

**Appendix I**  
Ontario Ministry of Natural Resources Records Review

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# REOT

## District NHA Records Review for Renewable Energy Projects

Nextera: Adelaide Wind Energy Centre

### **Wind, Solar, Biomass**

Ministry of Natural Resources

Renewable Energy Operation Team

August 23, 2011

Revised November 19, 2011

# NHA Records Review

<b>Project Name:</b>	Adelaide Wind Energy Centre			
<b>Project Location:</b>	MNR District Aylmer	Municipality Township of Adelaide Metcalfe  Middlesex County	Geo.Twp, Lot(s) & Con(s)	Various  (see shapefile)
<b>Applicant:</b>	Nextera Energy Canada  (contact: Tom Bird <a href="mailto:Thomas.bird@nexteraenergy.com">Thomas.bird@nexteraenergy.com</a> )		<b>Phone #:</b> 905-335-4904 x15	<b>Address:</b> 5500 North Service Road, Suite 205 Burlington, ON L7L 6W6
<b>Consultant:</b>	NRSI  (contact: Andrew Ryckman <a href="mailto:aryckman@nrsi.on.ca">aryckman@nrsi.on.ca</a> )		<b>Phone #:</b> 519-725-2227	<b>Address:</b> 225 Labrador Drive, Unit 1 Waterloo, ON N2K 4M8
<b>Generation type:</b>	<input checked="" type="checkbox"/> wind onshore	<input type="checkbox"/> wind offshore	<input type="checkbox"/> solar	<input type="checkbox"/> biomass/biogas
<b>Nameplate Capacity:</b>	60 <b>MW</b>			
<b>Name of MNR Records Reviewer:</b>	Heather Riddell			
<b>Date Records Compiled:</b>	August 23, 2011  Revised November 19, 2011 by Amy Cameron (changes made to remove duplicate records)			
<b>What Ecodistrict is the project located in?</b>	7E			

Feature Type	Present within 120m of project location <small>(yes, no, unknown, N/A)</small>	Present within project location <small>(yes, no, unknown, N/A)</small>	MNR Comments <small>(comments may expand on information provided and/or may include relevant records within the vicinity that were not within project location or 120m of project area)</small>	Information Source <small>(NHIC, district staff, etc. Include the data layer name where possible)</small>
<b>Provincial Park</b>	No	No	Indicated there are no PP in the records review report and do not carry forward to site investigation.	NRVIS – PP/CR layer
<b>Conservation Reserve</b>	No	No	Indicated there are no CR in the records review report and do not carry forward to site investigation.	NRVIS – PP/CR layer
<b>Earth Science ANSI*</b>	No	No	Indicated there are no Earth Science ANSIs in the records review report and do not carry forward to site investigation.	NRVIS – ANSI layer
<b>Life Science ANSI</b>	No	No	Indicated there are no Life Science ANSIs in the records review report and do not carry forward to site investigation.	NRVIS – ANSI layer
<b>Wetland</b>	No	No	Harford Wetland LSW is located ~1.3 km from the eastern extent of the project location. Carry forward to site investigation. All woodlands	NRVIS – evaluated wetland layer

					in or within 120 m of the project location should be investigated thoroughly to determine if they contain wetland communities. This determination should be made based on criteria within the Ontario Wetland Evaluation Manual.	
<b>Woodland</b>		Yes	Yes – it appears there are some wooded areas that are crossed or encroached by the project disturbance area as currently mapped		There are 38 polygons identified as wooded areas within 120 m of the project location. This includes approximately seven hedgerows.  It appears there are 17 wooded areas within which the project disturbance area is proposed. Three of those wooded areas are identified at hedgerows  Carry forward to site investigation.	NRVIS – SWOOP imagery and NRVIS wooded area layer
<b>Valleyland</b>		Unknown	Unknown		The District Office does not possess Valleylands mapping.  Recommend applicant contact the local conservation authority for Valleylands data to complete the records review.  Carry forward to site investigation.	Conservation Authority likely has mapping available. Contact St. Clair Region Conservation Authority to obtain this information.
<b>Significant Wildlife Habitat</b>	<b>Habitats of Seasonal Concentrations of Animals</b>	Winter deer yards	No	No	Winter deer yards are not common in the general area. Include this information in Records Review and do not carry forward to site investigation.	
		Moose late winter habitat	Does not apply to the project location		Include this information in Records Review and do not carry forward to site investigation.	
		Colonial-Nesting bird breeding habitat (bank and cliff swallows)	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Colonial-Nesting bird breeding habitat (tree/shrub)	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Colonial-Nesting bird breeding habitat (ground)	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Waterfowl stopover and staging areas (terrestrial)	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Waterfowl stopover and staging areas (aquatic)	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Waterfowl nesting habitats	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Shorebird migratory stopover areas	Does not apply to the project location		Project location is greater than 5km from the Great Lakes shoreline. Include this information in Records Review and do not carry forward to site investigation.	

		Landbird (including songbird) migratory stopover areas	Does not apply to the project location		Project location is greater than 5 km from Great Lakes shoreline (SWHTG). Include this information in Records Review and do not carry forward to site investigation.	
		Raptor winter feeding and roosting areas	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Wild turkey winter range	Does not apply to the project location		Do not carry forward to site investigation.	
		Turkey vulture summer roosting areas	Does not apply to the project location		Do not carry forward to site investigation.	
		Reptile hibernacula (snakes)	Unknown	Unknown	No records available – information lacking. . Carry forward to site investigation.  Hedgerows, woodlands and drains could contain rock piles or piled debris that could be considered candidate snake hibernacula. The area within 120 m of the project location should be searched for these types of habitat features.	
		Bat hibernacula	Unknown	Unknown	No records available – information lacking. A search of MNDM AMIS database for abandoned mines and information about caves and karst topography within 1120m of the project location is required by the applicant to complete the records review for this feature. Carry forward to site investigation.	
		Bat maternity colonies	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Migratory butterfly stopover areas	Does not apply to the project location		Project location is greater than 5 km from Great Lakes (SWHTG). Include this information in Records Review and do not carry forward to site investigation.	
	Rare Vegetation Communities or Specialized Habitats for Wildlife	Alvars	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Tall-grass prairies	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Savannahs	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Rare forest types	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Talus slopes	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Rock barrens	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Sand barrens	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Great Lake dunes	Does not apply to the project location		Given the distance from any Great Lakes. Include this information in Records Review and do not carry forward to site investigation.	
		Forests providing	Unknown	Unknown	Carry forward to site investigation.	

	high diversity of habitats			Many woodlands located in and within 120 m of the project location.	
	Old-growth or mature forest stands	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
	Foraging areas with abundant mast	Does not apply to the project location		No records available – information lacking. Carry forward to site investigation.	
	Turtle nesting habitat	Unknown	Unknown	No records available – information lacking.. Carry forward to site investigation.	
	Turtle over-wintering habitat	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
	Woodland raptor nesting habitat	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
	Osprey/Bald Eagle nesting, foraging and perching habitat	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
	Amphibian breeding habitat (woodland)	Unknown	Unknown	Carry forward to site investigation. Woodlands located in and within 120 m of the project location could contain vernal pools (SWHTG).	
	Amphibian breeding habitat (wetland)	Unknown	Unknown	Carry forward to site investigation. Woodlands located in and within 120 m of the project location should be further investigated in the field to determine if they are potential wetlands as per the Ontario Wetland Evaluation System manual.	
	Moose calving areas	Does not apply to the project location		Include this information in Records Review and do not carry forward to site investigation.	
	Moose aquatic feeding areas	Does not apply to the project location		Include this information in Records Review and do not carry forward to site investigation.	
	Mineral licks	Does not apply to the project location		Include this information in Records Review and do not carry forward to site investigation.	
	Mink, otter, marten, and fisher denning sites	Mink = unknown Otter, Marten and Fisher denning sites do not apply to this project location		Mink denning sites will be carried forward to site investigation but otter, marten and fisher denning sites do not need to be carried forward to site investigation.	
	Highly diverse areas	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
	Cliffs	No	No	Include this information in Records Review and do not carry forward to site investigation.	
	Seeps and springs	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
Species of Conservation Concern (list all that apply)	Marsh Bird Breeding Habitat	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.  Applicant should refer to the Breeding Bird Atlas Squares for further data.	
	Woodland Area	Unknown	Unknown	No records available –	

		Sensitive Breeding Birds			information lacking. Carry forward to site investigation.  Applicant should refer to the Breeding Bird Atlas Squares for further data to complete the records review.	
		Open Country Breeding Bird Habitat	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.  Applicant should refer to the Breeding Bird Atlas Squares for further data.	
		Shrub/Early Successional Bird Breeding Habitat	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.  Applicant should refer to the Breeding Bird Atlas Squares for further data.	
		Terrestrial Crayfish	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		Special Concern Species	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
		S1-S3, SH species and communities	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	
	Animal Movement Corridor	Amphibians Movement Corridors	Unknown	Unknown	No records available – information lacking. Carry forward to site investigation.	

Is any portion of the project located within the Oak Ridges Moraine Plan Area?  Yes  No

If yes, are any of the following features known to be present on or within 120m of the project location?

- Sand Barrens
- Savannah
- Tallgrass Prairie
- Unknown

Is the project location within the Protected Countryside (Greenbelt)?  Yes  No

If yes, are any of the following features known to be present on or within 120m of the project location?

- Sand Barrens
- Savannah
- Tallgrass Prairie
- Alvar
- Unknown

\* Earth Science ANSI only needs to be considered if it is located within 50m of the project location

**Appendix II**  
Biodiversity Explorer Query Results

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Unique Identifier (Element ID)	EO ID	Scientific Name	English Name	G-rank	S-rank	Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Status	Species At Risk in Ontario (SARO) Status	UTM Zone	Easting (nearest km)	Northing (nearest km)	EO Rank	EO Rank Date	First Observed Date	Last Observed Date
39002	3253	Aplectrum hyemale	Puttyroot	G5	S2			17	426000	4761000	H	1/1/2009	1906	6/9/1906
39002	3250	Aplectrum hyemale	Puttyroot	G5	S2			17	428000	4756000	X	2/21/2000	1898	1898-06-02
24000	2800	Arisaema dracontium	Green Dragon	G5	S3	SC	SC	17	443000	4751000	H	1/27/1998	8/1/1935	6/28/1956
24000	5690	Arisaema dracontium	Green Dragon	G5	S3	SC	SC	17	440000	4771000	X	1/29/1998	1883-06-20	1883-06-20
24000	17334	Arisaema dracontium	Green Dragon	G5	S3	SC	SC	17	446000	4754000	E	1/28/1998	5/20/1991	5/20/1991
23094	59248	Carex careyana	Carey's Sedge	G4G5	S2			17	449000	4756000	H	1/1/2009		1934
23094	2847	Carex careyana	Carey's Sedge	G4G5	S2			17	449000	4756000	H	1/1/2009	1934	1934
23446	5860	Carex trichocarpa	Hairy-fruited Sedge	G4	S3			17	449000	4757000	E		5/15/1990	5/15/1990
129028	60085	Conioselinum chinense	Chinese Hemlock Parsley	G5	S2			17	431000	4775000	H	1/1/2009		9/8/1984
82042	2533	Crataegus brainerdii	Brainerd's Hawthorn	G5	S2			17	435000	4769000	H	1/1/2009	1975	5/18/1976
82094	59781	Crataegus lumaria	Round-leaved Hawthorn	G3G4	S3?			17	429000	4767000	H	1/1/2009		5/18/1976
82130	2564	Crataegus suborbiculata	Caughuawaga Hawthorn	G3?	S1			17	434000	4768000	H	1/1/2009	1978	5/30/1978
143030	33012	Gentianella quinquefolia	Stiff Gentian	G5	S2			17	433000	4768000	H	5/25/2001	10/30/1907	9/30/1958
115000	2729	Hybanthus concolor	Eastern Green-violet	G5	S2			17	434000	4779000	H		10/15/1958	10/15/1958
111020	2038	Hypericum prolificum	Shrubby St. John's-wort	G5	S2			17	446000	4754000	E		1888	7/30/1990
149032	5234	Lithospermum latifolium	American Gromwell	G4	S3			17	437000	4796000	H		1910	9/5/1959
121006	64348	Lythrum alatum	Winged Loosestrife	G5	S3			17	435000	4754000	E			8/4/1991