

RE SMITHS FALLS 4 SOLAR PROJECT

Water Body Records Review Report

September 30, 2011

RECURRENT
ENERGY





RE Smiths Falls 4 ULC

Water Body
Records Review Report

RE Smith Falls 4 Solar Project

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Project Report

September 30, 2011

RE Smiths Falls 4 ULC
RE Smiths Falls 4 Solar Project

Water Body Records Review Report

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1. Introduction

1.1 Project Description

RE Smiths Falls 4 ULC is proposing to develop and operate a 10-megawatt (MW) solar photovoltaic (Solar PV) facility, on an approximately 35-hectare (ha) parcel of land, located approximately 10 km northwest of Smiths Falls in the Township of Drummond/North Elmsley in the County of Lanark; herein referred to as “RE Smiths Falls 4” 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. 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 do 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 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, or
- 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 (i.e., within any of the specified distances) of any of the water body 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 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)
- Natural Heritage Information Centre (NHIC) on-line mapping (<http://nhic.mnr.gov.on.ca/MNR/nhic/queries/nhic.mwf>)

The Kemptville 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 data obtained from LIO does not indicate any watercourses on or within 120 m of the Project location. It does indicate an unevaluated wetland within 120 m of the southeastern boundary of the Project location, but this wetland does not appear to be associated with a watercourse. There is a watercourse (Watercourse A – Figure 3.1) approximately 500 m south of the Project location and a tributary (Watercourse B – Figure 3.1) of that watercourse runs within approximately 500 m of the eastern Project location boundary.

The MNR Kemptville District (MNR, 2010) indicated that there is a small pond on the Project location that drains to a wetland.

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).

2.2.2 Results

Rural drainage mapping identified the two watercourses noted in Section 2.1.2 as being > 120 m from the Project location. Neither watercourse is identified as a municipal drain. No other watercourses or tile drainage are located 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))
- DFO Species at Risk Distribution Map (<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 area, 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 Rideau Valley Conservation Authority (RVCA). RVCA maintains an on-line mapping database showing its regulated area under O. Reg. 174/06 (Regulation for Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses). The Regulated Areas map for the project area was downloaded and reviewed. The RVCA was also asked to provide any information they had available regarding the water features on or adjacent to the property.

2.4.2 Results

No RVCA Regulated Areas are located within 120 m of the Project and there are no watercourses noted as being present on or within 120 m of the Project location (RVCA, 2010).

2.5 Municipal Records

2.5.1 Methodology

County of Lanark

The Project is located within the upper tier municipality of County of Lanark. The County maintains an on-line mapping database (<http://www.county.lanark.on.ca/AssetFactory.aspx?did=1114>) showing the general environmental and infrastructure features of the area. This mapping was reviewed as part of the Records Review. Other information on the County website was also reviewed as part of the Records Review.

Township of Drummond/North Elmsley

The Project is located within the lower tier municipality of the Township of Drummond/North Elmsley. The municipal website (<http://www.drummondnorthelmsley.com/siteengine/activepage.asp>) was examined as part of the Records Review.

The Official Plan for the Township (Township of Drummond/North Elmsley, 2004) was also examined as part of the Records Review.

2.5.2 Results

County of Lanark

The County of Lanark website was searched for relevant information. A general map of the county was reviewed, but no water features were found for the Project location.

Township of Drummond/North Elmsley

The Township of Drummond/North Elmsley’s website provided a general overview map showing the water features associated with the area, although it does not show any waterbodies on or within 120 m of the Project location.

Appendix A of the official plan is a generalized environmental and infrastructure map, which shows water features within the Township, but no water features were located within 120 m of the Project.

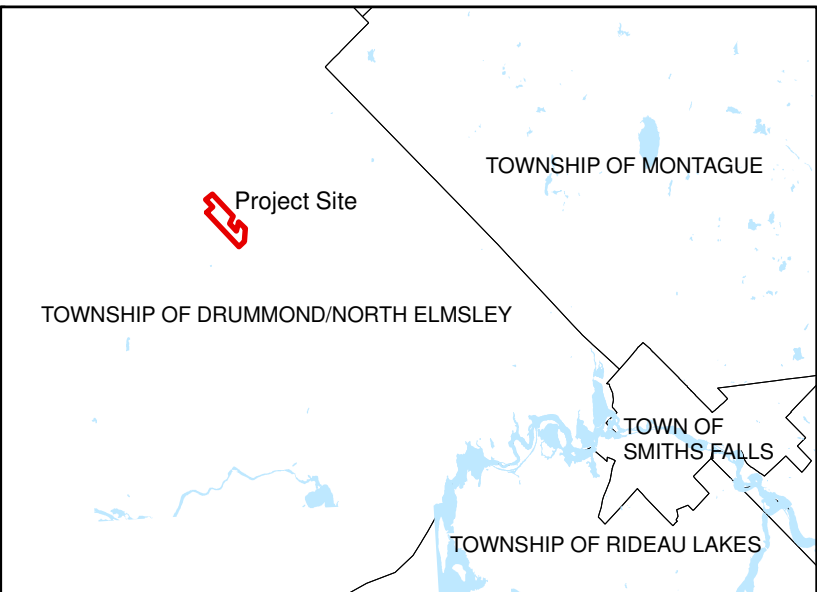
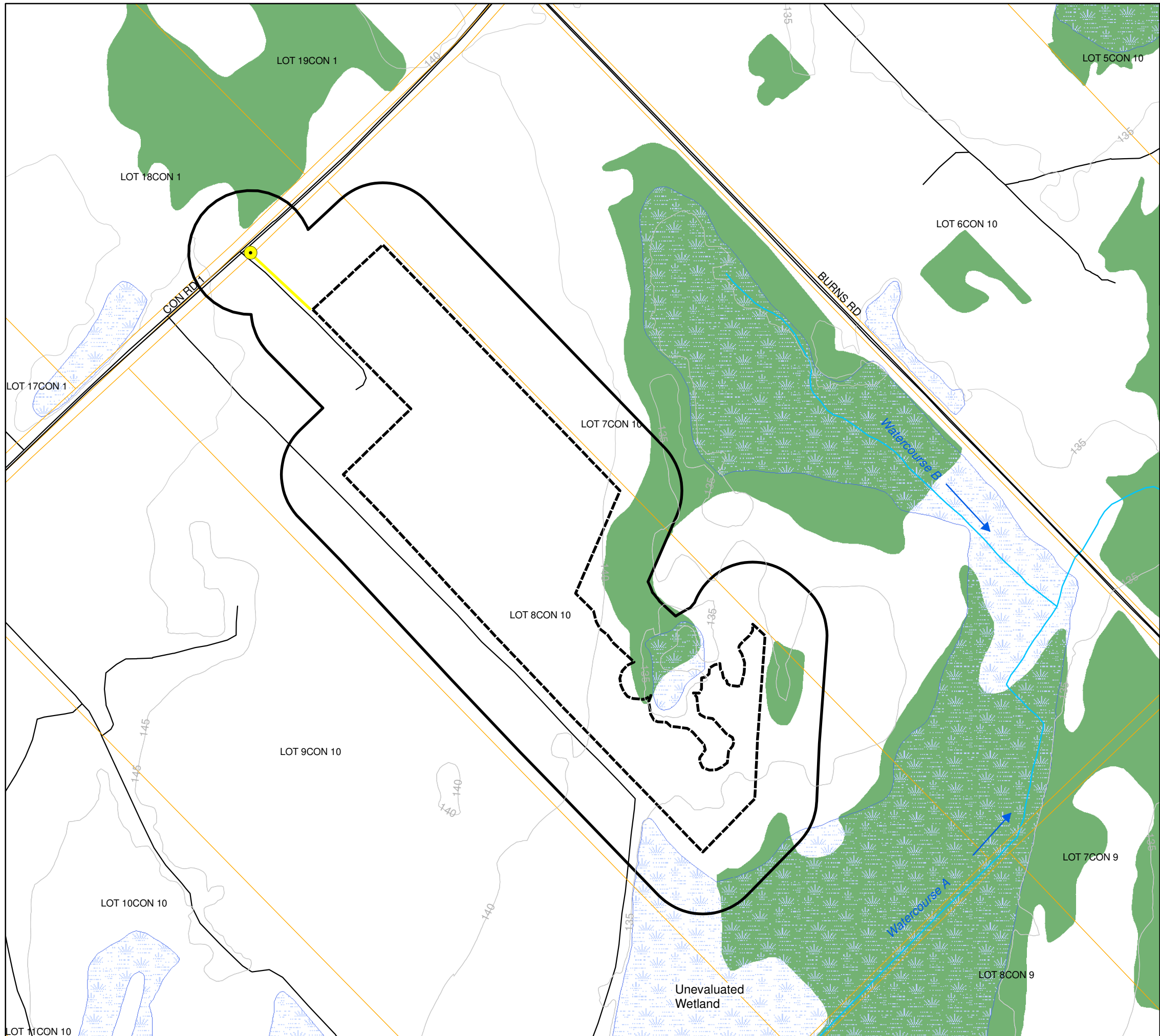
3. Summary of Results and Next Steps

3.1 Summary of Results

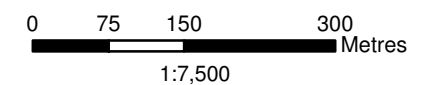
Table 3.1 summarizes the results of the Record Review according to the features identified in Section 1.2. A map depicting the identified water features on and in proximity to the site is provided in Figure 3.1.

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	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 120 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	MNR information notes the presence of a small pond within 120 m of the Project location that drains to a wetland
Is the Project within 120 m of a seepage area?	No	No groundwater seepage information for the area was noted during the records review.



- Legend**
- Connection Point With Existing Distribution Line
 - New Distribution Line From Project
 - Roads
 - Topographic Contour (5m Interval)
 - Watercourse
 - Project Location
 - 120 m from Project Location
 - Parcels
 - Wetland
 - Wooded Area



Notes:
 1. Spatial Referencing: UTM NAD 83
 2. OBM and NRVIS data downloaded from LIO-MNR with permission.

Figure 3.1
 Recurrent Energy
RE Smiths Falls 4
 Water Body Features



Back of figure

Based on the results of this Records Review, there is a small pond that drains to a wetland within 120 m of the Project. The origin of the pond and the nature of the drainage (e.g., drainage channel, passive seepage or diffuse overflow) is unknown, so at this point, it is unknown if the pond would meet the definition of a water body as per the REA Regulation. This will require confirmation during the site investigation.

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

Ministry of Natural Resources (MNR). 2010. Letter. L. Melvin (A/District Planner, Kemptville MNR) to S. Male (Terrestrial Ecologist, Hatch Ltd.). July 7, 2010.

Rideau Valley Conservation Authority (RVCA). 2010. Letter. M. Watters (Resource Specialist, RVCA) to N. Boucher (Aquatic Biologist, Hatch Ltd.). March 29, 2010.

Township of Drummond/North Elmsley. 2004. Official Plan for the Township of Drummond/North Elmsley. February 4, 2004. On-line at <http://www.drummondnorthelmsley.com/files/%7B8710BA66-BAB5-4906-A4DD-9C4FBC67416E%7DOfficial%20Plan%20text.pdf>. Accessed April 5, 2010.

