

# RE WAUBAUSHENE 5 SOLAR PROJECT

Water Body Records Review Report

March 18, 2011

RECURRENT  
ENERGY





RE Waubaushene 5 ULC

Water Body  
Records Review Report

RE Waubaushene 5 Solar Project

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Project Report

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**RE Waubaushene 5 ULC**  
**RE Waubaushene 5 Solar Project**

**Water Body Records Review Report**

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## 1. Introduction

### 1.1 Project Description

RE Waubaushene 5 ULC is proposing to develop and operate a 5-megawatt (MW) solar photovoltaic (Solar PV) facility, on an approximately 26-hectare (ha) parcel of land, located approximately 7 km northeast of Coldwater, in the Township of Severn in Simcoe County; herein referred to as “RE Waubaushene 5” 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 Body Records Review to identify “whether the project is

- i. in a waterbody
- 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, or
- v. within 120 m of a seepage area.” (O. Reg. 359/09, s. 30, Table).

Section 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 MOE’s Draft Technical Bulletin – Guidance for Preparing 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 or Conservation Authorities with jurisdiction in the Project study area. Also, the Project study area is not located within the Niagara Escarpment Commission Plan Area. Therefore, records from these agencies were not reviewed.

## 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](http://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 site.

### 2.1.2 Results

Mapping obtained from LIO identifies one unnamed watercourse (Watercourse A) located on the Project site and six others, including the North River, located within 120 m. Watercourse A originates on the Project site and discharges directly into the North River. Two other watercourses located within 120 m north of the Project site (Watercourses B and C) combine to form a larger tributary (Watercourse D) which passes within 120 m of the site, discharging into the North River. Another watercourse located east of the Project site (Watercourse E) runs adjacent (assumed to be in the ditch adjacent to Taylor line) discharging into the North River. The North River, which flows into Georgian Bay, is a cool water river that provides habitat for a number of species, including walleye (*Sander vitreus*) (MNR, 2010). There are two watercourses draining into the North River south of the Project site (Watercourses F and G).

No additional water features were identified on the mapping available on the NHIC website.

## 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](http://www.lio.ontario.ca/imf-ows/imf.jsp?site=ads_en)).

### 2.2.2 Results

Rural drainage mapping identified the watercourses noted in Section 2.1.2. No other watercourses were present within 120 m of the Project site. No tile drainage is noted as being present within 120 m of the Project.

## 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 Project site were available:

- Fisheries and Oceans Canada (DFO) website ([www. http://www.dfo-mpo.gc.ca/regions/central/habitat/os-ao/index-eng.htm](http://www.dfo-mpo.gc.ca/regions/central/habitat/os-ao/index-eng.htm))
- Natural Resource Canada (NRCan) ([http://ess.nrcan.gc.ca/mapcar/index\\_e.php](http://ess.nrcan.gc.ca/mapcar/index_e.php)).

### 2.3.2 Results

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

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 site.

## 2.4 Municipal Records

### 2.4.1 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 examined to find any records that may identify water features in the Project area.

#### *Township of Severn*

The Project is located within the lower tier municipality of the Township of Severn. The Township website (<http://www.townshipofsevern.com/>) was examined for information pertaining to water features on or around the Project site. The Official Plan for the Township (Township of Severn, 2006) was also reviewed.

### 2.4.2 Results

#### *Simcoe County*

Satellite imagery showed the same water features noted in Section 2.1.2. The North River is approximately 25 m wide, on average, and appears to be shallow and rocky, with scattered riparian vegetation adjacent to the agricultural fields. The drain on the Project site (Watercourse A) runs within a narrow vegetated corridor (< 5 m wide), but appears to not be tilled or driven through, so it would likely be classified as a watercourse. At the upstream end of Watercourse A, which must be a high point of land, there is another excavated drain (labeled as Drain B in Figure 3.1), which flows north, off the Project site, toward Watercourse C. There is also another drain (labeled as Drain C in Figure 3.1) running north off the Project site that was not shown on LIO mapping (Watercourse H). It is unknown at this point if these watercourses would meet the water body definition in the REA Regulation. This will be confirmed during the site investigation.

The Official Plan – Land Use Designation Map (County of Simcoe, 2007) showed the tributaries of North River noted in Section 2.1.2, but is not as detailed as the drainage network visible from the aerial photography.

**Township of Severn**

The Official Plan Schedule A Land Use Map (Northern Section) (Township of Severn, 2006) showed the water features noted in Section 2.1.2, with the exception of the North River, which was not identified on the mapping. No new water features relating to the Project site were shown.

### 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 an 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	No lakes are present on or within 120 m of the Project site.
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 site.
Is the Project within 120 m of the average annual high water mark of a permanent or intermittent stream?	Yes	There are a number of watercourses on or within 120 m of the Project site, although one is on the opposite side of Taylor Line and two are on the opposite side of the North River from the Project site.
Is the Project within 120 m of a seepage area?	No	No seepage areas were found within 120 m of the Project during the Records Review.

Therefore, depending on the layout of the proposed solar facility, some components of the Project could potentially be located within 120 m of the average annual high water mark of a number of permanent or intermittent streams.

#### 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.

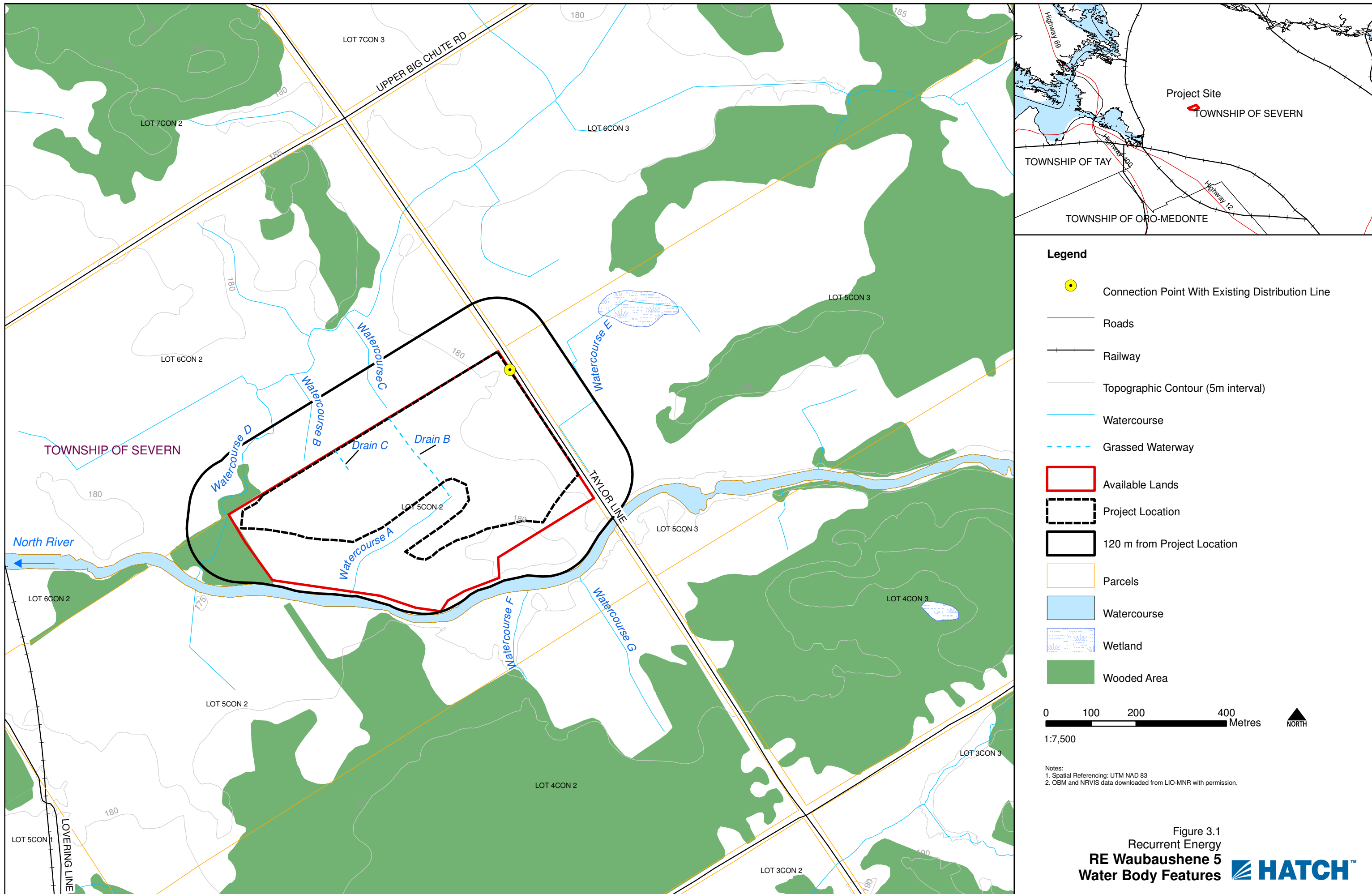


Figure 3.1  
 Recurrent Energy  
**RE Waubaushene 5**  
 Water Body Features

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#### **4. References**

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