. The focus of the assessment was identifying whether or not the Project was located within or adjacent to any of the water features listed above in Section 1.2. The sections are organized by the governing bodies identified in Column 1 of the Table in Section 30 of the REA Regulation.

The results of the Records Review are discussed below in relation to the distances specified between the Project and water features as defined in Section 30 of the REA Regulation (see Section 1.2).

There are no Planning Boards, Municipal Planning Authorities, Local Roads Boards, Local Services Boards with jurisdiction in the Project study area. Also, the Project study area is not located within the Niagara Escarpment Commission Plan Area. Therefore, records reviews for these governing bodies were not conducted as they were not required.

2.1 Ministry of Natural Resources Records

2.1.1 Methodology

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

- Ontario Base Maps and natural feature layers from Land Information Ontario (LIO) (www.geographynetwork.com).
- Natural Heritage Information Centre (NHIC) on-line mapping (<http://nhic.mnr.gov.on.ca/MNR/nhic/queries/nhic.mwf>).

The Midhurst District MNR office was also asked to provide any information they had available regarding water features on or adjacent to the project area.

2.1.2 Results

Mapping obtained from LIO does not indicate any water feature on or within 120 m of the Project location. The closest water feature to the Project is a stream associated with Langman Marsh Provincially Significant Wetland (PSW), approximately 210 m northeast of the Project boundary. Bass Lake is located approximately 700 m north of the Project location.

No additional water features were identified on the mapping available on the NHIC website. The Midhurst District MNR did not have any other information on fisheries in the Project area.

2.2 Ontario Ministry of Agriculture, Food and Rural Affairs Records

2.2.1 Methodology

The following Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) on-line records were reviewed:

- Rural drainage mapping (http://www.lio.ontario.ca/imf-ows/imf.jsp?site=ads_en).

2.2.2 Results

Rural drainage mapping identified the watercourse noted in Section 2.1.2 within Langman Marsh PSW. No watercourses and no drains were present within 120 m of the Project area.

2.3 Federal Government Records

2.3.1 Methodology

The following federal government websites were reviewed to determine if any records regarding water features on or adjacent to the property were available:

- Fisheries and Oceans Canada (DFO) website ([www. http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/index-eng.htm](http://www.dfo-mpo.gc.ca/regions/central/habitat/os-eo/index-eng.htm))

- DFO Aquatic Species at Risk Mapping (<http://www.conservation-ontario.on.ca/projects/DFO.html>)
- Natural Resource Canada (NRCAN) (http://ess.nrcan.gc.ca/mapcar/index_e.php).

2.3.2 Results

No reference to waterbodies on or adjacent to the Project location was found on the DFO website.

No Species At Risk (SAR) are known to be located in the Project location, based on the DFO SAR Distribution Map.

The NRCAN mapping review resulted in a general environment map showing features in the general area, but no site specific information regarding waterbodies was available for the Project location.

2.4 Conservation Authority Records

2.4.1 Methodology

The proposed Project is situated within the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA). NVCA maintains on-line mapping databases showing their Regulated Area under their respective Regulation for Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses. Information on Regulated Areas was obtained from this NVCA on-line mapping tool.

2.4.2 Results

NVCA Regulation Map 120 shows that there are no water features present within 120 m of the Project location. However, the Regulated Area associated with the 120-m buffer around the Langman Marsh PSW encroaches onto the northeast corner of the Project location.

2.5 Municipal Records

2.5.1 Methodology

Simcoe County

The Project is located within the upper tier municipality of Simcoe County. The County maintains an on-line mapping database (<http://maps.simcoe.ca>) showing the general environmental and infrastructure features of the area, as well as high resolution satellite imagery.

The Simcoe County Official Plan (County of Simcoe, 2007) was also searched to find any records that may identify water features on or within 120 m of the Project location.

Township of Oro-Medonte

The Project is located within the lower tier municipality of the Township of Oro-Medonte. Searches of available material were conducted on the Township website (<http://www.oro-medonte.ca/index.htm>). The Official Plan for the Township (Township of Oro-Medonte, 2007) was also examined.

2.5.2 Results

Simcoe County

Neither the satellite imagery nor aerial photos viewed on the Simcoe County website showed any water features on or within 120 m of the Project location.

The Official Plan – Land Use Designation Map (County of Simcoe, 2007) did not identify any water features on or within 120 m of the Project. The Evaluated Wetlands schedule (5.2.2) did identify Langman Marsh PSW adjacent to the Project. Gartner Lee (1996) indicates that the Langman Marsh, and several other wetlands around the periphery of Bass Lake provide an important flood storage function and discharge flows into the North River, which flows north toward Georgian Bay. Gartner Lee (1996) also indicates that Bass Lake receives much of its hydrological input as groundwater discharge from the adjacent Oro Moraine to the south, which includes the Project location.

Township of Oro-Medonte

The Township of Oro-Medonte website provided a link to the above-mentioned County of Simcoe Interactive map as well as provided a general map for the Township. No water features were found in relation to the Project location.

The Official Plan Natural Features map (Schedule B) showed no waterbodies on or within 120 m of the Project. It did note the presence of Langman Marsh PSW, northeast of the Project location.

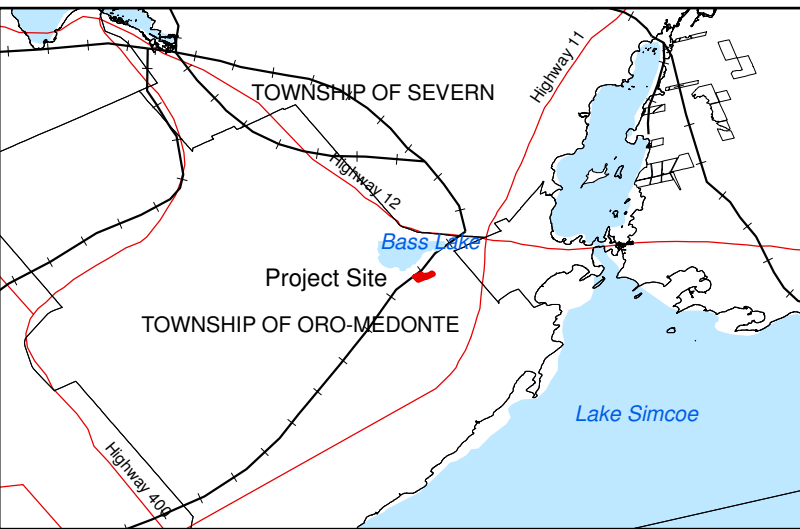
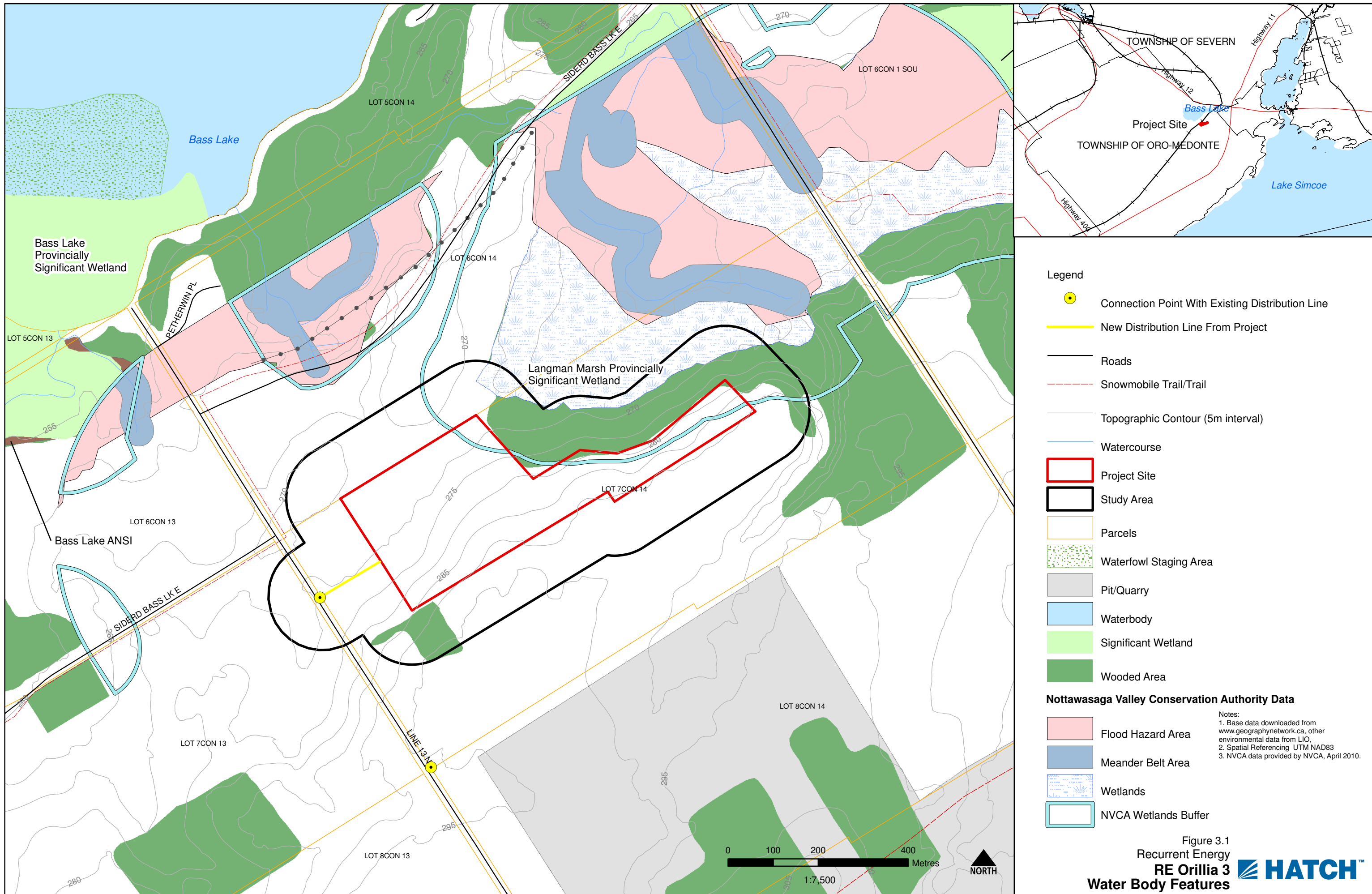
3. Summary of Results and Next Steps

3.1 Summary of Results

Table 3.1 summarizes the results of the Record Review according to the features identified in Section 1.2. A map depicting the identified water features on and in proximity to the site is provided in Figure 3.1.

Table 3.1 Summary of Records Review Determinations

Determination to be Made	Yes/No	Description
Is the Project in a water body?	No	No part of the Project will be constructed within a water body
Is the Project within 120 m of the average annual high water mark of a lake, other than a lake trout lake that is at or above development capacity?	No	Bass Lake is located approximately 700 m north of the Project.
Is the Project within 300 m of the average annual high water mark of a lake trout lake that is at or above development capacity?	No	No lake trout lakes are present on or within 300 m of the Project location.
Is the Project within 120 m of the average annual high water mark of a permanent or intermittent stream?	No	No watercourses were identified during the Records Review on or within 120 m of the Project location.
Is the Project within 120 m of a seepage area?	No	No seepage areas were identified during the Records Review on or within 120 m of the Project location.



- Legend**
- Connection Point With Existing Distribution Line
 - New Distribution Line From Project
 - Roads
 - Snowmobile Trail/Trail
 - Topographic Contour (5m interval)
 - Watercourse
 - Project Site
 - Study Area
 - Parcels
 - Waterfowl Staging Area
 - Pit/Quarry
 - Waterbody
 - Significant Wetland
 - Wooded Area
- Nottawasaga Valley Conservation Authority Data**
- Flood Hazard Area
 - Meander Belt Area
 - Wetlands
 - NVCA Wetlands Buffer
- Notes:
 1. Base data downloaded from www.geographynetwork.ca, other environmental data from LIO.
 2. Spatial Referencing UTM NAD83
 3. NVCA data provided by NVCA, April 2010.



Figure 3.1
 Recurrent Energy
RE Orillia 3
Water Body Features

Back of Figure

Based on the results of the Records Review, there are no waterbodies on or within 120 m of the Project location.

3.2 Next Steps

A site investigation, as required in Section 31 of the REA Regulation will be completed to (i) confirm the features identified during this records review, (ii) identify if any corrections to the information presented herein are required, (iii) determine whether any additional waterbodies exist in the Project area, (iv) confirm the boundaries of any water feature within 120 m of the Project and (v) determine the distance from the Project to the water boundary.

4. References

County of Simcoe. 2007. The County of Simcoe Official Plan. On-line at http://www.simcoe.ca/ws_cos/media/media/planning%20files/CtyOP_Sch_All.pdf. Accessed March 19, 2010.

Gartner Lee Limited. 1996. Development of a Natural Heritage System for the County of Simcoe. Prepared for County of Simcoe. 65 pp.

Township of Oro-Medonte. 2007. Township of Oro-Medonte Official Plan. Printed March 16, 2007.

