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**BORALEX**



January 7, 2019

Mohsen Keyvani  
Ministry of Environment and Climate Change  
135 St. Clair Ave W, Toronto, ON  
M4V 1P5

Dear Mr. Keyvani,

**Re: Modification to Environmental Effects Monitoring Plan for the Niagara Region Wind Farm**

Boralex retained Natural Resource Solutions Inc. (NRSI) to conduct three years of post-construction monitoring at the operational Niagara Region Wind Farm (Project), located within the Townships of West Lincoln and Wainfleet and the Town of Lincoln, in Niagara Region and Haldimand County, Ontario. This wind energy generating facility consists of 77 turbines with a total nameplate capacity of 230MW. In accordance with the Renewable Energy Approval (REA) granted on November 6, 2014 (No. 4353-9HMP2R), the Niagara Region Wind Farm: Environmental Effects Monitoring Plan for Wildlife and Wildlife Habitat (EEMP; Stantec 2013) has been implemented for the Project. The purpose of this letter is to provide formal notification to the Director and the Ministry of Natural Resources and Forestry (MNRF) that site conditions have changed due to regular agricultural activities, which has in-turn resulted in a modification to how the Project's EEMP (Condition L2 of the REA) is being implemented. The change in site conditions, and associated change in EEMP implementation, is entirely unrelated to the Project, or its development or operational activities.

In accordance with the EEMP, NRSI conducted the required raptor wintering area and short-eared owl (*Asio flammeus*) habitat surveys during January and February of 2017 and 2018. During these surveys, it was noted that the site conditions within each of the identified habitats have changed since the completion of baseline studies in 2011 and 2012. Due to changes in land use associated with common agricultural practices, the habitats no longer meet provincial criteria for candidate Significant Wildlife Habitat (OMNR 2012). NRSI prepared a memorandum (Niagara Region Wind Farm: Raptor Wintering Area and Short-eared Owl Habitat Suitability (2017)), dated January 10, 2018, describing the lack of suitability of these habitats to support over-wintering raptors and short-eared owls (enclosed). This memorandum was distributed to the Director and to the MNRF. Within the memorandum, NRSI proposed that the remaining monitoring associated with these habitats be discontinued, as any change in species use will be attributed to the change in habitat suitability that is entirely unrelated to the Project, or its development or operational activities.

NRSI received email confirmation from the MNRF supporting the proposed approach to adjust the monitoring at the raptor wintering areas and short-eared owl habitats on December 18, 2018 (enclosed). As of the receipt of email confirmation from the MNRF, the modification to the EEMP is considered accepted and further monitoring associated with the raptor wintering areas and short-eared owl habitats that no longer

provide functional habitat will be discontinued. As requested by the MNRF, NRSI will conduct habitat assessments in 2019 to confirm that the habitats continue to be used for intensive agricultural purposes. Boralex, as the owner of the Niagara Region Wind Farm, will publish this letter and enclosed documents to the Project website within 10 days of acceptance of modifications to the EEMP by the Director and the MNRF, in accordance with Condition L14 (1) of the REA.

As formal notification of a modification to the approved EEMP has been provided to the Director and the MNRF with this letter, and as the modification will be published to the Project website, Conditions L2 and L14 (1) of the REA have been satisfied.

Sincerely,



Stéphanie Bujold  
Environmental Manager

cc: Mike Poskin, Ministry of Natural Resources and Forestry  
Kaitlyn McGlade, Ministry of Natural Resources and Forestry

Enclosures (2)



## Memo

**Project No. 1865-A**

**To:** Mike Poskin (MNRF)  
Mohsen Keyvani (MOECC)

**From:** Erin Bannon (NRSI)

**cc:** Stéphanie Bujold (Boralex)  
Jason Weir (Boralex)  
Sarah Raetsen (MOECC)  
Andrew Ryckman (NRSI)

**Date:** January 10, 2018

**Re:** Niagara Region Wind Farm  
Raptor Wintering Area & Short-eared Owl Habitat Suitability (2017)

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Natural Resource Solutions Inc. (NRSI) was retained to conduct the first year of post-construction monitoring at the operational Niagara Region Wind Farm (Niagara Region WF) located within the Townships of West Lincoln and Wainfleet, and the Town of Lincoln, within Niagara Region and Haldimand County, Ontario. The Niagara Region WF consists of 77 operational wind energy generating turbines with a total nameplate capacity of 230MW.

In accordance with the *Niagara Region Wind Farm Environmental Effects Monitoring Plan for Wildlife and Wildlife Habitat* (Stantec 2013), NRSI conducted the required raptor wintering area and short-eared owl (*Asio flammeus*) habitat surveys during January and February 2017. During these surveys, it was determined that the site conditions within each of the identified habitats (WR1, WR2, WR, and WR4) have changed since the completion of baseline studies. During the pre-construction surveys completed in 2011-2012, these habitats were largely dominated by land uses that are consistent with provincial criteria for suitable raptor wintering habitat (e.g. grassland, pasture, hay, etc.). During the 2017 surveys, NRSI biologists identified that the majority, if not the entirety, of each of the 4 habitats were actively being used for intensive farming (i.e. planted with row crops), such that the minimum size requirements for suitable raptor wintering habitat was no longer met. The Niagara Region WF is generally located in a heavily farmed area where it is common for land use to change frequently, and these changes in habitat characteristics are typical of the rotational use of agricultural land which is a common agricultural practice.

The changes of land use that occurred within the last 5-6 years at each of the 4 identified habitats have resulted in changes to the composition, structure, and function of the previously significant habitats such that they no longer meet provincial criteria for candidate Significant Wildlife Habitat according to provincial criteria (OMNR 2012). Based on the change in land use, and therefore the habitat suitability, it is expected that these habitats will no longer function in the manner that was characterized during the pre-construction surveys. It is therefore similarly not expected that raptors or short-eared owls will overwinter in an

abundance and species composition that meets the provincial standards of significance for Raptor Wintering Habitat or Short-eared Owl Habitat, according to provincial criteria (OMNR 2012).

Based on the change in land use, NRSI believes that post-construction behaviour surveys are no longer appropriate to characterize habitats that, through regular agricultural activities, no longer provide the suitable habitat required to meet the expected significant use by winter raptors or short-eared owls. NRSI proposes that the remaining 2 years of monitoring at raptor wintering area and short-eared owl habitats WR1, WR2, WR3, and WR4 be discontinued since any change in species use will be attributed to the change in habitat suitability.

In accordance with condition L4 of the Niagara Region WF approval conditions, NRSI also conducted weekly post-construction monitoring, from January to March, and December 2017 at turbines T01 and T58, which are located within 120m of significant raptor wintering areas 3 and 4, respectively. Since this monitoring program was designed based on the presence of significant raptor wintering habitat and significant short-owl habitat, neither of which current exists, NRSI proposes that this targeted post-construction mortality monitoring be similarly discontinued.

The details and rationale provided above will also be presented in the *Niagara Region Wind Farm: 2017 Post-construction Monitoring Report for Significant Wildlife Habitat*, including detailed mapping of the habitats affected, which is required to be submitted to the Ministry of Natural Resources and Forestry (MNRF) by March 31, 2018. However, since NRSI is recommending discontinuing surveys that are otherwise required to be completed prior to report submission, this letter has been prepared to specifically present this information to the MNRF in an attempt to receive approval on the proposed approach to discontinue the 2018 surveys that will otherwise provide negligible value.

The Niagara Region WF, and its operator (Boralex), is committed to meeting expectations of the MNRF and will continue to implement the required winter behaviour and mortality monitoring in 2018 until formal approval to discontinue the surveys has been received from the MNRF.

### *References*

Ontario Ministry of Natural Resources (OMNR). 2012. Significant Wildlife Habitat Ecoregion 7E Criterion Schedules. February 2012.

**Subject:** RE: Niagara Region Wind Farm - Raptor Wintering Area & Short-eared Owl Habitat Suitability  
**From:** "McGlade, Kaitlyn (MNRF)" <Kaitlyn.McGlade@ontario.ca>  
**Date:** 2018-12-18, 8:47 a.m.  
**To:** "aryckman@nr.si.on.ca" <aryckman@nr.si.on.ca>  
**CC:** "Keyvani, Mohsen (MECP)" <Mohsen.Keyvani@ontario.ca>

Hi Andrew,

I have reviewed the letter and associated report provided for the raptor wintering habitats at Niagara Region Wind Farm. MNRF is in agreement that monitoring habitat areas that no longer meet the requirements for candidate or confirmed significance would not be beneficial. We would recommend that the habitats are checked during the next year of PCM to ensure conditions within the fields have not changed again (i.e. they are still be actively farmed with row crops).

Please note that any modifications to the approved EEMP require that they be published to the project website. As well, the Director (MECP) must be notified of any changes. I have cc'd Mohsen to this email.

Let me know if you have any questions.

Thanks,

**Kaitlyn McGlade**  
*Regional Planning Ecologist*  
Regional Resources Section | Southern Region  
Ontario Ministry of Natural Resources and Forestry  
[kaitlyn.mcglade@ontario.ca](mailto:kaitlyn.mcglade@ontario.ca)  
(705) 755-5393

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**From:** Andrew Ryckman <aryckman@nr.si.on.ca>  
**Sent:** Monday, December 10, 2018 11:05 AM  
**To:** Poskin, Mike (MNRF) <Mike.Poskin@ontario.ca>  
**Cc:** Stephanie Bujold <stephanie.bujold@boralex.com>; Lillian Knopf <lknopf@nr.si.on.ca>; McGlade, Kaitlyn (MNRF) <KAITLYN.MCGLADE@ontario.ca>  
**Subject:** Re: Niagara Region Wind Farm - Raptor Wintering Area & Short-eared Owl Habitat Suitability

Thanks Mike,

I appreciate it and look forward to hearing from Kaitlyn once she's had a chance to review and catch up on our previous correspondence.

Cheers,  
Andrew

**Our main office in Waterloo has moved! Please note change of address below.**

le:///S:/Projects/:

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Senior Terrestrial and Wetland Biologist  
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On 2018-12-10 10:56 a.m., Poskin, Mike (MNRF) wrote:

Hi Andrew,

I've passed your request on to Kaitlyn (cc'd on this email). She will be in touch when she has had a chance to review.

Thanks,  
Mike

**Mike Poskin**

**Regional Planner**

Land Use Planning | Regional Resources Section | Southern Region

Ministry of Natural Resources and Forestry

T: 705-755-1362

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**From:** Andrew Ryckman <[aryckman@nrsi.on.ca](mailto:aryckman@nrsi.on.ca)>

**Sent:** December-07-18 10:35 AM

**To:** Poskin, Mike (MNRF) <[Mike.Poskin@ontario.ca](mailto:Mike.Poskin@ontario.ca)>

**Cc:** Stephanie Bujold <[stephanie.bujold@boralex.com](mailto:stephanie.bujold@boralex.com)>; Lillian Knopf <[lknopf@nrsi.on.ca](mailto:lknopf@nrsi.on.ca)>

**Subject:** Fwd: Niagara Region Wind Farm - Raptor Wintering Area & Short-eared Owl Habitat Suitability

Good Morning Mike,

As a follow-up to my voicemail, here is the email and attached memo that was circulated last winter summarizing the current situation at the Niagara Region Wind Farm.

To refresh your memory, the habitat that was previously identified as suitable for wintering raptors has been modified through regular agricultural practices and no longer provides suitable habitat, per MNRF criteria. As such, it is also not expected that the use of the habitats will be the same as it was during pre-construction surveys.

It is NRSI's recommendation that repeating the pre-construction surveys no longer provide any value since any change in raptor use is almost certainly attributed to the landowner's change in land use.

This recommendation was provided in the email and attached memo circulated in January 2018, and was also reiterated in the *Niagara Region Wind Farm: 2017 Post-construction Natural Features and Behaviour*

Monitoring Report that was submitted on March 29, 2018.

As we are entering another monitoring year for these habitats, we hope to come to a resolution on this in the next few weeks. Please give me a call 519-725-2227 x234 at your earliest convenience to discuss.

Thanks!  
Andrew

**Our main office in Waterloo has moved! Please note change of address below.**

imap://aryckman@

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----- Forwarded Message -----

**Subject:**Niagara Region Wind Farm - Raptor Wintering Area & Short-eared Owl Habitat Suitability

**Date:**Wed, 10 Jan 2018 16:49:42 -0500

**From:**Erin Bannon <[ebannon@nrsi.on.ca](mailto:ebannon@nrsi.on.ca)>

**Organization:**Natural Resource Solutions Inc.

**To:**[Mike.Poskin@ontario.ca](mailto:Mike.Poskin@ontario.ca), Keyvani, Mohsen (MOECC) <[Mohsen.Keyvani@ontario.ca](mailto:Mohsen.Keyvani@ontario.ca)>

**CC:**'Stephanie Bujold' <[stephanie.bujold@boralex.com](mailto:stephanie.bujold@boralex.com)>, Jason Weir

<[jason.weir@boralex.com](mailto:jason.weir@boralex.com)>, Raetsen, Sarah (MOECC) <[Sarah.Raetsen@ontario.ca](mailto:Sarah.Raetsen@ontario.ca)>,

Andrew Ryckman <[aryckman@nrsi.on.ca](mailto:aryckman@nrsi.on.ca)>

Good Afternoon Mike and Mohsen,

NRSI was retained to complete the first year of post-construction monitoring at the Niagara Region Wind Farm in 2017. During the completion of the first year of behaviour monitoring, NRSI noted that the site conditions at several previously significant raptor wintering areas and short-eared owl habitats no longer meet the provincial criteria for candidate significant wildlife habitat due to regular agricultural practices that have occurred on the identified parcels within the 5-6 years since baseline surveys were completed.

As a result, it is NRSI's recommendation that further surveys of these habitats will not provide any meaningful information since any change in habitat use or species

composition is likely a result of changes in available habitat due to agricultural practices and not a result of the operating turbines.

Please review the attached letter at your earliest convenience and confirm your approval of the recommendation to discontinue the remaining 2 years of study at these habitats that no longer provide the habitat described during pre-construction studies. As Year 2 of the surveys are scheduled to begin during the week of January 15, 2018, a prompt review and reply would be greatly appreciated so as to minimize unnecessary effort, to the extent possible.

If you have any questions, would like additional information, or would otherwise like to discuss in more detail, please don't hesitate to contact me, my colleague Andrew Ryckman, or Stéphanie Bujold (Boralex).

Thank you,

Erin

--

imap://aryckm

**Erin Bannon** B.E.S. Certified Arborist  
Terrestrial and Wetland Biologist

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