

# RE WAUBAUSHENE 3 SOLAR PROJECT

Water Body Records Review Report

August 15, 2011

RECURRENT  
ENERGY





RE Waubaushene 3 ULC

Water Body  
Records Review Report

RE Waubaushene 3 Solar Project

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Project Report

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**RE Waubaushene 3 Solar Project**

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## 1. Introduction

### 1.1 Project Description

RE Waubaushene 3 ULC is proposing to develop and operate a 10-megawatt (MW) solar photovoltaic (Solar PV) facility, on an approximately 33-hectare (ha) parcel of land, located about 2 km northeast of Waverly, in the Township of Tay in County of Simcoe; herein referred to as “RE Waubaushene 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 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
- 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 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 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 review for these governing bodies was not conducted.

## 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 location.

### 2.1.2 Results

Mapping obtained from LIO indicates that Hog Creek flows in a northerly direction within 120 m west of the Project location. The mapping shows that five tributaries of Hog Creek originate on or within 120 m of the Project location. These tributaries flow north intersecting each other before flowing west and discharging into Hog Creek.

MNR indicated that Hog Creek is generally considered to be a coldwater creek with a fish community including rainbow trout (*Onchorynchus mykiss*), brook trout (*Salvelinus fontinalis*), white sucker (*Catostomus commersonii*), minnow species (*Cyprinidae*), sunfish species (*Centrarchidae*) and perch species (*Percidae*) (MNR, 2010).

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 tributaries of Hog Creek noted in Section 2.1.2. No other watercourses were noted as being present within 120 m of the Project location. No tile drainage is noted as being present on or within 120 m of the Project location.

## 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)).
- 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 location 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 location.

## 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 searched to find any records that may identify water features on or within 120 m of the Project location.

#### *Township of Tay*

The Project is located within the lower tier municipality of Tay Township. The Township website (<http://www.tay.township.on.ca>) was searched for information pertaining to waterbodies on or adjacent to the Project location.

### 2.4.2 Results

#### *Simcoe County*

The tributaries of Hog Creek discussed in Section 2.1.2 were visible on the Project location in the aerial photography. The unnamed watercourse near the mid-point of the property is surrounded by an approximately 20-m wide vegetated riparian corridor, which does not appear to be tilled through. The other three watercourses near the eastern edge of the property are located within vegetated valleys with defined channels north and east of the Project leased area and are therefore, within 120 m of the Project. However, they do not appear to be present as watercourses on the Project location itself, with aerial photography appearing to indicate, although they may be wetter areas in the field, they are tilled through and planted over. The western-most tributary on the Project location also appears to be tilled through and planted over, so it may not meet the definition of a watercourse.

Hog Creek appears to consist of a natural stream channel with a larger marsh and/or beaver ponds adjacent to the western end of the Project location.

The Official Plan – Land Use Designation Map (County of Simcoe, 2007) showed the tributaries of Hog Creek and the creek itself on and adjacent to the Project location. No other water features were identified within 120 m of the Project. Schedule 5.2.2 (Evaluated Wetlands) shows several of the ponds associated with Hog Creek adjacent to the Project location.

**Township of Tay**

No information regarding water features on or adjacent to the Project location was found on the Township of Tay website.

### 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.

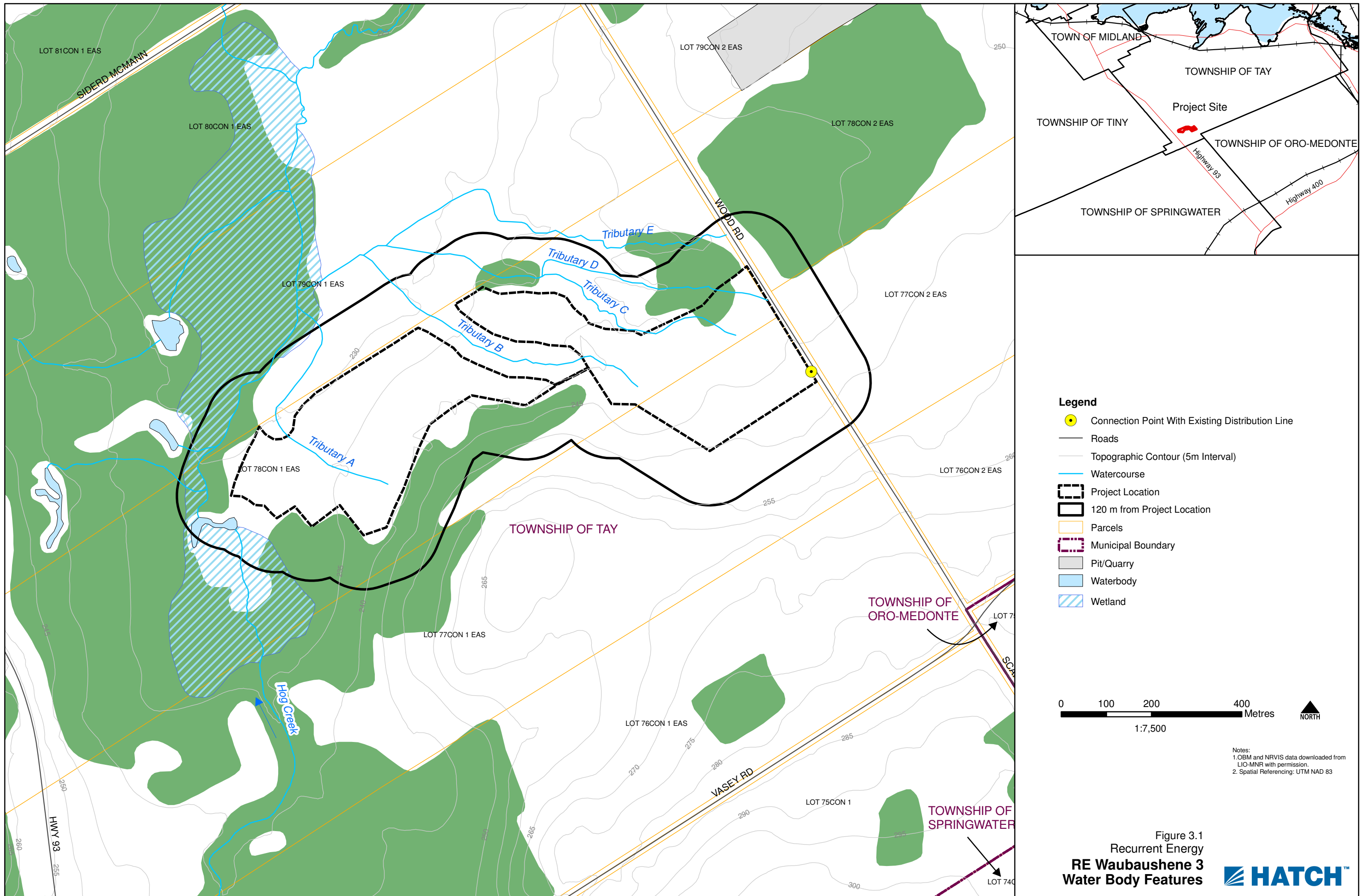
**Table 3.1 Summary of Records Review Determinations**

Determination to be Made	Yes/No	Description
Is the Project in a waterbody?	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 location.
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?	Yes	There are 6 watercourses on or within 120 m of the Project location, all of which are associated with the Hog Creek watershed
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 six permanent or intermittent streams, including Hog Creek and five of its tributaries.

#### 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.



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#### **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](http://www.simcoe.ca/ws_cos/media/media/planning%20files/CtyOP_Sch_All.pdf). Accessed March 19, 2010.

Ministry of Natural Resources (MNR). 2010. Unpublished Fish and Fish Habitat Information. Provided to Hatch Ltd. May 4, 2010.

