association to protect
AMHERST ISLAND

PO Box 6, 5695 Front Road,
Stella, ON K0H2S0
protectai@kos.net

19 February 2015

Honourable Bill Mauro
Minister of Natural Resources and Forestry
Ministry of Natural Resources and Forestry
Suite 6630, 6th Floor, Whitney Block
99 Wellesley Street West
Toronto, Ontario M7A 1W3

WITHOUT PREJUDICE TO ALL OF OUR RIGHTS

Minister Mauro,

Re: Windlectric Inc. Proposed Amherst Island Wind Energy Project / Blanding's Turtle

The Association to Protect Amherst Island (APAI) has previously forwarded volumes of information to various Ontario Government Ministries including the Ontario Environmental Registry detailing the many issues that arise from the Windlectric Project proposing to blanket Amherst Island with 33 wind turbines measuring over 500 feet tall.

Minister Mauro, this letter concerns the fact that Windlectric has not requested an MNR Overall Benefit Permit "to perform an activity that is not otherwise allowed under the Endangered Species Act"[1] for the large Blanding's Turtle population found on Amherst Island. Further, a careful review of available documentation indicates that Windlectric did not adhere to all of the laws and policies of the Government of Ontario, including the Green Energy Act, 2009, S.O. 2009, c. 12, sched. A and O. Reg. 359/09 made under the Environmental Protection Act; and the Species at Risk Act as these pertain to the Blanding's Turtle population of Amherst Island.

[1] MNR Website: Species at Risk Overall Benefit Permits. https://www.ontario.ca/environment-and-energy/species-risk-overall-benefit-permits

Per O. REg. 359/09, the following publications from the Ministry of Natural Resources (MNR) will inform the methodology used by the Proponent to complete the field studies required for submission of a complete Renewable Energy Approval (REA) application.

- Natural Heritage Assessment Guide for Renewable Energy Projects
- Birds and Bird Habitats: Guidelines for Wind Power Projects
- Bats and Bat Habitats: Guidelines for Wind Power Projects

The above publications in turn reference the following publications:

- Significant Wildlife Habitat Technical Guide
- Significant Wildlife Habitat Eco-regional Criteria Schedules
- Ontario Wetland Evaluation System Manuals
- Ecological Land Classification Manuals

APAI has provided to the MOE and MNR a 39 page Turtle Overwintering Area Gap Analysis detailing how the requirements detailed in the publications above were not met by the Proponent. This Gap Analysis will not be reproduced here, however the salient points are listed below.

- There is no available documentation of "specialized site investigation" as stated in the Windlectric Natural Heritage Assessment /Environmental Impact Study (NHA/EIS), therefore there is no evidence of any appropriate field studies undertaken to identify Blanding's Turtles or their habitat .
- Ecological Land Classification (ELC) evaluations that could have doubled as field investigations to identify turtle wintering areas occurred at the wrong time of the year or were comprised of "roadside" investigations.
- The process to document "roadside" investigations detailed in MNR publications was not adhered to.
- Habitat assessments were erroneously limited to "large" areas although this criteria is not listed in the MNR publication *Ecoregion 6E Criterion.*
- 75 additional suitable ELC Community Class locations were identified during ELC studies.

The inadequate methodology resulted in NO Blanding's Turtles being observed / identified by Stantec employees and a single Turtle Wintering Candidate Significant Wildlife Habitat being identified in the Natural Heritage Assessment / Environmental Impact Study (NHA/EIS).

The information gathered during the inadequately executed field studies was used as the basis for the REA NHA/EIS and the Species at Risk (SAR) Reports. The SAR Report is the Report that

addresses the requirements of the Endangered Species Act (ESA). According to the ESA[2] the habitat of Species at Risk that is afforded a measure of protection is defined as:

(a) "with respect to a species of animal, plant or other organism for which a regulation made under clause 55 (1) (a) is in force, the area prescribed by that regulation as the habitat of the species, or

(b) with respect to any other species of animal, plant or other organism, **an area on which the species depends, directly or indirectly, to carry on its life processes, including life processes such as reproduction, rearing, hibernation, migration or feeding,**

Further, Subsection 9(1) of the ESA prohibits killing, harming, harassing, possessing, capturing, taking, buying, selling, trading, leasing or transporting species listed as threatened, endangered or extirpated. Subsection 10(1) of the ESA prohibits the damage or destruction of the habitat of a species listed as threatened, endangered or extirpated.[3]

The MNR has stated in the past that for the proposed Amherst Island Wind Project, it has been determined that Blanding's Turtle or its habitat will not be negatively impacted by the proposed Project and a table (see below) was provided to APAI illustrating the basis for this determination. The table describes each potential activity that could impact the species or its habitat, and how this activity could be avoided or is unlikely to occur. Please see below for my comments specific to each activity.

Activity	**Assessment or Avoidance Strategy**
A. Blanding's Habitat will be damaged and/or destroyed (Section 10 of the ESA)	Construction activities are not occurring within critical Blanding's Turtle habitat such as feeding areas, breeding areas, hibernation areas and/or nesting areas.
	Blanding's Turtles life processes will not be impacted by the proposed wind power project construction footprint.
	Construction is only occurring in peripheral migration areas.

[2] http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm

[3] ESA, s. 9 and s. 10

Activity	Assessment or Avoidance Strategy
B. Individual Blanding's Turtles will be impacted (Section 9 of the ESA)	Work is occurring during timing windows when the turtles are hibernating.
	All staff will be trained and educated regarding species at risk, those as part of the permit, and others on the Island.
	New access roads that are being built are on private land and will have signage and speed limits.
	Existing municipal roads are not associated with the evaluation of impact as their footprints already exist.

A. Subsection 10(1) of the ESA prohibits the damage or destruction of the habitat of a species listed as threatened, endangered or extirpated / Per Table provided by MNR: Blanding's Habitat will be damaged and/or destroyed (Section 10 of the ESA)

The table above provides the following Assessment or Avoidance Strategies:

1. Construction activities are not occurring within critical Blanding's Turtle habitat such as feeding areas, breeding areas, hibernation areas and/or nesting areas.
2. Blanding's Turtles life processes will not be impacted by the proposed wind power project construction footprint.
3. Construction is only occurring in peripheral migration areas.

Windlectric Power cannot provide documentation to support the assertions in items 1, 2 and 3 above as the Gap Analysis previously provided to the MNR / MOE clearly demonstrates that the methodology used by Stantec to identify the Amherst Island Blanding's Turtle population and habitat was faulty in both timing and process.

Inappropriate Timing:

Section 3.1.1.1 of the Windlectric SAR *Terrestrial Species Surveys* states:

> *The field survey program to assess Species at Risk in the Project Study Area included:*
> - *Vascular plant surveys (2011 and 2012);*
> - *Blanding's Turtle and Eastern Musk Turtle habitat assessments (2011);*
>
> *Blanding's Turtle and Eastern Musk Turtle*

> *In conjunction with the ELC and vegetation surveys (as described above), detailed habitat assessments for Blanding's Turtle and Eastern Musk Turtle habitat were conducted in appropriate habitats. Dates, times, duration, field personnel and weather for each field survey and a summary of survey protocols and methods are presented in Tables 3.1 and 3.4 (Appendix B), respectively.*
>
> *At each open water habitat, a habitat assessment was completed for Blanding's Turtle and Eastern Musk Turtle overwintering habitat. Surveyors recorded microhabitat features in suitable wetland habitats such as estimated water depth, vegetation types, size of wetland, and substrate.*

A careful review of Windlectric's SAR Table 3.1 provide the following dates for Ecological Land Classification (ELC) and preliminary botanical inventories of the vegetation communities in and within the Project Location:

- July 26 – 29 (2011)
- August 2 – 5 (2011)
- August 17-19 (2011)
- November 11 (2011)
- March 27-28 (2012) – Field notes provide the following information:
  - March 27: survey conducted on mainland - no access, roadside visual
  - March 28: survey conducted in the vicinity of Turbine S05
- May 18 (2012) – Field notes provide the following information:
  - aprox 2.5 hr. were devoted to survey on mainland – while the ELC form does not specify no access, the ELC forms completed for this area on 11 November 2011 and 27 March 2012 specify no access available.
- August 15 (2012) – field notes provide the following information:
  - no access, roadside visual in the vicinity of Turbine S28
  - no access, roadside visual Front Road – Marshall 40 foot going East

The MNR *SWHTG* provides the following recommendation for the identification of turtle nesting habitat;

> "Conduct field investigations during prime nesting season near wetlands deemed to provide the best turtle habitat……..In spring and early summer, turtles lay their eggs in areas that may be used year after year."

MNR *Ecoregion 6E Criterion Schedule* provides the following information regarding the identification of turtle overwintering habitat;

> "Over wintering areas may be identified by searching for congregations (Basking Areas) of turtles on warm, sunny days during the fall (Sept. – Oct.) or spring (Mar. – May)."

According to Table 3.1, the 2011 ELC evaluations that could have doubled as field investigations to identify nesting turtles or overwintering turtle habitat occurred at the wrong time of the year.

Additionally, while Section 3.1.1.1 states that habitat assessments occurred in 2011, it is important to note that the 4 field assessments that occurred in 2012 were for the most part comprised of "roadside" investigations which were undertaken for an undisclosed amount of time.

Inadequate Process – ELC Searches

While the SAR states that "In conjunction with the ELC and vegetation surveys (as described above), detailed habitat assessments for Blanding's Turtle and Eastern Musk Turtle habitat were conducted in appropriate habitats", a review of the ELC forms and corresponding Woodland and Wildlife Habitat Assessment Forms provides the following sections:

- ELC form: as could be expected this form concentrates on land classification including the following, polygon description, stand description, stand composition and community classification.
- Woodland and Wildlife Habitat Assessment Form: this form has the following sections:
    - Reptile /Bat Hibernacula Features (Reptile Hibernacula – i.e. features that provide a route underground, including buried concrete or rock (example, foundations, bridge abutments, culverts with cracks / entry points, exposed rock crevices or inactive burrows."
    - Bat Roosting Features
    - Stick Nests
    - Seeps/ Springs/ Vernal Pools

If the proponent completed an additional set of forms focused on turtle habitat assessment, these forms were not appended to the SAR and should be provided as support documentation for the assertion that detailed habitat assessments were completed at the wrong time of the year.

Inadequate Process – Areas "searched" by Windlectric

Section 3.1.1.1 of the Windlectric SAR *Terrestrial Species Surveys* states:

> *At each open water habitat, a habitat assessment was completed for Blanding's Turtle and Eastern Musk Turtle overwintering habitat.*

Section 3.2.4.2 Assessment of the Amherst Island Project Study Area, of the Windlectric SAR report provides the following information:

> *Habitat assessments for Blanding's Turtle and Eastern Musk Turtle were undertaken using data collected through ELC and wetland delineations and evaluations. Most wetlands in proximity to the project location consist of green ash swamps and reed canary grass meadow marsh. These wetlands do not provide the standing water required by turtle species for most of their life processes. Open marsh communities that have the potential to support populations of turtles occur in the large coastal marshes. Of these coastal marshes, the Long Point Marsh is located in proximity to the Project Location with portions of the marsh in proximity to Turbine 36 (78 m from the wetland) and an access road off 3rd Concession Rd (77 m from the wetland). Blanding's Turtles nest in upland areas of exposed soil, often some distance from the open water. However, all project components within 1 km of Long Point Marsh are situated in hay, pasture or fallow fields with dense ground cover. Site investigations did not identify any potential turtle nesting sites in proximity to the project location, with the potential exception of existing roadsides. Over the course of all field surveys, no observations of either Blanding's Turtle or Eastern Musk Turtle were made.*

Additionally, the NHA/EIS states " *As lands within the Study Area consisted primarily of cultivated agricultural cropland, the search for turtle nesting habitat focused on watercourses and any marshy wetlands within 120 m of the Project Location*".

According to the Ostrander Point Environmental Review Tribunal, the following information regarding Blanding's Turtle habitat was not contested by any of the 4 expert witnesses testifying on Blanding's Turtles:

- [242] Blanding's turtle is a semi-aquatic turtle.
- [243] Blanding's turtle uses a variety of wetland types depending on availability, including emergent mashes, bogs, forested swamps, and temporary pools. Habitat use is generally driven by needs such as food, summer refuges from dry periods, and in winter protection from freezing temperatures. In some areas a single large wetland could accommodate all of those needs, but in most places Blanding's turtle uses several wetlands over the year, requiring overland trips.
- [244] In early summer, nesting females seek an appropriate site for egg laying with an exposure to direct sunlight. Such sites include beaches, grasslands, rocky outcrops, agricultural fields, road and railway embankments, lawns, forest cuts, dredge piles, and borrow pits. Blanding's turtles have been found to move extensively overland to nesting sites – movements up to 6km have been reported.

Looking at section 3.1.1.1 and 3.2.4.2, it is clear that field studies / habitat assessments were erroneously limited to areas of open water habitat / wetlands with standing water.

The MNR *General Habitat Description Guidelines* for the Blanding's Turtle provides the following information:

> Nesting Sites
> Blanding's Turtle nests are created in open habitats with low vegetation cover and high sun exposure such as in forest clearings, meadows, shorelines, beaches, rock outcrops, cornfields, gravel roads, road shoulders, ploughed fields, gardens, powerline rights-of-ways, yards and abandoned railroad beds.
>
> Overwintering Sites
> Overwintering sites are typically occupied for at least six months during the overwintering period in Ontario. Suitable Blanding's Turtle overwintering habitat typically includes permanent bogs, fens, marshes, ponds, channels or other habitats with free (unfrozen) shallow water. Blanding's Turtles studied in Windlectric Provincial park overwintered in wetlands with free water depths of 7 cm - 50 cm. This species may also hibernate within graminoid shallow marsh areas of larger marsh complexes by burying into substrates in areas of pooled water. Blanding's Turtle's may also overwinter in seasonal pools or small excavated areas with standing water.

The MNR *General Habitat Description Guidelines* for the Blanding's Turtle does not specify that open water habitat / wetlands with standing water are required for the Blanding's Turtle life processes. On the contrary, shallow water, shallow marsh areas, seasonal pools and small excavated areas with standing water are listed for overwintering sites. Nesting site requirements do not include standing water or open marsh communities either.

Clearly the focus on Long Point Marsh is an error in judgment. The presence of Blanding's Turtles on Amherst Island is well documented. Island residents and KFN members have previously provided documentation of incidental Blanding's Turtle sightings on Amherst Island to the MNR. This summer (2014) a group of concerned residents organized themselves to undertake regular walks along Island roads in order to document turtle sightings. Please note, these walks along the Island's county roads did not entail any type of search for overwintering or nesting habitat although some turtles were documented laying eggs. Below is a map indicating the approximate location of sightings of Blanding's Turtles, from 2013 and until September 2014. The sightings are spread throughout the Island, some quite close to Project components.

Figure 1 (red dots indicate turtle sightings / purple lines indicate roads used for turbine construction / yellow dots indicate turbines)

Below is a table that corresponds to the information provided in Figure 1 above, please note, some dots represent more than one turtle sighting in a particular location. Most of these listings include photographs, which are available upon request.

Documentation of the majority of the turtle sightings listed below have been submitted to the Natural Heritage Information Centre through the Ontario.ca website.

Table 1 – Blanding's Turtle Sightings Amherst Island 2013 - 2014

	Species	Date d/m/y	Location/Address	Coordinates	Coordinates	Reference Number
1.	Blanding's Turtle	23/05/2013	Front Road 20m west of 780	4894017	368512	57
2.	Blanding's Turtle	09/06/2013	9345 Second Concession	4886561	355901E	16
3.*	Blanding's Turtle	12/06/2013	100m west of 2435 Second Concession	4890026	362052	58
4.	Blanding's Turtle	12/06/2013	200m south of Second Concession on Emerald Forty Foot	4888087	359025	59
5.	Blanding's	18/06/2013	250m north of Third	4886337	360078	60

	Turtle		Concession on Emerald Forty Foot			
6.	Blanding's Turtle	19/06/2013	100m north of 550 Art McGinn Road	4887338	358246	61
7.*	Blanding's Turtle	29/06/2013	South Shore Road	4886759	264691	62
8.	Blanding's Turtle	01/07/2013	Art McGinn Road south of Second Concession to 1245 Art McGinn Road	44.1197162	76.766765	63
9.*	Blanding's Turtle	04/07/2013	South Shore Road	4886414	364555E	19
10.*	Blanding's Turtle	10/09/2013	450 Front Road	44.11.250	076.38.383	3
11.	Blanding's Turtle	13/05/2014	Emerald Forty Foot	44.08.302	076.46.059	4
12.	Blanding's Turtle	15/05/2014	Stella 40 & South Road	44.09.315	076.42.771	5
13.	Blanding's Turtle	19/05/2014	8875 South Shore Road	44.07.043	076.41.617	7
14.*	Blanding's Turtle	28/05/2014	South Shore Road	44.08.036	076.41.125	8
15.	Blanding's Turtle	29/05/2014	8875 South Shore Road	44.07.116	076.41.547	10
16.	Blanding's Turtle	30/05/2014	2150 South Shore Road	44.08.830	076.40.163	11
17.	Blanding's Turtle	12/06/2014	8555 South Shore Road	44.123347	76.688994	51
18.	Blanding's Turtle	13/06/2014	8875 South Shore Road	44.07.016	076.41.547	21
19.	Blanding's Turtle	16/06/2014	8925 South Shore Road	44.121364	76.691282	50
20.	Blanding's Turtle	17/06/2014	Emerald Forty Foot	44.08.257	076.46.020	31
21.*	Blanding's Turtle	17/06/2014	8850 Second Concession	44.07.600	076.47.390	32
22.*	Blanding's Turtle	18/06/2014	8875 South Shore Road	44.07.016	076.41.547	22
23.	Blanding's Turtle	18/06/2014	East of 7555 Third Concession	44.06.539	076.45.049	34
24.	Blanding's Turtle	19/06/2014	5700 Third Concession	44.129751	76.715687	23
25.	Blanding's Turtle	20/06/2014	9225a South Shore Road	44.08.036	076.41.125	52
26.	Blanding's Turtle	22/06/2014	Third Concession, near Sand Beach and Boat Ramp	44.114879	76.733964	24
27.*	Blanding's Turtle	22/06/2014	Emerald Forty Foot	44.139356	76.768494	47

28.	Blanding's Turtle	23/06/2014	East of 6100 Third Concession	44.114128	76738258	42
29.	Blanding's Turtle	24/06/2014	Emerald Forty Foot	44.08.321	076.46.076	25
30.	Blanding's Turtle	24/06/2014	Emerald Forty Foot	44.08.363	076.46.113	26
31.	Blanding's Turtle	24/06/2014	5945C Third Concession	44.11797	76.71078	48
32.	Blanding's Turtle	24/06/2014	9225a South Shore Road	44.08.036	076.41.125	53
33.	Blanding's Turtle	25/06/2014	5945C Third Concession	44.11185	76.72396	49
34.	Blanding's Turtle	26/06/2014	9225a South Shore Road	44.08.036	076.41.125	54
35.	Blanding's Turtle	27/06/2014	9225a South Shore Road	44.08.036	076.41.125	44
36.	Blanding's Turtle	28/06/2014	3475 Third Concession	44.1297507	76.7156873	45
37.	Blanding's Turtle	29/06/2014	Long Point Road	44.120139	76.69155	56
38.	Blanding's Turtle	21/08/2014	5595 Second Concession	44.143218	76.745208	78
39.*	Blanding's Turtle	21/09/2014	1400 Third Concession	44.151115	76.69086	79

Habitat that Requires Protection per MNR General Habitat Description

Nesting:

As well as the information provided above the MNR *General Habitat Description Guidelines* provides the following elaboration:

> Blanding's Turtle nests are typically close to permanent wetlands and reported average distances between nests and the nearest wetland range from 99.5 to 242 m, with maximum distances of 256 m to just over 400 m. Consequently, the area within 250 m of suitable aquatic habitat provides critical movement corridors through with hatchling Blanding's Turtles access wetlands after hatching. This habitat is also used by some hatchlings as overwintering habitat in their first year.

The Windlectric NHA/EIS lists 22 permanent wetlands. A glance at the table below indicates that project features are in or within 100m of every wetland with the exception of wetland 19 (102m) and wetland 22 (>120m). All of these wetlands are suitable habitat per the MNR criteria listed above.

Therefore, despite Windlectric's assertions to the contrary, Blanding's Turtle Habitat will be damaged and/or destroyed due to construction activities that will occur within critical Blanding's Turtle habitat such as nesting areas and construction will occur within central migration areas. Additionally, as nesting is a critical life process, Amherst Island Blanding's Turtle population life processes will be impacted by the proposed wind power project construction footprint. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

Table 15B: Mitigation Measures by Wetland Feature

Wetland Feature No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Significance	Significance assumed and assessed as per WCEFA	X	X	X	X	X			X	X		X	X	X	X	X	X	X	X	X	X		X
	OWES evaluated as non-PSW						X	X															
	Designated PSW										X											X	
Project Component(s) located within 120 m (m)	Turbine base	>120	96	>120	>120	60	55	>120	>120	>120	55	105	65	>120	>120	>120	>120	>120	>120	106	>120	>120	>120
	Substation	>120	>120	3	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120
	Access Road	94	52	>120	38	11	0	0	>120	99	74	77	7	100	44	>120	15	>120	58	107	42	78	>120
	Collector Line	74	96	41	<1	3	0	>120	28	18	13	115	4	1	40	18	19	3	62	102	24	>120	>120

Overwintering

A comparison of the overwintering requirements listed in the MNR *General Habitat Description Guidelines* (below) and Table 6B of the NHA/EIS (*Site Investigation Result – Wetland*) indicates that the 22 permanent wetlands provide suitable overwintering habitat in that at a minimum they all provide seasonal pools or the potential for small excavated areas with standing water.

> "Overwintering sites are typically occupied for at least six months during the overwintering period in Ontario. Suitable Blanding's Turtle overwintering habitat typically includes permanent bogs, fens, marshes, ponds, channels or other habitats with free (unfrozen) shallow water. Blanding's Turtles studied in Windlectric Provincial park overwintered in wetlands with free water depths of 7 cm - 50 cm. This species may also hibernate within graminoid shallow marsh areas of larger marsh complexes by burying into substrates in areas of pooled water. Blanding's Turtle's may also overwinter in seasonal pools or small excavated areas with standing water."

Therefore, despite Windlectric's assertions to the contrary, Blanding's Habitat will be damaged and/or destroyed due to construction activities that will occur within critical Blanding's Turtle habitat such as hibernation areas and construction will occur within central migration areas.

Additionally, as hibernation is a critical life process, Blanding's Turtles life processes will be impacted by the proposed wind power project construction footprint. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

Feeding Areas

According to the MNR *General Description Habitat Guidelines*:

> Suitable habitat for Blanding's Turtles during the active season includes a variety of wetlands such as marsh, swamps, ponds, fens, bogs, slow-flowing streams, shallow bays of lakes or rivers, as well as graminoid shallow marsh and slough forest habitats that are adjacent to larger marsh complexes. Suitable wetlands used during the active season are typically eutrophic (mineral or organic nutrient-rich), shallow with a soft substrate composed of decomposing materials, and often have emergent vegetation, such as water lilies and cattails.

Per the description of suitable habitat provided by the MNR *General Description Habitat Guidelines*, Table 6B of the NHA/EIS (*Site Investigation Result – Wetland*) indicates that the 22 permanent wetlands provide suitable habitat for Blanding's Turtles during the active season.

Additionally, Table 7B of the NHA/EIS (*Site Investigation Result – Woodland*) indicates that of the 36 woodlands listed, 18 include some type of deciduous mineral swamp component. Therefore, fully ½ of the woodlands of Amherst Island provide suitable habitat of Blanding's Turtles during active season.

Adding the 22 wetlands to the 18 suitable woodlands, there are 40 areas critical to the Blanding's Turtle population located on Amherst Island.

Despite Windlectric's assertions to the contrary, Blanding's Turtle habitat will be damaged and/or destroyed due to construction activities that will occur within critical Blanding's Turtle habitat such as feeding areas and construction will occur within central migration areas.

Additionally, as feeding is a critical life process, the Amherst Island Blanding's Turtle population's life processes will be impacted by the proposed wind power project construction footprint. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

B. Subsection 9(1) of the ESA prohibits killing, harming, harassing, possessing, capturing, taking, buying, selling, trading, leasing or transporting species listed as threatened, endangered or extirpated / Per Table provided by MNR: Individual Blanding's Turtles will be impacted (Section 9 of the ESA)

The table above outlines the following Assessment or Avoidance Strategies:

1. Work is occurring during timing windows when the turtles are hibernating.

2. All staff will be trained and educated regarding species at risk, those as part of the permit, and others on the Island.
3. New access roads that are being built are on private land and will have signage and speed limits.
4. Existing municipal roads are not associated with the evaluation of impact as their footprints already exist.

1. Work will occur during timing windows when the turtles are hibernating.

According to Table 15B above, construction activity will be undertaken within 3 to 0 meters of 9 wetlands. This has the potential to directly remove turtle habitat.

A review of Table of the NHA/EIS (*Site Investigation Result – Woodland)* in conjunction with NHA/IES *Natural Features Carried Forward to Evaluation of Significance* indicates that there are 6 woodlands containing a water feature that are within 3 to 0 meters of construction activity. This has the potential to directly remove turtle habitat.

According to the Windlectric *Construction Report*, the construction window is expected to require 18 to 24 months. The Project will require an "Overall Benefit" permit for Bobolink, Eastern Whip-poor-Will and Eastern Meadowlark. Typically this permit restricts construction during the Bird Breeding Season (April 1 to August 15 – 4 ½ months). According to the MNR *General Description Habitat Guidelines,* "overwintering sites are typically occupied for at least six months during the overwintering period in Ontario."

Therefore, according to the above there is a 1 and ½ month gap during which construction will be allowed to directly interfere with Blanding's Turtle life processes.

Additionally, the construction restrictions resulting from the Overall Benefit permit for Bobolink, Eastern Meadowlark and Eastern Whip-poor-will are not guaranteed to encompass the entire island. This could result in construction activities being undertaken in the middle of Blanding's Turtle breeding season.

Item 1 listed above provides no assurances that individual turtles will not be negatively impacted by the proposed project. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

2. Staff will be trained and educated regarding species at risk, those as part of the permit, and others on the Island

Training and education in and of themselves do not provide assurances that individual turtles will not be impacted. Windlectric must provide information as to how this training and

education will ensure that individual turtles will not be negatively impacted by the construction of 33 to 36 industrial wind turbines. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

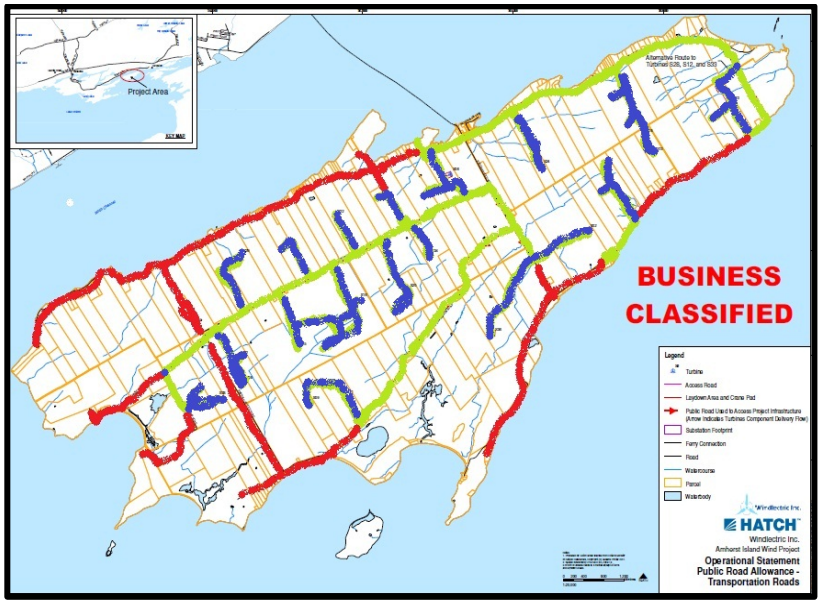
3. New access roads that are being built are on private land and will have signage and speed limits.

While signage and speed limits may assist in preventing negative impacts on individual Blanding's Turtles, this does not address the very real issue of increased predation that will result for an additional 35 km of access roads cutting into significant wildlife habitat. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

4. Existing municipal roads are not associated with the evaluation of impact as their footprints already exist.

According to the latest census information, the permanent population of the Amherst Island is 411, this translates to approximately 200 vehicles plus various farm equipment. A small network of seldom traveled gravel roads (red and green in the map below) service the island. Commercial operations are for the most part restricted to farms and there are no industrial operations on the island.

The roads outlined in green are municipal roads that will be subject to 18 /24 months of construction traffic and the roads in blue indicate the additional 35 kilometers of access road that will remain in place during the operational phase of the Project.



The construction of 33 industrial wind turbines the height of the Toronto Dominion Tower on a small island 2 km off shore will entail a great deal of construction activity. Windlectric has in effect, provided a single mitigation measure (restrictions on construction timing) for Avian SAR that will, if enforced, provide some protection for a yet to be defined area for an inadequate amount of time. According to Windlectric's flawed rationale, this mitigation measure would also address the Blanding's Turtle population.

The proposal from Windlectric exposes the island roads to a very high number of heavy loads on roadways not designated for these loads". Specifically:

- Approximately 400 oversized heavy truck loads will be required to transport turbine components to the building sites.
- Approximately 11,000 truckloads will be required for the transport of equipment and materials.

According to the *Windlectric Construction Plan Report* the various types of construction vehicles required to industrialize the island will include: pick-up trucks, SUVs, ATVs, tracked drill rig, trailer with water tank, dump trucks, oversized tractor trailer, flatbed trailer, small cranes, heavy lift cranes, mobile cranes, forklifts, all-terrain lifts, tractor scrapers, compactors, excavators, dozers, backhoe, grader, roller, concrete trucks, concrete pump trucks, utility bucket truck, auguring truck, pole trailer, reel stand vehicles, conductor puller vehicles, tensioner vehicle, lineman trucks, gravel truck, front end loader, cars, service vehicles, Read-mix concrete trucks and trim dozer. Additionally, the *Construction Plan Report* indicates that the number of workers required to complete the installation would peak at approximately 100, increasing the island population by 25%.

Clearly, noise and general upheaval resulting from construction traffic will negatively impact Blanding's Turtle habitat throughout the island.

To state that an evaluation of impact is not required as the road footprint already exists completely and ludicrously ignores the impact of an exponential increase in traffic along road that presently see one to two cars per hour on a typical day. Individual turtles will certainly be negatively impacted. The Amherst Island Blanding's Turtle population should therefore be afforded the protection provided by the MNR Permitting process.

Additional Indirect Effects Resulting from Construction Activity that will Negatively Effect the Blanding's Turtle Population

Per *the Windlectric Construction Report*, construction activity may include blasting (to dig the turbine tower supports) and will include hoe ramming. A hoe ram is a powerful percussion hammer fitted to an excavator for demolishing concrete structures or rocks. Demolition crews

employ the hoe ram for jobs too large for a jackhammer or areas where blasting is not possible due to safety or environmental issues.

The vibrations generated through Amherst Island's bedrock of fractured limestone will directly impact the Blanding's Turtle. The dust that will result from island industrialization must also be addressed. A review of the *Construction Plan Report* indicates that proposed dust suppression measures amount to "implement dust suppression measures (i.e. watering) on access roads as required." This does not take into account the presently existing gravel roads and the fact that the hoe ramming and blasting will raise enormous amounts of dust. The cement batch plant sited in the middle of the island will also generate vast amounts of corrosive dust.

As a result of poorly designed and implemented field studies with severely restricted parameter, Stantec employees recorded no observations of Blanding's Turtles. Subsequently, Windlectric has not submitted to the MNR for an Overall Benefit Permit that is required for the destruction of habitat of Endangered Species such as the Blanding's Turtle.

Windlectric has appled for MNR Overall Benefit Permits for 3 SAR only, Bobolink, Eastern Meadowlark and Eastern Whip-poor-Will.

Below you will find a table of the Species at Risk and Species of Concern documented by Windlectric and Kingston Field Naturalists on Amherst Island between 2011 and 2014. Clearly a number of additional Overall Benefit Permits must be applied for in order to meet the requirements of the Species at Risk Act.

Table 2: Species at Risk / of Concern documented on Amherst Island (2011 – 2014)

	Observed Migrating (Windlectric Power)	**Observed Breeding (Windlectric Power)**	**Observed (Kingston Field Naturalists)**	**Observed Breeding (Atlas Breeding Birds of Ont.)**	**Provincial Status**	**Federal Status**
AVIAN						
Bald Eagle	Yes		Yes	Unknown	SC	
Barn Swallow	Yes	Yes	Yes	Yes	THR	THR
Bank Swallow	Yes	Yes	Yes		THR	
Black Tern		Yes	Yes	Yes	SC	
Bobolink	Yes		Yes	Yes	THR	THR
Canada Warbler	Yes		Yes	Probable	SC	THR
Cerulian Warbler	Yes		Yes		THR	END
Eastern Meadowlark	Yes	Yes	Yes	Yes	THR	THR
E. Whip-poor-Will	Yes		Yes	Probable	THR	THR
	Observed Migrating	**Observed Breeding**	**Observed (Kingston**	**Observed Breeding (Atlas**	**Provincial Status**	**Federal Status**

	(Windlectric Power)	(Windlectric Power)	Field Naturalists)	Breeding Birds of Ont.)		
Golden Eagle			Yes		END	
Golden-Winged Warbler	Yes		Yes	Possible	SC	THR
Great Blue Heron	Yes		Yes	Probable		SC
Hooded Warbler	Yes		Yes		SC	THR
Horned Grebe	Yes		Yes	Unknown	SC	END
Least Bittern	(field notes)		Yes	Possible	THR	THR
N. Saw-Whet Owl		Yes	Yes	Probable		THR
Olive-sided Flycatcher	Yes		Yes	Unknown	SC	THR
Red-Headed Woodpecker	Yes		Yes	Yes	SC	THR
Red Knot			Yes	Unknown	END	THR
Short-Eared Owl	Yes	Yes	Yes	Yes	SC	SC
BUTTERFLY						
Monarch Butterfly	Yes		Yes		SC	
TURTLES						
Snapping Turtle			Yes		SC	
Blanding's Turtle			Yes		THR	
Painted Turtle (1 documented 2014)			Yes		SC	
SNAKE						
Milksnake			Yes		SC	
BAT						
Little Brown Bat			yes		END	THR

Probable Breeding: Evidence of breeding does not include confirmation of nest containing eggs but may include observation of pair in breeding season in suitable nesting habitat, nest building activity, courtship display, etc.

Possible Breeding: Evidence of breeding does not include confirmation of nest containing eggs but may include species observed in in breeding season in suitable nesting habitat, breeding calls heard, etc.

END / Endangered: A species facing imminent extinction or extirpation in Ontario - a candidate for regulation under ESA.

THR / Threatened: A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.

SC / Special Concern: A species with characteristics that make it sensitive to human activities or natural events.

We would appreciate the opportunity to meet with you and discuss the information provided.

Best Regards,

Peter Large

Peter Large, P.Eng.
President, APAI

Cc: Mr. Josh Arnold, MNR Senior Policy Advisor
Ms. Stevie Ms. O'Brien, Chief of Staff